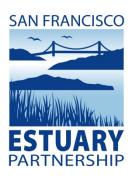
SAN FRANCISCO ESTUARY PARTNERSHIP FY 17 WORK PLAN AND BUDGET OCTOBER 1, 2016 - SEPTEMBER 30, 2017



Pacheco Marsh. Photo by Stephen Joseph, courtesy of Contra Costa County Flood Control and Water Conservation District



FY 17 Work Plan and Budget

October 1, 2016 - September 30, 2017

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- I. Continue Ongoing Funded Projects
- **II. Commence New Funded Projects**
- **III. Pursue New Initiatives**

Attachment 1: Budget Detail

Attachment 2: SFEP Staff List

Attachment 3: Funds Used for Travel

Attachment 4: Completed Projects

INTRODUCTION

The San Francisco Estuary Partnership ("Partnership" or "SFEP") collaborates with federal, state, and local agencies and stakeholder partners whose mission is to restore and improve the health of the San Francisco Estuary. The Partnership developed and tracks implementation of the Estuary's environmental master planning document, the *Comprehensive Conservation and Management Plan*, (CCMP); manages environmental projects throughout the greater San Francisco Bay Area; and educates the public about Bay-Delta ecological issues. The Partnership also sponsors scientific conferences and colloquia including the biannual State of the Estuary Conference and publishes reports such as *The State of the Estuary* (2015). This work is currently supported by more than 30 federal, state, and local grants and contracts that cover over 70 projects, and by the San Francisco Bay Regional Water Quality Control Board, which houses our offices, and the Association of Bay Area Governments, our host entity.

This work plan addresses the requirements of receiving annual US EPA implementation funds. Our 2016/17 \$600,000 appropriation of Section 320 EPA funding is a small, but critical part of the budget as it allows staff to work on efforts not directly funded by the other specific grant/contract funds. The workplan is approved by the Partnership's Implementation Committee prior to providing it to EPA.

This work plan summarizes our budget, and lists the projects, programs, and partners that SFEP will be working on from October 2016 to September 2017. Some of these projects were designed by and are directly managed by SFEP staff, but most of the work plan's projects are being implemented by our partners, with SFEP providing financial and administrative oversight.

It is important to stress that the Partnership's budget and work plan are continuously in flux. With only the EPA annual allocation as a constant income source, the Partnership must constantly work to develop new projects and find new funds and Partnership staff are continuously working with possible new funding partners and applying for new awards. This means that new projects are always in the pipeline and that staffing allocations of time and budget shift frequently to meet new obligations as additional funds are secured. This means that the work plan that will be approved by the Implementation Committee in May 2016 will be somewhat different from the Partnership's actual work during October 2016 to September 2017.

WHAT'S NEW IN 2016/17

The work plan has been restructured to reflect the 2016 Comprehensive Conservation and Management Plan: Actions for a Healthy Estuary. The new CCMP looks to the future of the Bay-Delta Estuary. How can the people and communities that surround the Estuary best protect this economic engine while restoring the values of this greatly stressed union of water, tidal habitats and uplands? With the expected impacts of climate change and continued population growth, what will the Estuary look like in 50 years? What do we need to plan for now – and what actions can we take in the near-term to help ensure a thriving Estuary 35 years from now, despite the changes we can expect and those which we cannot yet foresee?

The 2016 CCMP: Actions for a Healthy Estuary is the result of two years of work involving myriad partners, experts and stakeholders. A unifying collaborative blueprint, the CCMP includes four goals that represent the 35 year vision for the future of the San Francisco Bay-Delta Estuary, 12 objectives that detail desired outcomes that make progress towards achieving goals, and 40 actions that lay out a set of priority tasks to be accomplished over the next 5 years to reach one or more objectives. The 2016 CCMP builds upon the 2015 State of the Estuary Report by linking management responses to the findings of the State of the Estuary Report and using the health indicators contained State of the Estuary Report to track long term outcomes of the actions where possible, thus better integrating SFEP's science and planning documents and facilitating an adaptive management approach for SFEP and the region.

The work plan has been streamlined into three categories of projects. Both ongoing and new funded projects are listed. The third category lists new initiatives from the 2016 CCMP that SFEP is committed to pursuing through identifying and securing new partnerships and funding sources. Every project has been tagged with the 2016 CCMP goals and objectives the project helps meet.



2016 CCMP GOALS AND OBJECTIVES

Where do we want to be in 2050, and what can we do in the next five years to get started?

GOAL 1: Sustain and improve the Estuary's habitats and living resources Objectives:

- a. Protect, restore, and enhance ecological conditions and processes that support self-sustaining natural communities
- b. Eliminate or reduce threats to natural communities
- c. Conduct scientific research and monitoring to measure the status of natural communities, develop and refine management actions, and track progress towards management targets

GOAL 2: Bolster the resilience of the Estuary ecosystems, shorelines and communities to climate change Objectives:

- d. Increase resilience of tidal habitats and tributaries to climate change
- e. Increase resilience of communities at risk from climate change impacts while promoting and protecting natural resources
- f. Promote integrated, coordinated, multi-benefit approaches to increasing resiliency

GOAL 3: Improve water quality and increase the quantity of fresh water available to the Estuary Objectives:

- g. Increase drought resistance and water efficiency and reduce demand on imported water
- h. Improve freshwater flow patterns, quantity, and timing to better support natural resources
- i. Reduce contaminants entering the system and improve water quality

GOAL 4: Champion the Estuary Objectives:

- j. Build public support for the protection and restoration of the Estuary
- k. Strengthen regional leadership in support of Estuary health
- l. Promote efficient and coordinated regional governance

BUDGET

FY 17 Budget Estimate

SFEP manages approximately \$100.9 million for more than 70 projects funded by grants and contracts. As most of those grants are multi-year, this fiscal year budget estimate represents the slice that we would expect to receive and expend during that October 1 to September 30th federal fiscal year.

Our estimated FY 2017 budget is \$24,487,492.

