

**SANTA MONICA BAY NATIONAL ESTUARY PROGRAM**  
**Fiscal Year 2017 Work Plan**  
(October 1, 2016 – September 30, 2017)

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## Common Work Plan Acronyms

BEP = Boater Education Program  
BRP = Santa Monica Bay Restoration Plan  
BWER = Ballona Wetlands Ecological Reserve (or Reserve)  
CDFW = California Department of Fish and Wildlife  
CMP = Santa Monica Bay Comprehensive Bay Monitoring Program  
CVA = Clean Vessel Act  
DBW = California State Parks Division of Boating and Waterways  
EC = Santa Monica Bay Restoration Commission Executive Committee  
EWMP = Enhanced Watershed Management Plans  
FY17 = Federal Fiscal Year 2017  
GB = Santa Monica Bay Restoration Commission Governing Board  
GPRA = Government Performance and Results Act  
LARC = Los Angeles Regional Collaborative for Climate Action  
LARWQCB = Los Angeles Regional Water Quality Control Board  
MPA = Marine Protected Area  
MRCA = Mountains Recreation and Conservation Authority  
NPDES = National Pollutant Discharge Elimination System  
Prop. = Proposition Grant  
RCDSMM = Resource Conservation District of the Santa Monica Mountains  
SCC = California State Coastal Conservancy  
SMBNEP = Santa Monica Bay National Estuary Program  
SMBRA = Santa Monica Bay Restoration Authority  
SMBRC = Santa Monica Bay Restoration Commission  
SotB Report = 2015 State of the Bay Report  
SWRCB = State Water Resources Control Board  
TAC = Santa Monica Bay Restoration Commission Technical Advisory Committee  
TBF = The Bay Foundation (also known as the Santa Monica Bay Restoration Foundation)  
TMDL = Total Maximum Daily Load  
UCLA = University of California, Los Angeles  
USC = University of Southern California  
USEPA = United States Environmental Protection Agency  
WMP = Watershed Management Plans

# I. INTRODUCTION

## Santa Monica Bay National Estuary Program Entities

Section 320 of the federal Clean Water Act establishes the National Estuary Program (NEP), which is administered by the United States Environmental Protection Agency (USEPA). To implement the NEP, USEPA identifies national estuaries, develops a Comprehensive Conservation and Management Plan to restore the estuaries, and provides grants to pay for activities necessary to implement the plan. USEPA identified the Santa Monica Bay as a national estuary and approved the Santa Monica Bay Restoration Plan (BRP), with the concurrence of the State that identifies actions and priorities to restore the Santa Monica Bay. The Santa Monica Bay National Estuary Program (SMBNEP) is implemented by three entities: the Santa Monica Bay Restoration Commission (SMBRC), the Santa Monica Bay Restoration Authority (SMBRA), and the Santa Monica Bay Restoration Foundation also known as The Bay Foundation (TBF). Each entity is briefly described below, and more information can be found on the roles, membership, and relationship between entities on the following webpage: [http://www.smbrc.ca.gov/about\\_us/orientation/](http://www.smbrc.ca.gov/about_us/orientation/).

SMBRC is a non-regulatory, locally-based state entity established by an act of the California Legislature in 2002 [Pub. Res. Code §30988(d)]. SMBRC is charged with coordinating activities of federal, state, local, and other entities to restore and enhance the Santa Monica Bay, including identifying and leveraging funding to put solutions into action, building public-private partnerships, promoting cutting-edge research and technology, facilitating stakeholder-driven consensus processes, and raising public awareness ([www.smbrc.ca.gov](http://www.smbrc.ca.gov)). SMBRC brings together local, state, and federal agencies, environmental groups, businesses, scientists, and members of the public on its 36-member Governing Board. SMBRC is also supported by a Technical Advisory Committee (TAC), and a broad stakeholder body, the Watershed Advisory Council (WAC).

