

**BIANNUAL PROGRESS REPORT  
ASSOCIATION OF BAY AREA GOVERNMENTS  
for  
SAN FRANCISCO ESTUARY PARTNERSHIP**

October 31, 2010

Cooperative Agreement # CE-96949401-4/5

First/Second Quarters 2010 (April 1, 2010-September 30, 2010)

Title: National Estuary Program – San Francisco Estuary Partnership

Percent of Work Completed

FY 09/10 (ABAG 102141/142)

Total Budget: \$610,000

Budget Expended: 81% (\$494,327.94)

**Task 1. Program Implementation and Reporting**

**Financial management, tracing/reporting, planning and administration**

**1. Obtain ABAG Ex Board Approvals: May 2010-September 2010:**

- 1) Obtain authorization to enter into agreement with Aquatic Science Center for Wetland and Riparian Area Protection Policy statewide coordination and outreach for \$68,000.
- 2) Obtain ratification of agreement with CalTrans for technical support for permit processing for staff at North Coast Water Board-Region 1 for 2 years (04/01/10-04/01/12) for \$445,758.
- 3) Obtain ratification of agreement with Center for Ecosystem Management and Restoration (CEMAR) for State of the San Francisco Bay Report (03/15/10-12/31/10) for \$109,000.
- 4) Approval of Resolution No.06-10 and authorization to contract with California Dept. of Fish & Game for completion of Integrated Regional Wetland Monitoring and Analysis Project for 3 years (10/01/10-09/30/13) for \$420,000.
- 5) Obtain authorization to contract with California Department of Natural Resources to provide support for Delta Science Program (2 years) \$300,000.
- 6) Obtain authorization to enter into agreement with US EPA and ratification of application for funds under NEP Program and new cooperative agreement for SFEP.
- 7) Obtain authorization to enter into contract with US Geological Survey to provide support for Bay-Delta Science Program Biennial Science Conference, nte \$200,000.
- 8) Obtain authorization to modify agreement with Alameda County and Alameda County Flood Control & Water Conservation District for one year to 08/10/11 with option to extend to 08/10/12 for technical support for permit processing and increase amount by \$127,000.
- 9) Obtain authorization to submit grant proposal to California Department of Fish & Game for green infrastructure implementation projects under the IRWMP program for \$850,000 of which \$675,000 would be subcontracts.
- 10) Approval of Resolution No.09-10 to contract with Delta Stewardship Council for support of Delta Science Program and increase contract total to \$974,258.
- 11) Approval of Resolution No. 11-10 authorizing submittal of grant application to California Department of Conservation to fund a regional watershed coordinator for 2 years for \$218,816.

**2. Provide Contract Oversight (30 Master Grants/Contracts: 70 Subcontracts)**

During this period, SFEP processed 23 subcontracts and 8 subcontract modifications. A proposal was submitted to the California Strategic Growth Council on April 30, 2010 for the San Francisquito Watershed Urban Greening Action Plan in response to an RFP for Urban Greening Planning projects.

**A. ABAG/EPA Grants/Coop. Agreements/CCMP Implementation**

- 1) **2009-2010 SFEP/NEP** (CE96949401-5: \$610,000) Application and Work Plan submitted 05/30/2009. Work began November 2009.
- 2) **2009-2010 Stream/Wetlands Policy Development** (CD-96925701-0: \$297,800) Work began 07/09. Work continues. Progress report submitted separately for grant.
- 3) **2008-2011 Green Infill-Clean Stormwater** (WS-96932601-0: \$996,495) Work began 10/01/08. Subcontracts with SFEI, EarthTeam, and City of Pinole negotiated and finalized. Difficulties with state proposition match funding for Hercules construction has delayed subcontract and project. Work in San Mateo County proceeding. Monitored project progression, expenses, prepared progress reports. Executed contract with The Watershed Project for Richmond Bioswale Project following competitive bid process. Progress reports submitted separately for grant.
- 4) **2009-2012 Estuary 2100: Resilient Watersheds for a Changing Climate** (X7-00T04701-0: \$ 4,922,000) Work began 03/01/09. Subcontracts negotiated and signed with additional 2 partner agencies (total 14) Several remain outstanding due to changes in work scope and match funding issues. Monitored project progress, processed invoices, prepared progress reports. Progress reports submitted separately for grant.
- 5) **SFEP awarded \$3.6 million for projects under Estuary 2100-2, under the San Francisco Bay Water Quality Improvement Fund on 11/17/2009. Following negotiations re: NEPA, grant started 03/10/10.** SFEP began contracting with sub-recipients.