We have provided four figures showing various breakdowns of our budget:

- 1. Total projected income, showing various funding sources
- 2. Breakdown of Federal versus State and local funding
- 3. Breakdown of Federal National Estuary Program funding (Section 320 "base funds") versus other funds
- 4. SFEP-specific funds to manage projects versus passed-through funds to partners for implementation

The full budget is included after the work plan table as Attachment A.

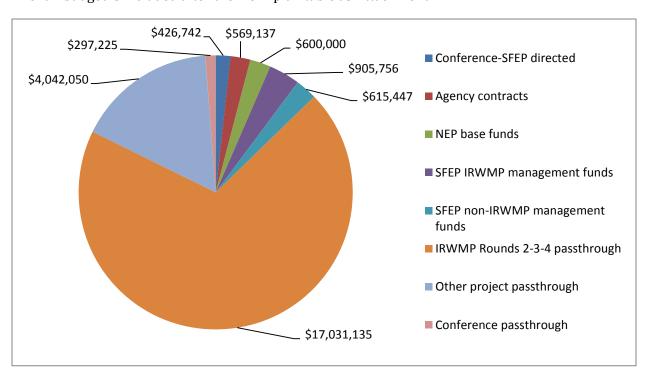


Figure 1: Breakdown of various funding types, FY 17. (Legend labels start with the top slice and proceed clockwise.)

The top sections of Figure 1 show funds that SFEP directs: conference funds, agency permit staff funds, NEP base funds, IRWMP management funds, and funds to manage non-IRWMP projects. The largest slice of the pie is IRWMP passthrough funds, followed by other project passthrough and

conference passthrough. SFEP-retained or SFEP-directed funds versus passthrough funds are summarized in Figure 4.

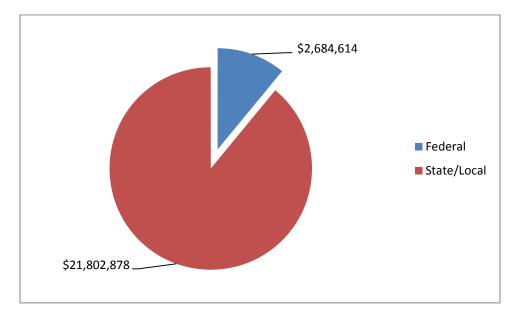


Figure 2: Federal vs State and local funds, FY 17

Approximately 11% of our funding this Federal fiscal year comes from Federal funding. The remaining 89% comes from State and local contracts. The additional Integrated Regional Water Management Plan (IRWMP) state-funded projects make this total much higher than in previous years.

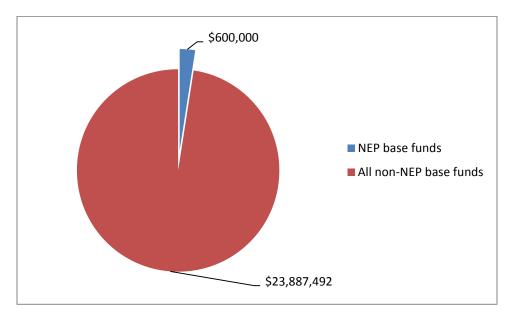


Figure 3: Section 320 "base" funds versus other funding, FY 17

Our National Estuary Program Section 320 "base" funds from EPA account for 2% of our annual budget this fiscal year. Of our "operating" budget (see chart below), the \$600,000 accounts for

approximately 19%. These highly leveraged National Estuary Program funds provide partial support for salary, benefits, and other fixed costs for core staff.

Our Section 320 funds must have a 50 percent match. Match funds come from contracts with local water agencies to fund staff assisting with permitting for the San Francisco Regional Water Quality Control Board and state contracts for science support. ABAG also provides direct project match as well as in-kind support for financial statements, payables reports, invoicing, and legal assistance.

SFEP leverages \$39,120,404 in state and local funds primarily for IRWMP grant management. That total includes \$889,314 of leverage from Water Board in-kind support for office space, computers, phones, mailing, supplies, etc.

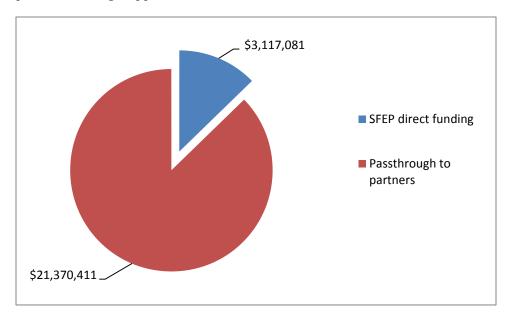


Figure 4: SFEP direct funding versus passthrough funds for partners, FY 17

We retain just over \$3 million for staff and other SFEP-led contract endeavors (ESTUARY News, conferences, etc.). The remaining \$21.3 million is passed through to partners on contracted projects, as described in the tables below.

ONGOING AND NEW PROJECT INFORMATION

I. Continue Existing Funded Projects

The following projects are continuing from the previous fiscal year. Projects where SFEP plays a key lead role in are listed first.

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
1	Clean Vessel Act Program	Implement boater pollution prevention education program under the Clean Vessel Act: Increase recreational vessel pump-out usage and awareness among boating community with a goal of reducing sewage discharge into the San Francisco Bay and Sacramento Delta	Lead	CA Dept of Parks and Recreation, Division of Boating and Waterways, Marinas, Coast Guard, Coastal Commission, SF Water Board	\$280,000 California Department of Parks and Recreation, Division of Boating and Waterways CVA grant	Goals: 1, 3, 4 Objectives: b, i, j
2	Aquatic Invasive Species	Provide continued staff support to work with national and regional coordinating bodies and the key agencies implementing programs to reduce the impact of invasive species through prevention, early detection, rapid response, eradication, and control. These groups are working on developing new policies and programs to reduce the spread of aquatic invasive species, developing and reviewing regional and species management plans, prioritizing key activities for implementation and funding, and coordinating activities at the federal, state, and local levels.	Lead	USFWS, NOAA, CSLC, CDFW	\$20,000 EPA §320	Goal: 1 Objective: b