SMBRA was created in 2004 by a joint exercise of powers agreement between SMBRC and the Los Angeles County Flood Control District and operates as a local public agency within the Santa Monica Bay watershed and the jurisdictional boundaries of SMBRC and the District. The purpose of SMBRA is to broaden funding opportunities for projects within the Santa Monica Bay Watershed, and it provides an efficient method by which state agencies can fund important programs of SMBNEP.

TBF is an independent, non-profit 501(c)(3) organization founded in 1990. The mission of TBF is to contribute to the restoration and enhancement of the Santa Monica Bay and other coastal waters ([www.santamonicabay.org](http://www.santamonicabay.org)). TBF receives an annual grant from USEPA pursuant to section 320 of the Clean Water Act (33 U.S.C. §1330) to implement the BRP. TBF also receives important grants and donations from other entities to support TBF and its activities.

## Bay Restoration Plan and FY17 Work Plan

The original BRP of 1995 was updated in 2008 and again in 2013. Updates are made to the BRP through a public and iterative process with active participation from members of the Governing Board as well as members of the WAC and TAC. The 2013 BRP ([http://www.smbrc.ca.gov/about\\_us/smbrc\\_plan/docs/smbrcplan2013\\_adopted.pdf](http://www.smbrc.ca.gov/about_us/smbrc_plan/docs/smbrcplan2013_adopted.pdf)) identifies

approaches and strategies intended to make substantial progress toward Bay restoration over the next ten to twenty years. It reflects the consensus of SMBNEP partners with regard to the best strategies and priorities to ensure continued progress and achieve eventual restoration of the Bay and its watershed. The next revision to the BRP is tentatively scheduled for 2018-19.

The purpose of this Work Plan is to identify the program objectives, tasks, timelines and budgets of the work to be performed during the federal fiscal year 2017 (FY17): October 1, 2016 – September 30, 2017, specifically to accomplish the goals and objectives of the 2013 BRP and various technical, managerial, and administrative activities necessary to continue to advance the mission of SMBNEP. Fourteen Goals are identified in the 2013 BRP, in three major “Priority Issue” categories: *Water Quality*, *Natural Resources*, and *Benefits and Values to Humans*. The 14 Goals are described below. The Goals that will be addressed in this Work Plan are identified with an asterisk.

### **Priority Issue – Water Quality**

- Goal #1: Improve water quality through enhancement of current regulatory framework and collaborative, integrated watershed-wide planning and implementation \*
- Goal #2: Improve water quality through pollution prevention and source control \*
- Goal #3: Address potential impacts of emerging contaminants

### **Priority Issue – Natural Resources**

- Goal #4: Create and support policies and programs to protect natural resources \*
- Goal #5: Acquire land for preservation of habitat and ecological services
- Goal #6: Manage invasive species \*
- Goal #7: Restore wetlands, streams and riparian zones \*
- Goal #8: Restore coastal bluffs, dunes, and sandy beaches \*
- Goal #9: Restore intertidal and subtidal habitats \*
- Goal #10: Protect and restore open ocean and deep water habitats

### **Priority Issue – Benefits and Values to Humans**

- Goal #11: Protect public health \*
- Goal #12: Maintain/increase natural flood protection through ecologically functioning floodplains and wetlands \*
- Goal #13: Increase public access to beaches and open space \*
- Goal #14: Conserve water and increase local water supply \*

### **Connection to EPA Goals**

The Clean Water Act section 320 grant is administered by USEPA and provided to TBF for carrying out certain annual Work Plan activities. Non-federal grant matching funds are required at a minimum rate of 1:1. In lieu of direct funding, the State Water Resources Control Board (SWRCB) contributes by providing state staff, office space, and other administrative services to SMBRC. In addition to the SWRCB contribution, the federal grant match requirement is met using funds from the State bond grants [e.g., Proposition 50 and 84 grants administered by the SWRCB and Proposition 12 grants administered by the State Coastal Conservancy (SCC)], and other State and local grants and funds received and managed by TBF and SMBRA. Projects and

activities conducted by other entities identified in this Work Plan are funded by various sources secured by those entities.