**B. ABAG/Dept. of Boating & Waterways Contract- Clean Vessel Education Program-SFEP**

provides boater education and outreach for pollution prevention including distributing pump out maps to area marinas; sampling marinas for pump out data; boat show attendance; subcontract management for agreement with Santa Monica Bay Restoration for outreach in Southern California. Amendment #10 covered the work plan for 2010 and extended the agreement through 12/31/2011. Total contract amount = \$2,304,280. Progress reports submitted separately for grant.

**C. ABAG/SWRCB Contracts/Grants**

- 1) **2009-2012:** New MOU between ABAG and Region 2 Water Board for continued support of SFEP for CCMP implementation signed by Executive Directors of both agencies in August 2009.
- 2) MOU for oversight of **Supplemental Environmental Projects:** Work continues on this effort which has significantly increased with many more fines being assessed by the Regional Board. SFEP coordinates the Regional Board oversight work; monitored projects; tracked expenses; processed invoices.
- 3) **2006-10 Prop 40 Grant for Suisun Marsh Low DO and Methyl Mercury BMPs** (\$795,000): Received restart notice from State Water Board 09/01/09; project ended 06/30/2010.
- 4) **2008-2010 TMDL Outreach Contract** (\$335,000): SFEP provides contract management and liaison with state and regional board staffs, TMDL outreach, public participation, administrative record preparation, statewide roundtable participation; analysis, obtaining interns, monitoring costs. Contract ended 03/31/2010.
- 5) **2007-10 Prop 50 Grant for TMDL Implementation: Taking Action for Clean Water:** Sediment reduction; PCB Reduction in Bldg Materials; Urban Pesticide Prevention; IPM Certification (\$2.6 million): Work stopped by State proposition grant freeze effective December 18, 2008. Funds expended: 33%. Contract restarted August 20, 2009 using ARRA funds as forgivable loan from State Revolving Fund. Work continues.
- 6) **2009-2012 ARRA forgivable loan agreement** received 09/08/2009 for construction of El Cerrito Green Streets and Rain Gardens project (\$392,000).
- 7) **2009-2013 ARRA forgivable loan agreement** received 09/15/2009 for demonstration project to install trash capture devices bay-wide (\$ 5,000,000).
- 8) **2010-2013 Hicks Flat Mercury Remediation Project** (\$ \$315,000): Grant received from State Water Board under EPA 319h program to remediate mercury mine waste on Hicks Flat site of the

Midpeninsula Regional Open Space District located within the Guadalupe River Watershed, abutted on the southeast by Cherry Springs Creek, an intermittent stream and a tributary to Guadalupe Creek within the watershed.

- 9) **2010-2011 TMDL Assistance for SWRCB and Regional Water Boards-** Communications and editorial documentation, plans, and tools for outreach, education, and public participation that enhance the TMDL/Water Quality Planning Programs (\$92,657). Contract started 06/14/2010.

**D. 2008-2010 ABAG/Santa Clara Valley Water Dist. Contract** (\$270,383): SFEP provides technical staff for permitting work at the Regional Water Board and performed management oversight and liaison; invoicing. Contract extension under negotiation.

**E. 2009-2011 ABAG/Bay-Delta Program Contracts**

- 1) **2009-2011 Bay-Delta Science Program Experts Contract** (\$ 974,258): Work includes contract development; monitoring; invoice processing and financial reporting; quarterly reporting and liaison. Contract amended 08/2010 to extend thru 12/31/2011 and add funds.
- 2) **2006-11 Web Design IPA Contract** (\$467,725): Payment stopped by State proposition grant freeze effective December 18, 2008. ABAG has continued services of web designer during freeze. Contract restarted June 2009. Work ends 11/30/2010.
- 3) **2010-Contract with USGS (\$200,000)** for support of the fall Bay-Delta Science Conference. Contract received 04/27/2010 thru 12/31/2010.

**F. 2004-12 ABAG/Alameda County Contract** (\$1,025,800): SFEP provides technical staff support for permitting work at the Regional Water Board and performed management oversight and liaison; invoicing. Contract extension negotiated 08/2010.

**G. 2006-2011 ABAG/SFPUC Contract** (\$496,785): SFEP provides technical staff support for permitting work at the Regional Water Board and performed management oversight and liaison; invoicing. Contract extension under negotiation.

**H. ABAG/Coastal Conservancy Contracts**

- 1) **2005-09 Spartina Signage Contract** for education outreach on invasive spartina removal (\$90,000) extended through 12/31/2009. Work stopped by State proposition grant freeze effective December 18, 2008. Contract extended through 12/31/10.
- 2) **Contract for Support for Subtidal Habitat Goals Report Experts (\$45,000)**: SFEP provides support for payment of stipends for expert peer reviewers. Contract thru 12/01/2010.