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
3	Outreach on Resiliency and Green Infrastructure	Develop comprehensive written outreach products on resiliency and green infrastructure.	Lead		\$30,000 EPA (2100)	Goals: 2, 3, 4 Objectives: d, i, j
4	2016 CCMP	Complete the revised Comprehensive Conservation and Management Plan (CCMP), distribute final version via hard copy and an interactive website, and track and report on progress of actions	Lead	IC and various other entities	\$350,000 EPA §320 and State Water Resources Control Board (SRF)	All
5	State of the Estuary Conference	Plan and implement a 2017 State of the Estuary Conference	Lead		\$300,000 EPA §320 and donations and registration fees	Goal: 4 Objective: k
6.	Website, Social Media	Increase public outreach through keeping website up to date and implementing a social media strategy	Lead		\$11,500 EPA §320	Goal: 4 Objective: j
7.	Report to EPA on habitat restoration and fund leveraging	Prepare annual NEPORT reports to EPA.	Lead		\$5,000 EPA §320	Goals: 1, 4 Objectives: c, j
8.	State of the Estuary Report	Continue to promote the findings from the 2015 State of the Estuary Report through conferences, workshops, websites, publications, media, etc. and begin preparations for the 2021 update of the report.	Lead		\$5,000 EPA §320	Goals: 1, 4 Objectives: c, j

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
9	Provide meeting support for the Implementatio n Committee	Plan and hold four meetings per year of the Implementation Committee.	Lead		\$10,000 EPA §320	Goal: 4 Objectives: j, k, l
10	Administrativ e Support	Provide staff training and equipment/supplies needed to successfully advance the work of SFEP.	Lead		\$25,000 EPA §320	All
11	Water Board Wetland Policies Analysis	This project will support the San Francisco Bay Regional Water Quality Control Board's evaluation of regulatory options associated with permitting multi-benefit projects designed to address sea level rise. The Project addresses a critical policy need for the Water Board to address climate change This work will help the state to better protect wetlands and water quality.	Lead (through contract position)	SF Bay Regional Water Quality Control Board	\$90,700 EPA Wetland Program Development Funds	Goals: 2, 4 Objectives: d, k, l
12	Restoring Adequate Freshwater Flows	Support studies and efforts to restore adequate flows in the Estuary and in the Bay tributary rivers and streams.	Project support	Friends of the Estuary, Bay Institute, NRDC, RWQCB	\$17,230 EPA §320	Goals: 3, 4 Objectives: h, j, k
13	Water Management	Support and advance efforts to address water delivery, use, recycling and reuse issues. Includes working with ABAG's Resiliency staff to include water issues in Plan Bay Area. Promote existing outreach activities education the public about recycled water	Participant, project support	ABAG, water suppliers, water districts, others	\$22,975 EPA §320	Goals: 3, 4 Objectives: g, I, j, k

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
14	Estuary News	Increase public outreach through Estuary News publication	Funder, Staff Support		\$68,000 EPA §320, partner donations	Goal: 4 Objective: j
15	Bay Area Regional Collaborative - Cross Agency Working Group	Coordinate with other agency staff to advance climate resiliency through regional agency coordination.	Project Support, Participant	Coastal Conservancy, BCDC, MTC, ABAG	\$5,000 EPA §320	Goals: 2, 4 Objectives: e, j, l
16	Coastal Hazards Adaptation Resiliency Group	SFEP is a member of the Policy Subcommittee of the Coastal Hazards Adaptation Resiliency Group (CHARG)	Project Support, Participant	CHARG members – government, private, NGO	\$2,800 EPA §320	Goals:2, 4 Objectives: d, e, k, l
17	Restoration Authority	Provide staff support to the Board of the Restoration Authority as it carries out its mission to find local funding for regional wetland restoration.	Staff Support	Coastal Conservancy	\$36,000 EPA §320	Goals: 1, 2, 4 Objectives: a, d, e, f, j, k

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
18	Urban Greening Bay Area	This multi-pronged project will develop and further enhance watershed-based green infrastructure planning (GreenPlan-IT) and tracking tools to assist public agencies in meeting water quality and quantity targets. Partner agencies will integrate GreenPlan-IT outputs into appropriate planning documents and construct up to three projects based on cost-effective LID designs for standard intersections at select locations. A key output will be a report that maps out strategies for better positioning GI within planned transportation and GHG Reduction investment programs.	Project Manager, Project Coordination	SFEI, BASMAA, San Jose, San Mateo, ABAG, Sunnyvale, Oakland, Contra Costa County, Richmond, EPA	\$570,264 EPA – SF Bay Water Quality Improvement Fund	Goals: 2, 3 Objectives: b, e, f, i
19	Supplemental Environmenta l Projects	Manage water quality improvement implementation projects funded through the SF Bay Regional Water Quality Control Board fines.	Program Coordination, Projects Oversight,	RWCQB	\$34,160 SF Bay Regional Water Quality Control Board ACL actions	Goals: 1, 2, 3 Objectives: a, d, g, h, i
20	San Francisco Bay-Delta Science Conference	Support Planning and Execution of Bay-Delta Science Conference in 2016.	Staff Support	Delta Science Program and USGS	\$350,000 Delta Science Program, USGS, and registration fees	Goal: 4 Objective: k

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
21	Flood Control 2.0	Develop a set of innovative approaches for bringing environmental benefits and cost-savings to flood protection infrastructure along the San Francisco Bay shoreline.	Project Manager, Project Coordination	SFEI, BCDC, JV, Marin County Flood Control, Contra Costa County Flood Control, San Francisquito JPA	\$1,552,059 EPA – SF Bay Water Quality Improvement Fund	Goals: 1, 2, 3 Objectives: a, e, f, i
22	Greener Pesticides for Cleaner Waterways Campaign	Develop and implement a coordinated communications and evaluation strategy focused on pesticide outreach and improving best practices for behavior change communication.	Project Manager, Project Coordination	BASMAA	\$250,000 EPA – SF Bay Water Quality Improvement Fund	Goals: 3, 4 Objectives: i, j
23	Suisun Marsh Monitoring	This project will: 1) Identify constraints, opportunities and recommendations for managed wetlands Best Management Practice (BMP) in Suisun Marsh that could improve water quality relative to Dissolved Oxygen (DO) and Methylmercury (MeHg), (2) build knowledge within the managed wetland landowner community, and (3) develop working relationships between all stakeholders to support attaining long-term Total Maximum Daily Load objectives. Expected environmental outcomes are reduced occurrences of low DO and high MeHg events in tidal sloughs.	Project Manager	Suisun RCD, SF Bay RWQCB, Delta Science Program, Delta Conservancy, Fairfield- Suisun Sanitary District	\$843,982 EPA – SF Bay Water Quality Improvement Fund	Goals: 1, 3 Objectives: c, i

