

Semi-Annual Report: April 2017 - September 2017

The Morro Bay National Estuary Program (Estuary Program) has moved forward on completing new and ongoing tasks in the Fiscal Year (FY) 2017 workplan. All workplans are approved by the Environmental Protection Agency and the Estuary Program's Implementation and Executive Committees. The budget report shows that our Section 320 expenses under the current grant in the second half of the fiscal year were \$304,400. As of September 30, we have expended 65% of our current 320 grant (started in FY17), with a remainder of approximately \$326,000. The Estuary Program has met 101% of its match requirement for the cumulative grant with cash match and estimated current in-kind contributions (at approximately \$1,485,000).

The Estuary Program requests EPA's continued participation on the Executive Committee and assistance with meeting relevant administrative and programmatic grant conditions. During this reporting period, the Estuary Program continued to work to meet the requirements of the final program evaluation letter, which was completed in FY16.

The following summarizes activities and deliverables completed during the semi-annual report period.

Habitat and Water Quality Protection and Restoration

Land Conservation

Objective: Conserve land to achieve Management Plan goals as opportunities arise.

Status: Ongoing task

Progress to Date: The Estuary Program has worked with the Land Conservancy of San Luis Obispo County to further easement and acquisition projects in the watershed. Staff time has been spent to develop these opportunities and support Land Conservancy efforts. An eight-acre parcel in Los Osos was donated anonymously to the Land Conservancy, who is in the process of transferring the property to the Morro Coast Audubon Society. A 133-acre easement is under development with a private landowner in the Los Osos Valley and is expected to be completed by the end of the calendar year. The Estuary Program expects to provide Restoration Fund monies to support the latter effort. Additional land conservation deals are underway in the watershed.

Deliverables: Easements and acquisitions are included in the Estuary Program's conservation and restoration projects map in the State of the Bay report and other similar deliverables. Specific acreage and habitats results will also be reported in future semiannual reports as well as NEPORT.

Freshwater Flow

Objective: Identify projects in lower Chorro Valley and Camp San Luis Obispo area to promote water conservation.

Status: Ongoing task

Progress to Date: The Estuary Program has supported various efforts in the watershed that target enhanced freshwater flow. Trout Unlimited (TU) is working through permitting issues in order to begin construction of an improved fish passage structure and modified flow diversion on Pennington Creek. While the construction may be delayed until next year, the permitting and monitoring is underway for the work to proceed. The Estuary Program attended meetings and provided input in regards to the monitoring requirements laid out by the regulators. The Estuary Program also supports a Central Coast Salmon Enhancement (CCSE) project with funding from a Prop 1 Wildlife Conservation Board grant to collect and analyze streamflow data to assess the effectiveness of a rainwater catchment project. Monitoring continues through the dry season to capture the lowest flows of the year.

Pending Deliverables: Permits and monitoring plans related to the TU effort, currently in draft form. Final analysis by CCSE on the impacts of a water conservation project.

Restoration Maintenance and Monitoring

Objective: Complete monitoring for conservation easements and restoration projects, as necessary.

Status: Ongoing task

Progress to Date: The Estuary Program conducted the annual monitoring of the sites treated as part of the Road Erosion Prevention Project. This involved photo monitoring at sites located throughout the watershed, in conjunction with landowners. Staff conducted annual monitoring of an easement on a private ranch. Staff continued monitoring of flows in Pennington Creek to assess the impacts of a rainwater catchment project. Staff conducted monthly monitoring of bacteria concentrations to assess the effectiveness of riparian fencing and shared the results in monthly landowner memos. Staff submitted habitat project information into the NEPORT system. Staff monitored eelgrass restoration locations from plantings in 2012 through 2014, as well as experimental plantings conducted in March and July of 2017.

Deliverables: For eelgrass monitoring: See report titled "CDFW Duck Stamp Progress Report July 2017" for a summary of historic plantings. The write-up of the monitoring from the experimental plantings are pending. For Pennington Creek flows: report is pending. For conservation easement monitoring: Maino easement monitoring report. For road erosion prevention project: Photo documentation for Road Erosion Prevention Project. For monthly bacteria memos for private landowners: See example memo. Project data submitted to NEPORT. Pending Deliverable: CRAM analysis on Walters Creek.