**I. ABAG/Caltrans Contract: 2007-10 MOU and Contract** for permitting technical support for District 4 projects under the jurisdiction of the San Francisco Bay Water Board. Amended to add funds for additional technical permitting staff at North Coast Water Board (total amount of \$637,367); Work continues including task order budgeting and contract oversight and staff management.

**J. 2007-2010 ABAG/NOAA Interagency Agreement:** (\$95,000) SFEP provides support for Subtidal Habitat Goals Project; attend meetings of Administrative Core Team; draft and negotiate contracts oyster study; conceptual habitat models; continue working on writing draft document. Contract extended due to delays in completing report.

**K. 2010-2011 ABAG/USFWS Interagency Agreement:** (\$23,405) SFEP provides support for travel costs of participants on the Western Regional Panel on Aquatic Nuisance Species, an advisory group of the national Aquatic Nuisance Species Task Force.

**L. 2010-2012 ABAG/DFG Grant (\$420,000):** SFEP began negotiating with the California Dept. of Fish and Game to complete a study on Integrated Regional Wetland Monitoring to analyze data collected under a prior CalFed contract for fish, inverts, trophic structure, nutrients, and productivity. Grant projected to start October 2010.

### **3. Reports/Workplans/Budgets**

**A. 2010 Strategic Plan--**SFEP completed Strategic Plan for CCMP implementation for next 3 years. Implementation Committee reviewed and approved at November 19, 2009 meeting.

**B. 2010-2011 Work Plan--** A draft of the 2010-11 work plan was completed for review by the IC at its February 26, 2010 meeting. The work plan has also been reorganized to incorporate the strategic plan goals and objectives. The IC approved a revised and final work plan at its May 26, 2010 meeting.

**C. Quarterly reports provided for numerous grants and contracts listed above.**

**D. NEP Program Evaluation-** National Estuary Programs are evaluated once every three years by EPA headquarters staff to measure progress in achieving programmatic and environmental results, including progress in implementing CCMPs. SFEP developed a wiki site to display materials for review. SFEP's on-site program evaluation occurred May 19-21, 2010. EPA HQ staff included project officer, Tim Jones, and Abby Nichols, also Region 9 staff, Sam Ziegler and Luisa Valiela, and Richard Ribb, Director, Narragansett Bay NEP, and Chris Townsend of the Puget Sound Partnership.

### **4. Personnel:**

Judy Kelly, Director completed annual performance reviews for: Janet Cox, Debbi Egtervanwisskeke, Xavier Fernandez, Jennifer Krebs, Brendan Thompson, and Paula Trigueros.

**5. Legislation:** Judy Kelly spoke before the House Committee on Transportation and Infrastructure, subcommittee on Water Resources and Environment, on April 28<sup>th</sup> and testified on the significance of the San Francisco Bay and Estuary, especially as it pertains to H.R. 5061, the San Francisco Bay Improvement Act of 2010 which would authorize dedicated funding for projects, programs, and studies that implement priority objectives of the San Francisco Estuary Partnership's CCMP.

**6. Other:** SFEP convened a meeting of the Executive Council on May 13 in Sacramento, to move forward our implementation of Strategic Plan Goal 2 (Reorganize SFEP for Greater Effectiveness), Objective 5 (Reaffirm role of SFEP's Executive Council). Current Executive Council members are Lester Snow, California Resources Agency Secretary; Henry Gardner, Executive Director of ABAG; Jared Blumenfeld, Region 9 Administration for EPA; Linda Adams, California EPA Secretary; and Ren Lohofener, U.S. Fish and Wildlife Service Region 8 Director. Tom Mumley, chair of the IC, and Alexis Strauss, EPA Region 9 also attended.

The San Francisco Bay Restoration Authority (SFBRA) was established by AB 2954 as a regional entity to generate and allocate resources for the protection and enhancement of tidal wetlands and other wildlife habitat in and surrounding the San Francisco Bay. The Authority continues to meet quarterly. Meeting materials are available at

<http://www.sfbayrestore.org/meetings.html>. To join the email list, email [info@sfbayrestore.org](mailto:info@sfbayrestore.org).

### **7. SFEP Implementation Structure Support**

**Implementation Committee Meetings** were held May 26, 2010 and August 25, 2010. Agendas, meeting materials and meeting summaries can be found on the website, [www.sfestuary.org](http://www.sfestuary.org)

### **8. RWOCB Support**

SFEP provided various contractual support activities; provided distribution support for *Primer on Stream and River Protection*; provided technical support as requested.