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
24	Mercury in the South San Francisco Bay: The Guadalupe Watershed	Assist the Santa Clara County Parks and Recreation Department to complete both the Senador Mine and Calcine Paved Roads mercury remediation projects. Begin the 100% design for Upper Jacques Gulch Remediation Project.	Project Manager, Project Coordination	Santa Clara County Parks and Recreation Department	\$2,493,484 EPA: \$1,292,500; State Water Board \$174,984; Santa Clara County \$1,026,000	Goals: 1, 3, 4 Objectives: a, b, i, k
25	Stonybrook Creek Bio- Engineered Bank Stabilization	The Alameda County Resource Conservation District (ACRCD) completed a habitat assessment of the entire length of Stonybrook Creek and used the results of the assessment to develop a watershed plan for project prioritization and selected projects to implement. ACRCD completed bank stabilization projects and one of the two planned fish passage barrier removal projects. These projects will result in habitat improvements to 8,976 linear feet of creek habitat.	Project Manager	Alameda County Resource Conservation District	\$147,750 EPA (2100)	Goal: 1 Objectives: a, b, c

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
26	Regional Green Infrastructure Capacity Building Program/San Pablo Avenue Green Stormwater Spine Project	IRWMP Round 1 – This project includes the creation of innovative stormwater treatment projects along 12.5 miles of San Pablo Avenue in the cities of Albany, Berkeley, El Cerrito, Emeryville, Oakland, San Pablo and Richmond. Cumulatively, the seven sites will treat over 8 acres of impervious surface runoff. The San Francisco Estuary Institute will conduct water quality monitoring to quantify associated pollutant load reductions. Other outputs include regional outreach and creation of a model Green Streets Ordinance that municipalities can adapt and adopt to integrate LID practices into street/sidewalk improvements.	Local Project Sponsor, project manager	Cities of San Pablo, Richmond, Albany, Berkeley, Emeryville, Oakland, and El Cerrito; Caltrans	\$4.9M State Funds – Department of Water Resources; Natural Resources Agency, Urban Greening; Department of Transportation EPA Funds – SF Bay Water Quality Improvement Fund	Goals: 2, 3 Objectives: f, i
27	IRWMP Round 1 DAC Projects	Suite of 7 projects under IRWMP Round 1 Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities 1. Stream Restoration with Schools in Disadvantaged Communities of the North Bay -7,500 linear feet of stream channel restored through stream and wetland/upland transition zone corridor revegetation.	Local Project Sponsor, project manager	Point Blue – Students and Teachers to Restore a Wetland	\$2,201,026 State Funds – Department of Water Resources \$264,977 State Funds – DWR, additional partner match	Goals: 1, 4 Objectives: a, j

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		 Storm Water Improvements and Flood Reduction Strategies Pilot Project in Bay Point – Assessment of stormwater infrastructure and flood hazards in Bay Point, community engagement with data collection. 		The Watershed Project	\$163,000 State Funds – DWR, additional partner match	Goal: 2 Objectives: e, f
		3. Floodplain Mapping for the Bay Area with Disadvantaged Communities Focus - Gather, compile and standardize existing shore features into a Geographic Information System (GIS) database.		SFEI	\$840,000 State Funds – DWR, additional partner match	Goal: 2 Objectives: e, f
		4. Disadvantaged Communities Richmond Shoreline and San Pablo Flood Project - Design guidance for North Richmond coastal creeks; and planning and design for a crossing at Wildcat Creek and restoration on 1,800 feet of Wildcat Creek.		Urban Tilth	\$219,989 State Funds – DWR, additional partner match	Goals: 1, 3 Objectives: a, i

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		5. Pescadero Integrated Flood Reduction and Habitat Enhancement Project - Conceptual designs for a solution to the flooding problems in Pescadero and a juvenile salmonid monitoring program within the Pescadero Creek watershed.		San Mateo Resource Conservation District	\$256,090 State Funds – DWR, additional partner match	Goals: 1, 3 Objectives: a, h
		6. Watershed Guidance and San Francisquito Watershed Restoration - Technical and community planning and educational efforts for San Francisquito Creek Watershed and East Palo Alto, and development of regional curve plots for creek restoration design in three disadvantaged communities.		Committee for Green Foothills	\$292,000 State Funds – DWR, additional partner match	Goals: 1, 3 Objectives: a, h
		7. San Francisco Estuary Salmonid Monitoring Program - Collect outmigrating salmonids and perform related studies in: Sonoma Creek, Corte Madera Creek and the Napa River. Results will be used to evaluate the status of salmonids and to formulate management and future monitoring recommendations.		CEMAR	\$498,537 State Funds – DWR, additional partner match	Goals: 1, 3 Objectives: a, h
28	IRWMP Round 2 Projects	Integrated Regional Water Management Project Round 2 Administration – ABAG's Grant Administration oversees invoicing and reporting for all 19 projects in the grant.	Grantee and overall coordinator for 19 projects		\$750,000 State Funds – DWR	

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		1. San Francisco Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing – This project involves construction of a demonstration ecotone slope on an existing parcel owned by the Oro Loma Sanitary District. The pilot project will be studied to determine its efficacy and optimal design. The elements of the optimal design will then be built into a second phase of pilot projects at other sites in the Bay Area.		SFEP (Lead Partner), Ora Loma Sanitary District	\$2.1 M State Funds – DWR, additional partner match	Goal: 2 Objective: d, e
		2. Bay Area Regional Conservation and Education Program – This project will expand the implementation of existing water conservation practices in the Bay Area, resulting in reduced potable water use and improve the existing Bay Area regional water conservation initiative. A suite of program elements will promote high-efficiency technologies and best water conservation practices that improve indoor and outdoor water use efficiency.		Solano County Water Agency (Lead Partner) and Water Agencies	\$2.7 M State Funds – DWR, additional partner match	Goal: 3 Objective: g