Eelgrass Restoration

Objective: Meet eelgrass restoration goals with plantings and partnership efforts.

Status: Ongoing task

Progress to Date: Monitoring of eelgrass restoration plantings from 2012 through 2014 was conducted. Minimal eelgrass was found to have survived. This work was conducted under a California Department of Fish and Wildlife Duck Stamp grant. Preliminary results are available in the progress report from July

2017. Estuary Program staff coordinated with local partners, including California Polytechnic State University San Luis Obispo (Cal Poly), the city of Morro Bay, the California Department of Fish and Wildlife, and NOAA. A small-scale experimental planting effort was conducted in March and July 2017. Approximately 600 plants were harvested from Coleman Beach during each of those two time periods, and the eelgrass was replanted at two locations. The Forebay site was selected as a control, since it is an area where eelgrass has continued to survive. The Mid-bay site was selected as an experimental site, since it was an area with historic eelgrass loss. Post-project monitoring indicates that the Forebay eelgrass plots continue to do well, while the Mid-bay plots had almost no plant survival. The Mid-bay location was likely not conducive to eelgrass survival.

Deliverables: Eelgrass monitoring protocol for bed condition monitoring, developed in conjunction with Cal Poly. The document is called "Intertidal Eelgrass Monitoring Protocol 2017". The preliminary results of the eelgrass restoration bed monitoring are contained in the report called "CDFW Duck Stamp Progress Report July 2017". The final report for the effort is a pending deliverable. Preliminary results of their research efforts were written up by the Cal Poly professors involved in the project. Those are contained in the final project report for a NOAA Eelgrass Monitoring and Research Grant awarded to the Estuary Program in 2016 and completed in 2017. The report is called "Morro Bay Eelgrass 2016 to 2017 Research and Monitoring Final Report." Updated map of subtidal eelgrass extent: "2017 Subtidal Eelgrass map". Pending Deliverables: Eelgrass restoration monitoring data and analysis.

Chorro Creek Ecological Reserve Restoration and Planning

Objective: Update restoration plans for the Chorro Creek Ecological Reserve to prepare for implementation.

Status: Ongoing task

Progress to Date: The 100% designs for the project were completed. A grant application was developed seeking funding for project implementation. Estuary Program staff coordinated with CDFW and consultants to update planning, permitting, and design for the project. Estuary Program staff has also lined up other potential funding sources, dependent on a successful application to a CDFW funding program.

Deliverables: 100% designs, submitted to EPA in May 2017. Pending deliverables: Summary of permitting and CEQA activities for restoration effort.

Other Restoration Efforts

Objective: Engage in other restoration efforts that arise and help achieve Management Plan goals.

Status: Ongoing task

Progress to Date: The Estuary Program participated in numerous efforts to meet Management Plan goals. These included participation in the following efforts:

- Public process for wastewater treatment facility in Morro Bay
- City of Morro Bay Harbor Advisory Board subcommittee on eelgrass

- General outreach on invasive species as part of watershed tours and presentations
- Regional Water Management Group meetings, providing project recommendations to the County of San Luis Obispo
- SLO County and Caltrans effort to replace the bridge on South Bay Boulevard
- Los Osos Basin Management Committee, providing funding to analyze future climate change precipitation patterns and how predictions may affect the basin yield models for the Los Osos groundwater basin.

Larger efforts included support of a Coastal San Luis Resource Conservation District (CSLRCD) project on private property to stabilize a portion of bank, plant native plants, and install in-stream fish habitat structures. The Estuary Program contributed funding as well as staff time toward the effort. In particular, the CSLRCD required staff support for water quality monitoring and handling of sensitive species.

Staff continued progress with a conservation plan to identify and prioritize habitat conservation efforts throughout the watershed.

Deliverables: Summary of HAB eelgrass subcommittee meetings. CSLRCD bank stabilization project: Page 39 of "Final Report_#10-440-553_Morro Bay319H 12.29.2016_v3". Assessment of future climate precipitation patterns on basin yield for the Los Osos Basin Management Committee: Basin Yield Model response analysis final report. Pending Deliverables: Conservation planning document.

Conservation and Restoration Project Development

Objective: To develop projects and funding for conservation and restoration.