## **9. NEP Tasks**

Judy Kelly was elected Co-Chair of the Association of National Estuary Programs (ANEP) Legislative Subcommittee and participates in subcommittee conference calls on pending legislative actions. She also participates in monthly Director conference calls for ANEP.

### **Task 2. Ecosystem Status and Trends**

#### **Wetlands Monitoring**

SFEP funds an intern to assist the Water Board with wetland project tracking and project data management for the Wetlands Tracker and staff participate in meetings of the Water Boards's Wetlands Monitoring Group.

#### **Tracking Habitat for SFEP**

SFEI assists us with the web-based habitat tracking system. SFEP tracks one indicator - habitat - the acquisition, restoration and enhancement of wetlands and riparian habitat. The information is recorded in the annual Government Performance Requirement Act report required by EPA. SFEP is working with its partners, ABAG, RWQCB, SFEI to develop a strategy for an ongoing and improved habitat tracking system in a GIS format.

### **Task 3. Integrated Watershed Stewardship**

#### **3.1 Restoration Coordination**

Services of Marc Holmes, restoration coordinator, included attending the Bay Area Watershed Network meetings, meetings on the SPBWRP, meetings on Aramburu restoration, work on the SFEP Strategic Plan, meeting congressional contacts, formulating restoration priority lists, bay restoration video, work on SF Bay Restoration Authority.

#### **3.2 Stream and Wetland Protection Policy**

SFEP staff continued to develop the draft Basin Plan amendment language and supporting Staff Report for the Regional Boards' policy; continued to work with State Board to coordinate the state and regional policies and develop a state wetland definition; staff also conducted stakeholder outreach for the Regional Boards' policy and continued to maintain the Administrative Record. Quarterly progress reports submitted separately.

#### **3.3 Application of the Watershed Assessment Framework (WAF) as a Tool for Integrating and Communicating Watershed Health Indicators for the San Francisco Estuary**

Under a contract from Resources Agency/DWR, SFEP coordinates the indicator consortium and serves to advance indicators work for the estuary by evaluating indicators, incorporating the WAF framework and finalizing a science based methodology for assessment. Work was halted by the bond freeze in December 2008 and restarted in September 2009. Work continues.

#### **3.4 Chelsea Wetlands/Pinole Creek Restoration**

Under EPA grant WS-96932601, Green Infill, Clean Stormwater, grant partners, the cities of Hercules and Pinole will restore Chelsea Wetlands, Contra Costa County, and reaches of Pinole Creek (which empties into Chelsea Wetlands). Both cities' efforts are based upon comprehensive stakeholder-based watershed plans, and a variety of committed funding sources. EPA funds will be used to restore natural creek functions to a flood control channel, expand marsh plain habitat, create a sustainable creek profile,

improve recreational access, and enhance flood protection. A separate quarterly progress report is provided.

### **3.5 Bahia Restoration and Revegetation**

This Estuary 2100 project in a seasonal tidal marsh at Bahia Marsh in Marin County, in partnership with Marin Audubon, restores to a more ecologically complete and resilient wetland, habitat attractive to the federally-listed, endangered California Clapper Rail, salt marsh harvest mouse, and other fauna. Work includes excavation of upland area for construction of marsh bench within marsh plain; propagation and planting of native species; monitoring the succession of plants at the wetlands helping to establish upland transition zones adjacent to the existing tidal wetlands. A separate quarterly progress report is provided.

### **3.6 Yosemite Slough/Candlestick Point Wetlands Restoration**

Bay Youth for the Environment, a wetland education program of the California State Parks Foundation, will propagate and plant 5,000 to 6,000 native plants in the Yosemite Slough Wetlands, the largest contiguous wetland area in the City and County of San Francisco. This project offers training in wetland ecology, horticultural techniques, nursery operations, as well as general life/professional skills development for local youth from the under-served Hunters' Point community. It restores an area of the Bay where urban impacts to wetlands are most severe; the project site is currently undergoing remediation to remove toxic sediment, from which stormwater runoff currently washes to the Bay during high rainfall events. The youth involved in the project will also organize and attend community meetings and events to do outreach about ecology and wetlands stewardship. A separate quarterly progress report is provided for this Estuary 2100 project.

### **3.7 Shoreline Habitat Restoration**

At Eden Landing Ecological Reserve in Hayward and Martin Luther King Jr. Regional Shoreline in Oakland, using Estuary 2100 funds, grant partner, Save the Bay, will use trained community volunteers (student and adult), to establish and enhance tidal marsh transition zone habitat for recovery of endangered species and improved water quality by removing invasive plants and trash, propagating and planting native plants, maintaining of planting areas, monitoring and reporting results. A separate quarterly progress report is provided.