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		3. East Bayshore Recycled Water Project Phase 2 – This project will ultimately provide up to 2.5 mgd (2,800 AFY) of tertiary treated recycled water to customers within the Cities of Alameda, Albany, Berkeley, Emeryville, and Oakland. In 2012, EBMUD completed a segment of the East Bayshore recycled water transmission pipeline. This next phase will extend the recycled water transmission pipeline by about 5,100 feet.		East Bay Municipal Utilities District	\$1 M State Funds – DWR, additional partner match	Goal: 3 Objective: g
		4. Lagunitas Creek Watershed Sediment Reduction and Management Project – This sediment reduction project will improve water quality and streambed habitat for the benefit of coho salmon and steelhead trout populations in Lagunitas Creek; and improve fish passage. The project involves repair of three stream crossings along the Cross Marin Trail		Marin Municipal Water District	\$720,000 State Funds – DWR, additional partner match	Goal: 1 Objective: a

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		5. Marin/Sonoma Conserving Our Watersheds: Agricultural BMP Projects – This project will implement critical environmental Best Management Practices (BMPs) on agricultural lands in Marin and Sonoma counties. The BMP projects will focus on improving water quality, conserving water, and enhancing wildlife ecosystems on agricultural lands.		Marin Resource Conservation District	\$600,000 State Funds – DWR, additional partner match	Goals: 1, 3 Objectives: a, g, i
		6. Napa Milliken Creek Flood Damage Reduction and Fish Passage Barrier Removal – The Project involves three integrated elements along Milliken Creek: 1) removal of a dam and restoration of the stream, 2) construction of a flood bypass/weir, and 3) grading/landscape improvements. The project will prevent flooding of a neighborhood of over 50 homes.		County of Napa	\$500,000 State Funds – DWR, additional partner match	Goals: 1, 2 Objectives: a, d
		7. North Bay Water Reuse Program's Sonoma Valley CSD 5th Street East/McGill Road Recycled Water Project - The project consists of two recycled water sub-projects located In Sonoma Valley. The total recycled water yield from the Project is approximately 200 acre-feet per year (AFY).		Sonoma Valley County Sanitation District	\$1.02 M State Funds – DWR, additional partner match	Goal: 3 Objective: g

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		8. Oakland Sausal Creek Restoration Project - This project involves restoring 754 linear feet of Sausal Creek in Dimond Park in Oakland, California, including 180 feet of culvert daylighting. The project includes restoration of channel function, stream bank stabilization, erosion prevention, native plant restoration, native trout habitat improvement, and interpretive site features.		City of Oakland	\$500,000 State Funds – DWR, additional partner match	Goal: 1 Objective: a
		9. Pescadero Water Supply and Sustainability Project – This project will construct a new municipal groundwater well and 140,000 gallon storage tank for the County Service Area 11 (CSA 11) Water System, which serves approximately 100 households within the Town of Pescadero.		San Mateo County	\$700,000 State Funds – DWR, additional partner match	Goal: 3 Objective: g
		10. Petaluma Flood Reduction, Water & Habitat Quality, and Recreation Project for Capri Creek – This project implements improvements to an existing engineering drainage swale to restore a natural riparian corridor aesthetic. The goals of the project are to achieve flood reduction, habitat enhancement, groundwater recharge opportunities (limited), expand recreational and educational amenities, and water quality improvements.		City of Petaluma	\$825,000 State Funds – DWR, additional partner match	Goals: 1, 2, 3 Objectives: a, d, g

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		11. Redwood City Bayfront Canal and Atherton Channel Flood Improvement and Habitat Restoration Project – This project will mitigate chronic and widespread flooding by routing flood flows from the Bayfront Canal and Atherton Channel into managed ponds that are part of the South Bay Salt Pond Restoration Project. This will provide detention for these drainage areas, and redirected runoff will be used to enhance wetland habitat. This project will alleviate flooding concerns, improve runoff water quality from nearby neighborhoods, and support additional recreational trails. 12. Regional Groundwater Storage and Recovery Project – This project will result in a regional conjunctive use project in the South Westside		Redwood City San Francisco Public Utilities Commission	\$1.135 M State Funds – DWR, additional partner match \$1.4 M State Funds – DWR, additional	Goals: 2, 3 Objectives: d, e, i Goal: 3 Objective:
		Groundwater Basin for use during drought conditions. The basin will be an underground reservoir to store water during periods when surface water supply can be made available to offset groundwater pumping by the Partner Agencies, leading to an accumulation of stored groundwater that can be used during drought years. Will include the construction of 5 groundwater wells.			partner match	

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		13. Richmond Breuner Marsh Restoration Project – EBRPD will create, restore, enhance, and protect 164 acres of crucial habitat in Breuner Marsh at Point Pinole Regional Shoreline Park. The goal of this wetland restoration project is to provide long-term, self-sustaining tidal wetlands, seasonal wetlands, and coastal prairie to create valuable habitat for special-status species and for public access for compatible passive recreation and public education. 14. Roseview Heights Infrastructure		East Bay Regional Parks District	\$750,000 State Funds – DWR, additional partner match	Goal: 1 Objective: a Goal: 3
		Upgrades for Water Supply and Quality Improvement – This project will replace the existing, aging water system infrastructure before emergency repairs or emergency replacement become necessary. The project will improve water supply reliability, water quality, and fire suppression capability by replacing and upgrading water tanks and water mains and adding fire hydrants.		Heights Municipal Water District	State Funds – DWR, additional partner match	Objective:

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		15. San Francisco International Airport Industrial Waste Treatment Plant and Reclaimed Water Facility – This project will provide the necessary infrastructure needed to reuse 100% of treated effluent at the airport terminals for non- potable reuse, thus reducing imported water demand on the Hetch Hetchy water system. An existing recycled water facility will be upgraded to treat 1.0 MGD of high quality industrial, sanitary, and stormwater effluent.		City and County of San Francisco Airport Commission	\$750,000 State Funds – DWR, additional partner match	Goal: 3 Objective: g
		16. San Jose Green Streets & Alleys Demonstration Projects – This project will construct Low Impact Development (LID) improvements along a residential collector-type street and alley segments in a disadvantaged community to demonstrate a range of approaches for retrofitting existing urban streets with LID stormwater management features. These projects will add to a regional collection of demonstration LID retrofit projects.		City of San Jose	\$2 M State Funds – DWR, additional partner match	Goal: 3 Objective: i

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		17. San Pablo Rheem Creek Wetlands Restoration Project – This project will create seasonal wetlands on a ten-acre parcel adjacent to Rheem Creek and Breuner Marsh, located in the City of Richmond. The project will also improve the quality of stormwater that ultimately flows to San Pablo Bay. In addition, the project will lower potential flood impacts from Rheem Creek in neighborhoods within the cities of San Pablo and Richmond.		Contra Costa Water District	\$750,000 State Funds – DWR, additional partner match	Goals: 1, 2, 3 Objectives: a, d, e, i
		18. St. Helena Upper York Creek Dam Removal and Ecosystem Restoration Project – This project will remove the Upper York Creek Dam. The dam removal will provide access to an additional 1.7 miles of spawning and rearing habitat. The project will also restore approximately 2 acres of riparian corridor along York Creek.		City of St. Helena	\$800,000 State Funds – DWR, additional partner match	Goal: 1 Objective: a

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives
					Source	Met
		19. Students and Teachers Restoring a Watershed (STRAW) Project, North and East Bay Watersheds – This project will implement a minimum of 20 habitat restoration projects in Bay Area watersheds with students and community members. Professionally designed and implemented habitat restoration projects integrated with an innovative and time-tested education program will provide water quality benefits, habitat improvement, and positive impacts on economic, social, and environmental sustainability.		Point Blue	\$500,000 State Funds – DWR, additional partner match	Goals: 1, 4 Objectives: a, j
29	IRWMP Round 3 Projects	Integrated Regional Water Management Project Round 2 Administration – ABAG's Grant Administration oversees invoicing and reporting for all 10 projects in the grant. 1. Lower Cherry Aqueduct Emergency Rehabilitation Project – This project will install pipes and repair sections of a dam and tunnel in the Upper Tuolomne River watershed. These improvements will allow the San Francisco Public Utilities Commission (SFPUC) to access up to 150,000 AF of potable supply from Cherry Reservoir and Lake Eleanor in the Upper Tuolumne River watershed.	Grantee and overall coordinator for all 10 projects	San Francisco Public Utilities Commission	\$1.65 M State Funds – DWR \$3 M State Funds – DWR, additional partner match	Goal: 3 Objective: g

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		2. Zone 7 Water Supply Drop Preparedness Project – The increase potable water so groundwater recharge by new production well and of Lakes Well No. 5 is pro- produce up to 2 million g (6.1 AFD or 2,240 AFY) a management of the ground The pipeline will transfers an impervious pond to a to recharge up to 15 MGI 3. Los Carneros Water Distr	ne project will apply and constructing a pipeline. Chain spected to callons per day nd will improve ndwater basin. water between pervious pond 0 (46 AFD).	Alameda County Zone 7 Water Agency	\$3 M State Funds – DWR, additional partner match	Goal: 3 Objective: g Goal: 3
		Sarco-Tulocay Recycled V The project extends NSD water distribution syster by 15 miles west into the area and northeast into t The MST recycled water supply 700 AFY for agric landscape irrigation purp groundwater use. The LC water pipeline will provi AFY to supplement surfa demands and offset agric demands.	Vater Pipelines – Is recycled In in Napa Valley Los Carneros The MST area. In pipeline will In ultural and In poses, offsetting IND recycled IND de up to 1,250 IND recycled I	Sanitation District	State Funds – DWR, additional partner match	Objective:

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		4. Sunnyvale Continuous Recycled Water Production Facilities and Wolfe Road Pipeline – The project will increase recycled water production and distribution capacity to provide 1,680 AFY of additional recycled water to help maintain groundwater levels and contribute to the ongoing conjunctive management in the Santa Clara subbasin. In addition, the Project will reduce nutrient loading to San Francisco Bay.		Santa Clara Valley Water District / City of Sunnyvale	\$4 M State Funds – DWR, additional partner match	Goal: 3 Objectives: g, i
		5. DERWA Phase 3 Recycled Water Expansion Project – The DSRSD-EBMUD Recycled Water Authority's (DERWA's) project will construct permanent distribution system infrastructure to meet some current potable water demand with recycled water for non- potable uses: Anticipated recycled water deliveries are 390 acre-feet per year (AFY) from DERWA to DSRSD and 477 AFY from DERWA to EBMUD.		Dublin San Ramon Services District/East Bay Municipal Utilities District	\$4 M State Funds – DWR, additional partner match	Goal: 3 Objective: g

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		6. Calistoga Recycled Water Storage Facility – The project will enhance recycled water production and storage to provide increased water supply for urban and agricultural use. The goal of the Project is to provide an additional 25 AFY of recycled water to Calistoga by extending the City's ability to generate recycled water year-round and provide new customers with recycled water to offset their potable water and groundwater use.		City of Calistoga	\$750,000 State Funds – DWR, additional partner match	Goal: 3 Objective: g
		7. Drought Relief for South Coast San Mateo County – The project will improve water supply and drought resiliency for domestic and agricultural water users in the two largest coastal watersheds in the county (Pescadero-Butano and San Gregorio watersheds). A suite of site-specific water use, infrastructure, and water management improvements will result in 20.1 AFY (6.55 MGY) of additional water storage capacity and 157 AFY (51 MGY) of reduced water demand.		San Mateo Resources Conservation District/ American Rivers	\$3.872 M State Funds – DWR, additional partner match	Goal: 3 Objective: g