Status: New task

Progress to Date: Staff coordinated a technical advisory committee to review the plans for a wetland restoration project on Los Osos Creek. The Estuary Program completed the development of a pikeminnow management plan and conducted pikeminnow management efforts in Chorro Creek in September of 2017. Pikeminnow are an invasive fish that are thought to be impacting the recovery of steelhead in the watershed, as they prey on juvenile steelhead and compete with adults for habitat and food.

At the time of development of the FY2017 Workplan, a stormwater planning effort was underway with Camp SLO. It has since been determined that a county-wide stormwater management plan must first be created before any project work can proceed. Thus, the Estuary Program participates in the county-wide stormwater plan process but at this time is not pursuing project work on Camp SLO.

Deliverables: Report from the pikeminnow management efforts in Chorro Creek mainstem.

Environmental Monitoring and Research

Monitoring Program Coordination

Objective: Continue coordination of Volunteer Monitoring Program and collect data that meets QAPP guidelines.

Status: Ongoing task

Progress to Date: Staff conducted monitoring and coordinated volunteers for work in the watershed and estuary to track long-term ambient trends and project implementation effectiveness. In FY17, 65 volunteers contributed 700 hours to the monitoring program. Between staff and volunteers, there were 84 monitoring trips for bay water quality, 328 for bacteria, and 284 for creek water quality. Staff coordinated with the California Department of Public Health and local shellfish growers on monitoring related to toxic plankton blooms and bacteria. Staff continued long-term partnership with Cuesta College, teaching two college laboratory and lecture sessions on oceanography. Staff conducted a volunteer training event and conducted bioassessment monitoring at twelve sites during the spring.

Deliverables: A quality dataset that meets the parameters outlined in the QAPP. Data for calendar year 2016 was submitted to www.ceden.org, which included over 700 records.

Pending Deliverables: Data for 2017 has not been able to be submitted to CEDEN due to lack of funding at the regional data center, Moss Landing Marine Labs. The lab is expecting funding later this year, and data loading can then be resumed.

Monitoring Program Reporting and Analysis

Objective: Analyze data and share results with grantors, partners, local land owners, and the public.

Status: Ongoing Task

Progress to Date: Estuary Program staff compile data in formats appropriate for various audiences, including academic classes, landowners, and the general public. A prime example is the State of the Bay environmental report cards and the accompanying presentations given to local service organizations, local libraries, public meetings, and other groups to share water quality information and projects with the community. Nearly 800 hard copies of the report have been distributed, and countless others have accessed it via our website. Through 11 presentations given in the community about the report card content, 256 people were reached, along with an approximately 900 via TV and radio. Other examples of compiling of data for reporting include the monthly bacteria memos for landowners and agencies, as well as responding to numerous requests for program-generated data. Several blog posts on monitoring-related topics were created over the year, including a popular monthly "Field Updates" post which provides a rundown of what staff have been up to in the estuary and watershed.

Deliverables: Monthly bacteria memos (see example). State of the Bay presentation statistics.

Monitoring Program Data Management

Objective: Maintain data in SWAMP-compatible format.

Status: Ongoing task

Progress to Date: Estuary Program data for water quality, bacteria, and bioassessment for 2016 has been submitted to CEDEN. 2017 data has not yet been submitted due to funding and contracting issues at the Regional Data Center. These are expected to be resolved this fall, and data submittal should be able to continue.

Deliverables: Water quality, bacteria, and bioassesment data for 2016 has been submitted to CEDEN and is available at www.ceden.org This task also included compiling data and conducting analysis for the State of the Bay report, finalized and printed in Spring 2017. Pending Deliverables: Submittal to CEDEN of 2017 data.

Monitoring Program Quality Assurance

Objective: Maintain an approved Quality Assurance Project Plan (QAPP) and implement necessary quality assurance measures.

Status: Ongoing task

Progress to Date: The 2017 QAPP submittal was approved by EPA earlier in the year. It was reviewed and approved the Central Coast Regional Water Quality Control Board (CCRWQCB) QA Officer in the spring. The Estuary Program continues to implement the quality assurance measures contained in the QAPP, including the Sediment Lab QA testing.

Deliverables: Annual QAPP update approved by EPA and the CCRWQCB. Results of Sediment Lab QA testing. Pending Deliverables: Management of QA data in database.

Project Effectiveness Monitoring

Objective: Complete monitoring to show project effectiveness for various restoration projects.