### **3.8 Stonybrook Creek Bio-engineered Bank Stabilization**

Under the Estuary 2100 EPA grant, project will stabilize the banks of Stonybrook Creek, an upper watershed tributary to Alameda Creek, in three locations. Efforts will decrease turbidity and fine sediment, detrimental to sensitive species such as the endangered steelhead trout. This project will improve water quality in Alameda Creek, the largest tributary to San Francisco Bay, for the last thirteen miles before it reaches the Bay. Reducing sediment loads and turbidity in the creek will contribute to the significant multi-agency effort underway to re-establish a thriving population of the native steelhead in the watershed. A separate quarterly progress report is provided.

### **3.9 Stream Management Program for Land Owners**

This Estuary 2100 project in partnership with Urban Creeks Council will reduce the amount of sediment in creeks and streams essential to supporting and reestablishing viable populations of salmonids. This program will assist creekside property owners in implementing state-of-the-art erosion control techniques using recommended bioengineering strategies to protect property, reduce sedimentation, and control stream bank erosion. Approaches include redesigning and revegetating stream channels, minimizing soil disturbances, and restoring soil-food web relationships. A separate quarterly progress report is provided.

### **3.10 Senador Mine Erosion Control**

Santa Clara County will undertake a variety of erosion control strategies, including regrading and planting, to minimize mercury-laden sediment from entering the watershed to implement the Guadalupe

River Watershed Mercury TMDL. A separate quarterly progress report is provided for this Estuary 2100 project.

### **3.11 Hicks Flat Mercury Mine Waste Erosion Control**

Under a 319h grant from USEPA, SFEP will partner with the Mid-peninsula Regional Open Space District to remediate a former mercury mine waste disposal site on San Francisquito Creek in the Guadalupe Creek watershed. This project also involves erosion control strategies, including regrading and planting, to minimize mercury-laden sediment from entering the watershed. A separate quarterly progress report is provided to the Regional Water Board grant manager.

### **3.12 Protecting Instream Flows for Fish in the North Bay**

Under the Estuary 2100 grant, over one year, the California Land Stewardship Institute will evaluate experimental approaches to providing frost protection to vineyards in order to reduce springtime water diversions in the North Bay. Future efforts will develop best management practices from the successful approaches and promote the BMPs to vineyard owners. A separate quarterly progress report is provided.

### **3.13 Littorina Eradication Project**

This project aims to stop a new invasive species before it becomes a large-scale problem. To prevent the exotic snail *Littorina littorea* from establishing itself in San Francisco Bay, volunteers will remove the snails from areas with known, incipient populations. *Littorina* species will be studied to determine the best control strategies to prevent them from becoming fully established. New outreach materials will help inform the public and encourage reporting of future sightings. A separate quarterly progress report is provided for this Estuary 2100 project.

### **3.14 Invasive Spartina Project**

This project will supplement ongoing efforts to treat the last 150 acres of baylands infested with invasive *Spartina*. Control of *Spartina alterniflora* is particularly important to support broader efforts around the Bay to restore wetlands because this species spreads rapidly, crowding out native cordgrass and other plants making wetland ecosystems less able to support a healthy range of native flora and fauna, including the endangered California Clapper Rail. The project makes innovative use of aerial spraying techniques in order to target isolated occurrences of invasive *Spartina* with few impacts on other species. A separate quarterly progress report is provided for this Estuary 2100 project.

### **3.15 Taking Action for Clean Water: TMDL Implementation for Sediment Reduction**

SFEP coordinates and assists with implementing Best Management Practices for Basin-wide sediment reduction in impacted Bay watersheds including Lagunitas/San Geronimo Creeks watershed, Sonoma Creek, Los Trancos Creek, and San Francisquito Creek in the South Bay.

### **3.16 Decrease PCBs Contamination in Urban Runoff**

This effort seeks to discover specific information on PCB loadings to urban runoff from historic building materials in San Francisco Bay area. SFEP, SFEI and partners want to identify structures containing PCBs in their building materials; conduct field sampling, chemical analysis, analyze data, work with municipal and regulatory agency staff to provide guidance in developing Best Management Practices (BMPs) to manage wastes and hazardous materials during building demolition/remodeling.