#	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		8. Stinson Beach Water Supply & Drought Preparedness Plan – The plan includes four projects that will reduce water system losses; improve the District's ability to identify, locate, and repair leaks in pipelines; improve drinking water supply and reliability; and benefit fish and wildlife.		Stinson Beach Water District	\$937,452 State Funds – DWR, additional partner match	Goal: 3 Objectives: g, i
		9. Bay Area Regional Drought Relief and Water Conservation Project – The project will be implemented by 12 Bay Area agencies and will leverage and expand existing incentive projects to meet the reduction goals for the current drought and ensure long-term savings, thus improving water supply reliability. A suite of Project elements will promote high-efficiency technologies and water conservation practices that improve indoor and outdoor water use efficiency. The Project will save approximately 1,200 AFY (or 24,000 AF over 20 years).		Stopwaste.or g and Water Agencies	\$5,993,971 State Funds – DWR, additional partner match	Goal: 3 Objective: g

#]	Project Name	Description	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objectives Met
		10. WaterSMART Irrigation with AMI/AMR – The project will alleviate drought impacts in MMWD's service area by permanently reducing commercial landscape sector potable water demand. The Project goal is to achieve a 25% reduction in average landscaping water use through the installation of SMART irrigation equipment and AMI/AMR technology. The Project will install advanced irrigation equipment at 800 sites throughout MMWD's service area in Marin County.		Marin Municipal Water District	\$975,000 State Funds – DWR, additional partner match	Goal: 3 Objective: g

New Projects

II. Commence New Projects

The following are funded projects that SFEP will commence within FY 17.

Proje ct#	Project Name	Description/Outputs	SFEP Role	Partners	Project Cost/ Funding Source	CCMP Goals/ Objective s Met
30	Ocean Acidification Monitoring	Purchase and deploy monitoring equipment for bottom water pH and DO measurements, and convene a regional ocean acidification workshop to develop a plan for a coordinated OA monitoring network.	Project Manager	SF State, UC Davis, SFEI, NERR	\$70,000 EPA §320 through Ocean and Coastal Protection Division	Goals: 1, 3 Objectives: c, i
31	Regional transition zone mapping and community adaptation strategy pilot project	Develop a regional transition zone mapping methodology, and implement a pilot project to advance environmental justice principles with transition zone adaptation strategy.	Project Manager	SF Bay Joint Venture, SFEI, North Richmond Shoreline Open Space Alliance, Urban Tilth	\$75,000 EPA §320 through Climate Ready Estuaries Program	Goals: 1, 2 Objectives: a, b, d
32	Blue Carbon/Metha ne Monitoring Study	Assess methane fluxes regarding pond management of selected South Bay Salt Ponds	Project Manager	Coastal Conservancy	\$46,031 EPA \$320	Goals: 1, 2, 3 Objectives: c, d, i
33	IRWMP Round 1	IRWMP Round 1 – SFEP's Grant Administration will take over invoicing and reporting for remaining Round 1 projects from BACWA.	Coordinator for remaining 10 projects	EBMUD, BACWA	\$100,000 BACWA	Goal: 2 Objective: d, e

New Projects

34	IRWMP Round	IRWMP Round 4 – SFEP's Grant Administration	Grantee and		\$836,411	
	4 Projects	will oversee invoicing and reporting for all of the	overall		State Funds,	
		projects in the grant.	coordinator for 9		DWR	
			projects			
		1. Anderson Dam Seismic Retrofit Project –	projects	Santa Clara	\$4.09 M	Goals: 2, 3
		This project will make improvements		Valley Water	State Funds –	Objectives:
		required for Anderson Dam and its		District	DWR,	e, g
		appurtenances to withstand a maximum			additional	C, 5
		credible earthquake and probable			partner match	
		maximum flood event.				
		2. Marin 2020 Turf Replacement Project –		Marin	\$781,563	Goal: 3
		This project will remove up to 443,000		Municipal	State Funds –	Objectives:
		square feet of non-functional turfgrass from commercial, institutional, and		Water District	DWR,	g, i
		industrial properties and replace it with		District	additional	
		environmentally beneficial landscapes.			partner match	
		3. East Palo Alto Groundwater Supply Project		City of East	\$1,506,050	Goal: 3
		 This project includes development and 		Palo Alto	State Funds -	Objectives:
		use of groundwater as a new source of			DWR,	g
		water supply for the City of East Palo Alto			additional	
		and its DACs.			partner match	
		4. Coastal San Mateo County Drought Relief		San Mateo	\$1.4 M	Goal: 3
		Phase II – This project continues ongoing efforts with local communities and		County Resource	State Funds -	Objectives:
		agricultural stakeholders to balance		Conservation	DWR,	g
		beneficial uses of water resources in San		District	additional partner match	
		Mateo County.		District	partiler match	
		5. San Francisquito Creek Flood Protection		State Coastal	\$1,044,351	Goals: 1, 2
		and Ecosystem Restoration Project – The		Conservancy	State Funds –	Objectives:
		project goals are to protect against			DWR,	a, d, e
		concurrent 100-year riverine floods, 100-			additional	
		year high-tides, and sea-level rise while			partner match	
		restoring 18 acres of tidal marsh.				

New Projects

6. Mountain View Shoreline Portion of SBSPR Project – This project in Mountain View includes 710 acres of tidal marsh and upland habitat restoration and critical flood risk management infrastructure for residences and businesses.	State Coastal Conservancy	\$4,807,998 State Funds – DWR, additional partner match	Goals: 1, 2 Objectives: a, d, e
7. Eden Landing Portion of SBSPR Project – The Eden Landing project involves restoration of over 1,300 acres of tidal marsh, levee improvements to decrease flood risk, and new public access trails.	State Coastal Conservancy	\$3,265,121 State Funds – DWR, additional partner match	Goals: 1, 2 Objectives: a, d, e
8. Novato Creek Flood Protection and Habitat Enhancement Project – The Novato Creek Flood Protection and Habitat Enhancement Project will provide flood protection for 870 acres of land and restore 30 acres of wetland habitat.	State Coastal Conservancy	\$3,551,607 State Funds – DWR, additional partner match	Goals: 1, 2 Objectives: a, d, e

New Initiatives

III.Pursue New Initiatives

The following are new initiatives identified within the 2016 CCMP that SFEP and our partners are committed to pursuing within FY 2017, where SFEP will play a lead role in advancing the project or program. SFEP will seek partnerships and funding to advance these specific tasks under CCMP actions.