Status: Ongoing task

Progress to Date: The Estuary Program conducted suspended sediment monitoring at two sampling sites throughout the winter and spring. Staff are currently processing the samples to estimate sediment loads. The Estuary Program conducted upstream/downstream monitoring to assess the effectiveness of riparian fencing projects. Staff conducted monitoring of the freshwater seeps at the bay's edge to assess the impacts of the recently completed Los Osos Wastewater Treatment Facility. The Estuary Program conducts monitoring of water levels for two projects on Pennington Creek. One is to assess the impact of a rainwater harvesting project, and the second is to assess an upcoming project to address a fish passage barrier and water diversion. Staff also conducted monitoring of eelgrass restoration beds.

Deliverables: Monthly bacteria memos. Pending Deliverables: Summary of sediment monitoring results. CDFW Duck Stamp Grant final report of eelgrass monitoring

Eelgrass Monitoring and Research

Objective: Monitor eelgrass to determine distribution in the bay.

Status: Ongoing Task

Progress to Date: Estuary Program staff coordinated with Cal Poly and other partners on research and monitoring efforts. Conducted monitoring for an experimental outplanting effort conducted in the spring of 2017. Completed a second round of experimental outplanting in July, and conducted monitoring to assess its progress. Completed a bay-wide subtidal eelgrass mapping effort utilizing sonar and drone imagery. Finalized the monitoring report for the mapping effort. Developed a scope of work and request for cost estimates for a bay-wide map of intertidal eelgrass. Coordinated with NOAA on a new eelgrass grant for 2017 to 2018 to support Morro Bay eelgrass monitoring and experiment planting efforts.

Deliverables: Contractor report on eelgrass mapping effort in spring 2017. Results from Cal Poly efforts to monitor eelgrass restoration plots and NOAA grant final report: See Morro Bay Eelgrass 2016 to 2017 Research and Monitoring Final Report. Scope of work for bay-wide intertidal eelgrass mapping project to take place in fall 2017. Pending Deliverables: Summary of results for the bed condition monitoring effort. CDFW Duck Stamp Grant final report.

Partner Research Efforts

Objective: Support science partners in pursuing research efforts relevant to the goals of the Estuary Program.

Status: Ongoing task

Progress to Date: Estuary Program staff coordinated and collaborated with Cal Poly, CDFW, NOAA, ACOE, the city of Morro Bay, and other project partners to research the causes of eelgrass decline and related water quality issues. Studied eelgrass monitoring and restoration methods in other areas, and reached out to other researchers. Sought results of research efforts in Morro Bay related to nutrients, sedimentation, and other water quality data. Partnered with Cal Poly on a Sea Grant proposal to study sedimentation in the bay and its past and future impacts on eelgrass. The project was selected for funding, but whether or not it moves forward depends on the federal budget.

Deliverables: CDFW Duck Stamp interim report: CDFW Duck Stamp Progress Report July 2017. NOAA eelgrass grant final report: Morro Bay Eelgrass 2016 to 2017 Research and Monitoring Final Report. USGS research on impacts of sea level rise on tidal marshes. Pending Deliverables: Summary of eelgrass monitoring results. USGS report on water quality sampling effort results. Summary of results of Cal Poly research related to eelgrass.

Public Participation, Education and Outreach

Communications

Objective: Communicate with a variety of audiences using presentations, printed materials, online presence, social media, and other venues.

Status: Ongoing task

Progress to Date: Estuary Program staff regularly conducts the following communications tasks:

- Created weekly blog posts which were shared via email, website, and social media
- Updated the website to share program news and upcoming events
- Conducted 47 presentations and fieldtrips, reaching 1,789 individuals in person, as well as an estimated 8,900 individuals via television and radio.
- Continued to increase the number of followers on Facebook to 1,328 users. Utilized two-way communication with these users.
- Maintained a Twitter feed that currently has 515 followers
- Maintained an Instagram feed that currently has 1,513 followers
- Created and distributed press releases for the State of the Bay events. In total there were nine news articles that mentioned these events. The events were featured in a local food magazine and included interviews with program staff.
- Created new outreach materials for display in our Nature Center.

Deliverables: Blog posts at www.mbnep.org/blog Website and Facebook statistics. FY16 Annual Report.