### **3.17 Urban Pesticide Pollution Prevention**

SFEP staff provides outreach to local government; coordinating efforts with IPM project; staffs bimonthly UP-3 committee meetings; drafts and distributes meeting summaries; communicated pesticide information to large interested party list; maintains website, provides technical research into existing information on pesticides being considered for use or re-evaluation; provides training workshops for local govt. on IPM and IPM contracting.

The **EcoWise Program for Integrated Pest Management** Implementation is part of this subtask. SFEP staff coordinates this program to register pesticide operators, both individuals and businesses, in the use of IPM (Integrated Pest Management) to reduce pesticide use and its impact on stormwater. The project conducts orientations to recruit, test, and monitor providers on IPM standards to complete certification; maintains a web site ([www.ecowisecertified.org](http://www.ecowisecertified.org)); supports dialogs with PCOC on pesticide issues; conducts outreach and education, trainings on IPM; promotes statewide implementation of the certification program; and seeks a long-term home for program.

### **3.18 Total Maximum Daily Loads-TMDL Communication and Technical Support**

Staff continues to compile/manage data/information for TMDLs; reviewed and edited response to comments; provided outreach/education to stakeholders by maintaining web site and mailing lists; worked on CEQA related to TMDLs; provided monthly reports on TMDL activities in Ex. Officer Report; provided administrative support for statewide TMDL Roundtable.

**3.19 Strategy for Resolving Methyl Mercury and Low Dissolved Oxygen Events in Northern Suisun Marsh** -The goal of this project is to determine the best water and/or vegetation management practices for reducing the occurrence of low dissolved oxygen and high MeHg events associated with fall flood-up practices on Suisun Marsh managed wetlands. Separate progress reports are provided to the Regional Water Board grant manager.

### **3.20 Supplemental Environmental Projects**

SFEP provides contract/administrative/technical coordination including required evaluation, administration, outreach, tracking and project implementation oversight required for the SEPs per agreement with RWQCB – activities that implement the CCMP.

## **Task 4. Supporting Climate Change Resiliency**

### **4.1 Innovative Wetland Adaption Techniques in Lower Corte Madera Creek Watershed**

Under the Estuary 2100 grant, BCDC will coordinate efforts to study the effects of sea level rise and the impact of the local sediment budget on wetland restoration. Their team will develop a sampling method and conduct a sediment coring program at Corte Madera Creek to determine creek sedimentation pathways; measure wind-wave propagation and attenuation at Corte Madera marsh; evaluate best control practices for flood control at creek mouths (assuming various sea level rise scenarios); and develop an Adaptation Strategy template local governments can use to design and implement effective flood control mechanisms. A separate quarterly progress report is provided for this Estuary 2100 project.

### **4.2 Muted Tidal Habitat at South Bay Salt Ponds**

Under the Estuary 2100 grant, The Resources Legacy Fund will coordinate the use of remote sensing technology to map and analyze vegetation, mudflat, and channel evolution in the South Bay Salt Ponds as restoration progresses. These findings will be essential for evaluating bayland restoration approaches and methodologies under changing conditions. The Pond A8 Project will introduce muted tidal action from Alviso and Guadalupe Sloughs to create approximately 1,400 acres of shallow subtidal habitat in Ponds A5, A7, and A8. A separate quarterly progress report is provided for this Estuary 2100 project.

### **4.3 Bay Area Stream Channel Restoration Design Curves**

The Waterways Restoration Institute will develop a critical design tool that will guide the stream restoration around the Bay Area. Regional "restoration curves" indicate the appropriate width and depth for a restored stream channel that will achieve equilibrium stability and avoid excessive erosion, deposition, and flooding. The curves will be developed through field research, analysis of rainfall and flow data, and watershed size, using representative streams in Marin and Contra Costa Counties. The San Francisco Bay Regional Water Quality Control Board will publish the results as part of its water quality permit and stream protection programs. A separate quarterly progress report is provided for this Estuary 2100 project.



#### **4.4 San Francisco Bay Subtidal Habitat Goals Project**

SFEP participates on Administrative Core Group for Subtidal Goals development; SFEP subcontracted with UC Davis following RFQ process for oyster study work,; subcontracted with Dr. Wim Kimmerer to develop subtidal habitat conceptual models. SFEP will write draft document. SFEP is also providing fiscal agent services for project and considerable contract management.

#### **4.5 Technical Support for Delta Science Program**

The CCMP's ecosystem goals and science needs overlap and are compatible with Science Program goals. SFEP has assisted the CalFed Science Program since 2002 in establishing peer review in selecting proposals and finalizing written reports and analyses; conducting reviews of program actions and strategies based on new knowledge; creating and supporting partnerships between agency and academic scientists. Based on new legislation, the Delta Stewardship Council replaced the CalFed Program and SFEP was given a new contract in August 2009 that covers obtaining leading scientists to support Delta Science workshops, peer reviews, and proposal solicitations.