#	2016 CCMP Action	Task	CCMP Goals/ Objectives Met
New-1.	-1. Action 14 – Demonstrate how natural habitats and nature-based shoreline infrastructure can provide increased resiliency Task 14-1. Develop a primer on how bayshore projects can be designed and optimized to achieve multiple rather than single benefits. Challenge designers and planners to look beyond a primary objective and find opportunities to incorporate not only flood protection but also habitat enhancement and recreational access, among other objectives, in proposed projects.		Goals: 1, 2 Objectives: a, d, e, f
New-2.			Goals: 1, 3, 4 Objectives: a, g, l
New-3.	, ,		Goals: 1, 3 Objectives: a, g
New-4.			Goals: 1, 3 Objectives: b, i
New-5.			Goals: 3, 4 Objectives: i, j

New Initiatives

New-6.	Action 31 – Foster support	Task 31-3. Develop and distribute educational materials and maps to	Goals: 1, 4
	for resource protection and restoration by providing Estuary-oriented public access and recreational opportunities compatible with wildlife.	boaters and various partners that identify areas where shorebirds, waterfowl, and harbor seals forage, rest, and roost, and include information related to expected changes to habitats and wildlife from climate change.	Objectives: b, j

SFEP Work	Plan Attachment 1 - FINAL												
	16-9/30/17) Estimated Funding												
(10/1/	10 0/00/17/ Edimatou Fananig												
Type	Funder	Project	OWP#	Fed	deral	St	ate/Local	FF	Y 16-17	SF	EP Portion	Mar	aged for Partners
	Registrations, Sponsors, Contracts	State of the Estuary Conference	102065		aoi di	\$	300,000		300,000		300,000		-
	Registrations	Interagency Ecological Program workshop	102101			\$	37,000		37,000		-	\$	37,000
	Delta Stewardship Council	Delta Science Support	102281			\$	286,967	\$	286,967		26,742		260,225
	Registrations	Delta Science Conference	n/a			\$	100,000		100,000		100,000		-
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Local	Donations	Estuary News Magazine	102142			\$	20,000	\$	20,000	\$	_	\$	20,000
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Federal	EPA	Section 320 NEP Base Funds FY 16-17	102224	\$	600,000			\$	600,000	\$	600,000	\$	
	EPA	Ocean Acidification Monitoring	102224	\$	145.000			\$	145,000		16.500		128,500
		Blue Carbon Methane Monitoring Study	102224	\$	46,031			\$	46,031		-	\$	46,031
Federal	EPA	Estuary 2100 Phase 2	102180	\$	185,019			\$	185,019		15,926		169,093
	EPA	Flood Control 2.0 Resilient Habitats	102206	\$	170,146			\$	170,146		11,412		158.734
	EPA	Greener Pesticides for Cleaner Waterways	102207	\$	11,879			\$	11,879		1,879		10,000
	EPA	Calcine Paved Roads	102230	\$	375,245			\$	375,245		17,800		357,445
	EPA	Urban Greening Bay Area	102263	\$	570,264			\$	570,264		128,121		442,143
	EPA	Suisun Marsh Monitoring	102264	\$	421,354			\$	421,354		44,874		376,480
	EPA	Wetland-Climate Change Regulatory Update	102280	\$	45,000			\$	45,000		45,000		-
Federal	CA Division of Boating & Waterways	Clean Vessel Education Program	102262	\$	114,677			\$	114,677	\$	68,038	\$	46,639
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Local	SCVWD	Permit Writing Assistance	102036			\$	134,314	\$	134,314	\$	134,314	\$	
Local	Marin County/SMART	Permit Writing Assistance	102214			\$	168,855	\$	168,855	\$	168,855	\$	-
	Sonoma County Water Agency	Permit Writing Assistance	102220			\$	107,702	\$	107,702	\$	107,702	\$	-
	Alameda County	Permit Writing Assistance	102227			\$	158,266	\$	158,266	\$	158,266		
	•										-		
State	Regional Water Board	ACL-SEP Oversight	102015			\$	21,248	\$	21,248	\$	21,248	\$	-
State	Strategic Growth Council	Stormwater Spine El Cerrito Site 3	102208			\$	572,134	\$	572,134	\$	33,762	\$	538,372
	Caltrans	Match for Stormwater Spine project	102215			\$	881,932	\$	881,932	\$	-	\$	881,932
State	Department of Water Resources	IRWM 1 SFEP GI projects	102204			\$	247,981	\$	247,981	\$	112,879	\$	135,102
State	Department of Water Resources	IRWM 1 DAC Projects	102205			\$	718,229	\$	718,229	\$	20,366	\$	697,863
State	Department of Water Resources	IRWM 1 Grant Administration (transfer from BAC)	tbd			\$	66,667	\$	66,667	\$	66,667	\$	-
State	Department of Water Resources	IRWM 2 Grant Administration	102231			\$	158,557	\$	158,557		158,557	\$	-
State	Department of Water Resources	IRWM 2 All Other Projects	102232-53			\$	5,500,000	\$	5,500,000	\$	-	\$	5,500,000
State	Department of Water Resources	IRWM 3 Grant Administration	102257			\$	471,429	\$	471,429	\$	471,429	\$	-
State	Department of Water Resources	IRWM 3 All Other Projects	102268-78			\$	5,158,154	\$	5,158,154	\$	-	\$	5,158,154
	Department of Water Resources	IRWM 4 Grant Administration	102261			\$	209,103		209,103	\$	209,103	\$	-
	Department of Water Resources	IRWM 4 All Other Projects	tbd			\$	6,372,981	\$	6,372,981	\$	-	\$	6,372,981
State	State Water Board-SRF	Unified Bay & Delta Protection and Reporting	102258			\$	111,359		111,359	\$	77,642	\$	33,717
				\$ 2	2,684,614	\$ 2	21,802,878	\$	24,487,492	\$	3,117,081	\$	21,370,411
					11%		89%		rand Total		13%		87%
									•				