Education

Objective: Develop formal education partnerships and services and continue to maintain the Nature Center and other education efforts.

Status: Ongoing task

Progress to Date: Efforts to support Education included the following:

- Maintained the Nature Center and its exhibits. Added a popular viewing scope to the center.
- Created a new exhibit about pet waste educational program and corresponding webpage with map of dispenser locations.
- Funded three Floating Lab field trips for a total of 89 students from Morro Bay High School, the only high school located in the watershed. This field trip allowed students to experience the bay and its wildlife, learn about water quality measurements, and practice scientific fieldwork methods through an educational program in partnership with the Central Coast Aquarium.
- Completed a Coastal Conservancy grant to create content for an app to draw visitors to the
- Six watershed model demonstrations completed in grades K through 6, reaching 154 students.
- Conducted a demonstration of the watershed model for environmental educators at Camp KEEP, to be used in their curriculum with primary grade students from Kern County.

 Created updated content for the kiosk in the Nature Center. The topics included changing climate and environmental science.

Deliverables: Nature Center promotional materials and statistics, including an example blog post. Fieldtrip and presentation statistics. Pending Deliverable: Content for the Nature Center kiosk.

Nature Center Update

Objective: Update the content and displays in the Nature Center.

Status: New task

Progress to Date: Staff implemented a grant from the Harold J. Miossi Charitable Trust to develop new educational content for the interactive touchscreen kiosk in the Nature Center and to share the content online with users beyond the Nature Center. Staff purchased equipment, developed content, and worked with a Cal Poly Capstone Project group to create a video game on the steelhead life cycle.

Pending Deliverables: Nature Center kiosk updated materials in house and online.

Community Grants

Objective: Provide support for community projects that further the goals of the Management Plan and engage the community.

Status: Ongoing task

Progress to Date: Completed a grant awarded for the creation of an award-winning short documentary film about the challenges facing Morro Bay and the formation of the Estuary Program. The film was screened at the SLO and LA Film Festivals and won awards at both festivals. The film was screened for the community as well as for program partners. Staff worked with a local non-profit to develop a project to educate divers about how to interact safely with sea otters in order to minimize disturbance to these marine mammals. Staff worked with two local applicants on projects to be considered in the next round of funding in early FY18.

Deliverables: Final grant report for project to support a kayak docent program to encourage safe viewing of marine wildlife: Kayak Docent Program Community Grant Final Report. Final grant report for short documentary film: Documentary Film Community Grant Final Report. Pending Deliverables: Brochure and final report for grant project to educate divers on minimizing wildlife disturbance.

Outreach for Boating and Harbor Best Management Practices

Objective: Conduct outreach to boaters about responsible waste disposal practices and other clean boating best management practices.

Status: Ongoing task

Progress to Date: Over the summer, the Estuary Program hired a Clean Boating Intern. His role was to paddle around the bay and walk the shoreline slips to talk to local boaters and share a clean boating message. Staff created an updated survey to gauge the effectiveness of the materials and the clean boating services offered in the bay. In total, he discussed clean boating practices with 44 boaters. 95% of those boaters engaged in positive conversation regarding best practices in clean boating and were very glad to receive our clean boating kits. Several of them requested more of the oil absorbents contained in the kits and suggested additional places around the bay where it would be good to allow boaters to access and exchange these oil absorbents (e.g., the local fuel dock). We have passed feedback from boaters along to the Harbor Department.

Deliverables: Survey. Pending Deliverables: Survey results.

Bay-Friendly Recreational Uses

Objective: Support partner efforts to disseminate message to the public about recreating on the bay while minimizing impacts to wildlife and other competing uses.

Status: Ongoing task

Progress to Date: Staff supported local efforts regarding bay-friendly recreational uses. Participated in training for kayak docent program to reach recreational bay users and educate them on safe wildlife interactions. Helped staff a bayside educational booth during Sea Otter Awareness week that reached 1,500 locals and visitors with information about responsible sea otter viewing. Audience members included all biology and agriculture students from Morro Bay High School, which is located in our watershed. Worked with local group on a community grant to educate divers on safe interactions with wildlife.