### **Task 5. Developing Green Infrastructure**

#### **5.1 Green Infill Monitoring Project**

Grant partner, SFEI, collaborated with the San Mateo Countywide Water Pollution Program to design effective monitoring and performance assessment features into streets and parking lots prior to retrofitting. This will enable the County to use at least one green street and green parking lot project to conduct long-term monitoring of runoff reduction, and model anticipated environmental benefits of retrofitting whole city neighborhoods. A separate quarterly progress report is provided.

#### **5.2 Green Solution Project**

This Estuary 2100 demonstration project will quantify and identify suitable public lands in Alameda County for conversion from impervious to pervious land cover, and retrofit, to serve as seasonal retention/filtration areas for urban/stormwater runoff. Such lands can act as natural pollutant filters and treatment areas, while meeting needs for parks, playing fields, and wildlife habitat. A separate quarterly progress report is provided.

#### **5.3 The Watershed Project- Richmond Bioswale**

This project included a study to identify additional LID opportunities and project sites in Richmond which consisted of analysis of a number of reports and the compilation of data from multiple sources. The final product was a GIS document showing potential sites. The central focus of the grant, was for the creation of the bioswale. Funds were spent for project management, working with our engineering and design teams, construction planning, site preparation, soil amendments, irrigation materials, plants, community outreach, and volunteer coordination. Much of the groundwork was completed by volunteers at monthly work days and on the Martin Luther King Day of Service, combined the project reached out to over 500 community volunteers, planted over 500 plants, and removed innumerable exotic and invasive species. Contractor also completed monitoring and evaluation effort for the Bioswale project including designing and carrying out a site characterization and monitoring analysis of the pre-swale conditions and designing a follow up monitoring protocol to be carried out following the expansion of the bioswale.

#### **5.4 Keep It Clean**

This project under Estuary 2100 will collaborate with Bay Area local governments to promote and replicate proven Bay-friendly best management practices and outreach strategies. Working directly with several cities, Save The Bay will provide tools to better protect San Francisco Bay and its watersheds from runoff pollution. Activities will include collecting local government model ordinances, programs, developing case studies and BMPs for preventing pollution from pesticides, vehicles, trash, and other sources; engage key participant cities to adopt BMPs and promote them to other cities; track cities that

adopt BMPs and document project outcomes and impacts. . A separate quarterly progress report is provided.

### **5.5 Bayview Model Block Project**

Architecture for Humanity, a non-profit network of design professionals, has designed a traffic-calming, community building, street-greening project for the 1700 block of Newcomb Avenue in San Francisco's low-income Bayview district. This project will implement the design for a green streetscape, planting trees and other drought tolerant plants and installing specially designed stormwater-filtering planters to infiltrate stormwater runoff, and traffic chicanes to calm traffic and create community gathering places. A separate quarterly progress report is provided for this Estuary 2100 project.

### **5.6 Estuary 2100 Technical Assistance**

ABAG, SFEP, and SFEI will assist with QAPP development, monitoring protocols, data collection. SFEI will assist San Francisco in setting up a monitoring plan for Newcomb Avenue. SFEP and ABAG will collaborate with Save the Bay on BMP development and refinement.

### **5.7 Estuary 2100: Modeling, monitoring and reporting**

SFEI will track the projects of Estuary 2100 and report outputs and outcomes. SFEI will target monitoring and modeling on a group of projects that should demonstrate results within the required time frame: Shoreline Habitat Restoration (photo documentation and monitoring design of native plant recovery); Bahia Restoration and Revegetation (monitoring and design review, and monitoring program implementation support); Littorina Eradication Project (develop long-term eradication monitoring program & public outreach success monitoring); Protecting Instream Flows for Fish in the North Bay (develop pre- and post-BMP monitoring program to assess flows); Senador Mine Erosion Control (work with RWQCB and Santa Clara County Parks to develop a meaningful and cost effective long-term monitoring plan).

### **5.8 Joint Aquatic Resource Permit Application (JARPA)**

SFEP staff provides support as requested; continue to seek funding to update permit.

### **5.9 Construction Site Planning and Management for Water Quality Protection Workshops**

SFEP staff partnering with Water Board staff organized 3 fall erosion control workshops, working with BASMAA., local municipalities and the Water Board. Publications continue to be distributed/sold widely.