Deliverables: Statistics from outreach efforts. Survey on wildlife interactions and interactions with docents from SeaLife Stewards Program: Wildlife Viewing Survey_Final. Report from community grant for kayak docent program: Kayak Docent Program Community Grant Final Report. Pending Deliverables: Brochure for divers to educate them about safe interactions with wildlife. Survey results.

State of the Bay Analysis and Planning

Objective: Complete analysis and report planning for the triennial State of the Bay report.

Status: Ongoing Task

Progress to Date: The triennial State of the Bay report card was printed in the spring and distributed throughout the rest of the year. Staff planned and conducted events to share the report results with various audiences throughout the watershed and beyond. Events included scientific talks, hikes, gardening events, a dog focused event, and others. Through the month-long events, approximately 1,184 individuals were reached in person with an estimated reach of 4,000 people via local public radio station KCBX. Following the end of State of the Bay month in April, staff shared the report card results through an additional 11 presentations, reaching 256 people in person and an estimated 900 through television and radio broadcasts.

Deliverables: State of the Bay report card for 2017. Statistics from State of the Bay outreach events. Posters created to share report card results: SOTB posters for birds, climate change, eelgrass, habitat, safe swimming, sediment, shellfish, steelhead, and water quality.

Other E&O Tasks/Community Partner Projects

Objective: Support outreach projects in the community that further goals of the Management Plan.

Status: Ongoing task

Progress to Date: Staff gave 47 presentations and field trips, reaching 1,789 individuals with our message of protection and restoration.

Deliverables: Outreach statistics.

Program Management

Manage Committees and Build Partnerships

Objective: Hold quarterly meetings and support partnerships.

Status: Ongoing task

Progress to Date: Staff compiled meeting materials and coordinated quarterly meetings of the Implementation Committee and Executive Committee throughout the year. Working group meetings were held as needed for review of grant applications or technical plans. Membership was updated for both committees as needed. Staff coordinated guest speakers for the IC meetings and recruited new members.

Deliverables: Minutes, agenda, staff reports, and materials completed for each meeting.

Grants and Contracts Administration and Financial Management

Objective: Develop workplan, administer grants, and complete annual financial management tasks.

Status: Ongoing task

Progress to Date: Staff worked on financial reporting, progress reports to the EPA and management conference, and participation in NEP conference calls and committees. Staff worked with financial auditors to complete a federal single audit for the Estuary Program's host agency (Bay Foundation of Morro Bay). We coordinated with EPA to provide required materials for oversight of grant and managed numerous grants to the Estuary Program to support our project work.

Deliverables: Semiannual reports are a required deliverable under the EPA Section 320 NEP grant, as well as annual FFR and MBE-WBE forms that are submitted to EPA Region 9 Grants Office. Annual audited financial statements are submitted through the federal clearinghouse and available upon request. 990 tax returns are available on the Bay Foundation website at

http://www.bayfoundationmb.org/financials. Executive Director attended ANEP meeting in DC in May 2017. Completed FY18 Workplan and budget.

General Administration and Human Resources Management

Objective: Maintain accurate financial and human resources records and manage personnel.

Status: Task ongoing

Progress to Date: Staff maintained the ongoing financial and administrative functions, including recordkeeping, filing, bookkeeping, equipment and office space upkeep, as well as interacting with the general public. In addition, the Director spent time managing staff performance and workplan progress. Other HR tasks included training, professional development, recruitment, and keeping all personnel policies and procedures up to date. We hired two Monitoring Interns, a Clean Boating Intern, and an Education & Outreach intern during FY17.

Deliverables: Activities under this task are summarized in the semi-annual report. Bookkeeping and other record keeping tasks contribute to the completion of the deliverables included for the previous tasks (financial management).

Tracking Implementation of the CCMP and Workplan

Objective: Keep track of Workplan and Management Plan implementation.

Status: Ongoing task

Progress to Date: Tracked progress on CCMP implementation through biannual reports to the Executive Committee and through NEPORT data submissions.

Deliverables: Biannual Executive Committee reports. NEPORT submittal.

Budget Overview

Table 1: Costs expended during this semi-annual report period (April 1 through September 30, 2017) and cumulative since the beginning of the grant.

Category	Subcategory	FY17 Period 2 320 Funds	Cash Match	TOTAL	Cumulative 320 Funds	Cumulative Cash Match	Cumulative TOTAL
Personnel	Salaries	\$180,210	\$24,567	\$204,776	\$238,946	\$45,204	\$284,150
	Fringe	\$19,738	\$0	\$19,738	\$27,944	\$0	\$27,944
	Management Conference	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal	\$199,948	\$24,567	\$224,514	\$266,890	\$45,204	\$312,094
Travel		\$2,416	\$0	\$2,416	\$4,530	\$0	\$4,530
	Computers, software	\$925	\$0	\$925	\$1,052	\$0	\$1,052
	Vehicle maintenance, fuel	\$570	\$0	\$570	\$664	\$0	\$664
	Monitoring supplies	\$7,873	\$146	\$8,019	\$8,362	\$238	\$8,600
	Misc. office supplies	\$1,761	\$3,116	\$4,877	\$2,769	\$6,209	\$8,977
	Rent	\$27,492	\$0	\$27,492	\$54,984	\$0	\$54,984
	Utilities	\$1,524	\$0	\$1,524	\$2,124	\$0	\$2,124
Supplies	Subtotal	\$40,144	\$3,262	\$43,406	\$74,483	\$6,447	\$80,930
	Audit/Taxes/Accounting	\$4,724	\$0	\$4,724	\$4,724	\$0	\$4,724
	Education and Outreach	\$6,545	\$11,201	\$17,746	\$6,868	\$7,996	\$14,864
	Monitoring and Research	\$36,563	\$6,876	\$43,439	\$36,563	\$7,777	\$44,340
	Restoration and Protection	\$8,740	\$56,542	\$65,282	\$9,085	\$162,194	\$171,280
Contractual	Subtotal	\$56,572	\$74,618	\$131,191	\$57,241	\$177,967	\$235,207
Other	Postage	\$782	\$229	\$1,011	\$906	\$229	\$1,13
	Copying, Printing	\$1,316	\$0	\$1,316	\$1,674	\$0	\$1,674
	Training, Prof. Dev.	\$830	\$0	\$830	\$940	\$0	\$940
	Telephone, Internet	\$1,221	\$0	\$1,221	\$4,250	\$560	\$4,810
	Repairs and Maintenance	\$1,184	\$0	\$1,184	\$2,402	\$0	\$2,400
	Insurance	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal	\$5,333	\$229	\$5,562	\$10,173	\$789	\$10,962
	TOTAL	\$304,413	\$102,676	\$407,089	\$408,786	\$230,407	\$639,193

Table 2: Costs by program area and task. Match numbers do not include in-kind match.

		FY17 Period 2	FY17 Period 2	FY17 Period 2	FY17 Overall
Program Area	Project	320 Funds	Match	TOTAL	TOTAL
	Communications	\$1,586	\$3,360	\$4,946	\$4,946
	Community Projects	\$1,291	\$0	\$1,291	\$1,291
Education and	Community Grants	\$0	\$3,884	\$3,884	\$8,884
Outreach	Education and Nature Center	\$2,776	\$917	\$3,694	\$3,694
Outreach	State of the Bay	\$0	\$0	\$0	\$0
	Other E&O Tasks	\$892	\$3,040	\$3,932	\$7,255
	Subtotal	\$6,545	\$11,201	\$17,746	\$26,069
	Benthic Invertebrate Monitoring	\$1,230	\$6,670	\$7,900	\$7,900
N - :- : - 1	Stats	\$0	\$0	\$0	\$0
Monitoring and Research	Water Quality Monitoring	\$17,514	\$88	\$17,602	\$17,602
rescuren	Eelgrass Monitoring & Analysis	\$17,820	\$118	\$17,937	\$18,839
	Subtotal	\$36,563	\$6,876	\$43,439	\$44,340
	Restoration & Conservation Planning	\$0	\$0	\$0	\$0
	Freshwater Flow	\$0	\$0	\$0	\$0
Habitat Protection and	Chorro Creek Ecological Reserve	\$0	\$41,686	\$41,686	\$144,902
Restoration	Restoration Project Maintenance	\$54	\$0	\$54	\$54
Restoration	Other Restoration	\$8,686	\$14,856	\$23,542	\$26,634
,	Subtotal	\$8,740	\$56,542	\$65,282	\$171,591
Program Administration		\$0	\$0	\$0	\$0
	TOTAL	\$51,849	\$74,618	\$126,467	\$242,000