### **5.10 Technical Support for Water Quality Certifications (401 permits) and Waste Discharge Requirements (WDRS)**

SFEP staff provides technical support reviewing and commenting on 401 permit applications and WDRs including site visits, preparing 401 recommendations and WDRs for projects; reviewing monitoring reports and recommending BMPs for wetland protection, creek flood protection and transportation projects for Alameda County, CalTrans Districts 1 and 4, San Francisco PUC, and Santa Clara Valley Water District.

## **Task 6. The Voice of the Bay**

### **Public Involvement, Education and Outreach**

SFEP celebrated winners of the “**One Square Block**” poetry and art contest on Saturday, April 17 at the San Francisco Public Library in honor of Earth Day and National Poetry Month. The contest was open to students in kindergarten through twelfth grade in the Bay Area. It was a regional competition, conducted by SFEP in affiliation with Berkeley nonprofit River of Words and part of River of Words' annual youth creativity competition. Watch for an insert in ESTUARY NEWS featuring the winners and finalists. Find more at <http://www.sfestuary.org/projects/detail.php?projectID=43>

SFEP held another forum, **Oil Spills in San Francisco Bay: Preparing a Better Response** on May 11 in the State Building auditorium. The forum was especially well-attended by the press, with on-line, television, radio, and print coverage in all of the major media outlets. With the world watching oil spill response operations unfold in the Gulf of Mexico, SFEP and Pacific Environment hosted this public forum to discuss local preparedness for future oil spills, raise awareness about spill impacts, and improve oil spill response in Bay Area waters.

Our **2011 Birds of San Francisco Bay** calendar is well underway; we judged and notified finalists in our graphics contest and are working with a graphic designer to produce the calendar. The 2011 calendar will be distributed in Fall 2010. We chose 14 finalists from over 100 entries, and photographers participated from all reaches of the Bay region. We are already pleased with the success of this outreach tool, and look forward its debut at the end of this year.

### ***ESTUARY* Newsletter**

Completed April 2010, June 2010, and August 2010 issues and mailed to list of over 1800 interested parties and subscribers including local/state/fed elected officials, agencies, and environmental organizations; continue to market subscriptions/fundraise. Issues available on the website at [www.sfestuary.org](http://www.sfestuary.org)

### **SFEP on the Internet**

SFEP maintains an updated web site ([www.sfestuary.org](http://www.sfestuary.org)) that includes pages for all new Estuary 2100 projects as well as other new projects, and videos and slideshows about the Estuary.

### **Boater Education Program**

SFEP staff continued to focus on targeted outreach to Bay-Delta marinas and boaters on the need for pump-out stations and how to use them. SFEP staff staffed booths at the Oakland and Sacramento boat shows. This year a survey of pump out stations usage is continuing and SFEP is distributing redesigned pumpout location maps for marinas in the San Francisco Bay and Delta. Staff provides support for the Santa Monica Bay Restoration Commission Boater Education Program including contract management and payment processing.

### **Other Outreach**

SFEP is organizing the 6<sup>th</sup> Biennial Bay-Delta Science Conference (formerly the CALFED Science Conference) in Sacramento on September 27-29, 2010. It is a forum to provide new information such as study results, model simulations, and analysis and syntheses of data to the broad community of scientists, engineers, resource managers, and stakeholders working on Bay-Delta issues. The program is posted at [www.baydeltascienceconf.org](http://www.baydeltascienceconf.org). The program includes tracks on climate change and the Pelagic Organism Decline.

Working with consultant Jerry Kay of Media Interchange, we have produced seven **online Estuary Reports** (available at [www.sfestuary.org/podcast](http://www.sfestuary.org/podcast)). These reports are designed as an on-line supplement and adjunct to ESTUARY NEWS, which we continue to produce bi-monthly in print. You can subscribe to the Estuary Report via Google, Yahoo, and as podcasts; all the options are listed at the link above.

Topics to date include:

- [Parking Strip Landscaping](#): Creating a more permeable watershed in San Francisco
- [Claiming the Rain](#): An interview with Eric Bernsten of the State Water Resources Control Board, on the many benefits of rain gardens
- [New Booming Technologies](#): Stephanie Brown, Oil Response Engineer with the United States Navy, offering background and up-to-date information regarding new booming technologies which can be used to stop and collect oil after a spill

- [New Oil Spill Legislation](#): An interview with Assemblymember Jared Huffman, 6th Assembly District, on AB 234: "Oil Spill Prevention and Response: Transfer of Oil"
- [Slow it, Spread it, Sink it](#): Green streets and stormwater
- [Letting Plants Do the Work](#): The benefits of soil bioengineering
- [From Storm Sewer to Babbling Brook](#): How creek restoration benefits the Bay