EPA's *FY 2014-2018 Strategic Plan* charts a course for the agency through FY 2018 and is organized around five key goals, including:

- Taking Action on Climate Change and Improving Air Quality;
- Protecting America's Waters;
- Cleaning Up Our Communities and Advancing Sustainable Development;
- Ensuring the Safety of Chemicals and Preventing Pollution; and
- Enforcing Environmental Laws.

This Work Plan includes activities that will contribute to the EPA Strategic Plan goals as well as the Office of Water (OW) *National Water Program Guidance* (FY 2014 and FY 2015 Addendum). Specifically, the SMBNEP contributes to the element of the guidance that states: "EPA will continue to build the capacity within the National Estuary Program to adapt to changes from climate change on the coasts, and will provide additional assistance to individual NEPs to support their work to develop adaptation plans for their study areas or technical assistance to support implementation of those plans."<sup>1</sup>

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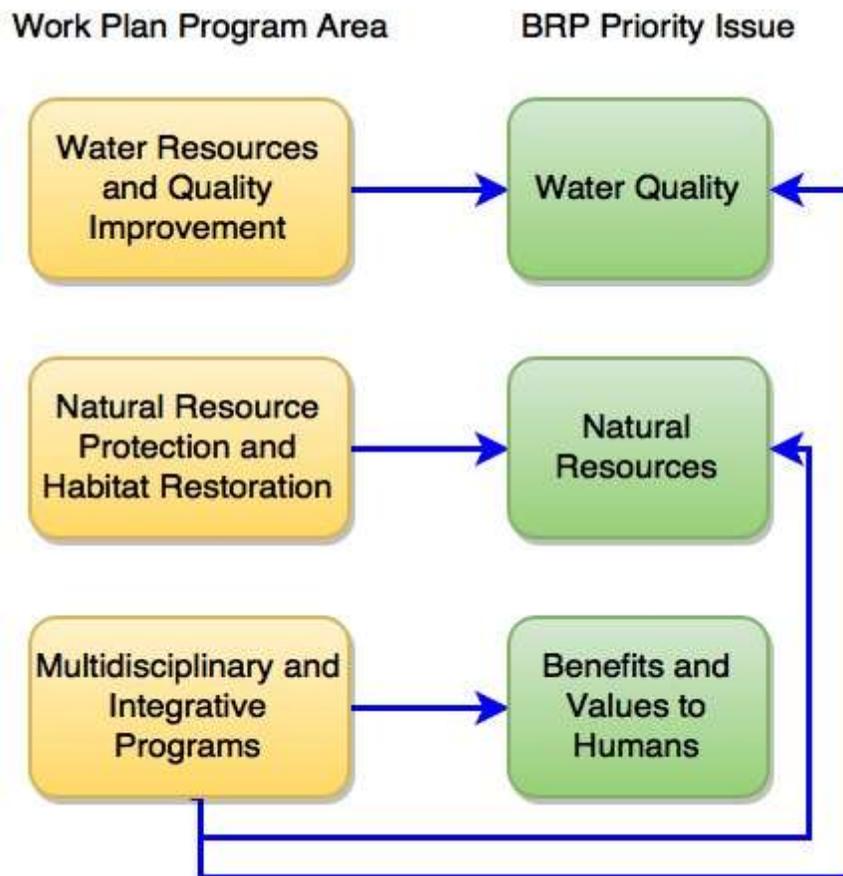
<sup>1</sup> [http://water.epa.gov/aboutow/goals\\_objectives/goals.cfm](http://water.epa.gov/aboutow/goals_objectives/goals.cfm), p. 53.

## II. WORK PLAN OVERVIEW

### Work Plan Structure

Section II of the Work Plan provides an overview of the activities to be undertaken in FY17. Section III provides details on the individual tasks and how each task advances the goals of the BRP. Sections IV and V depict the Work Plan budget and travel documentation, respectively.

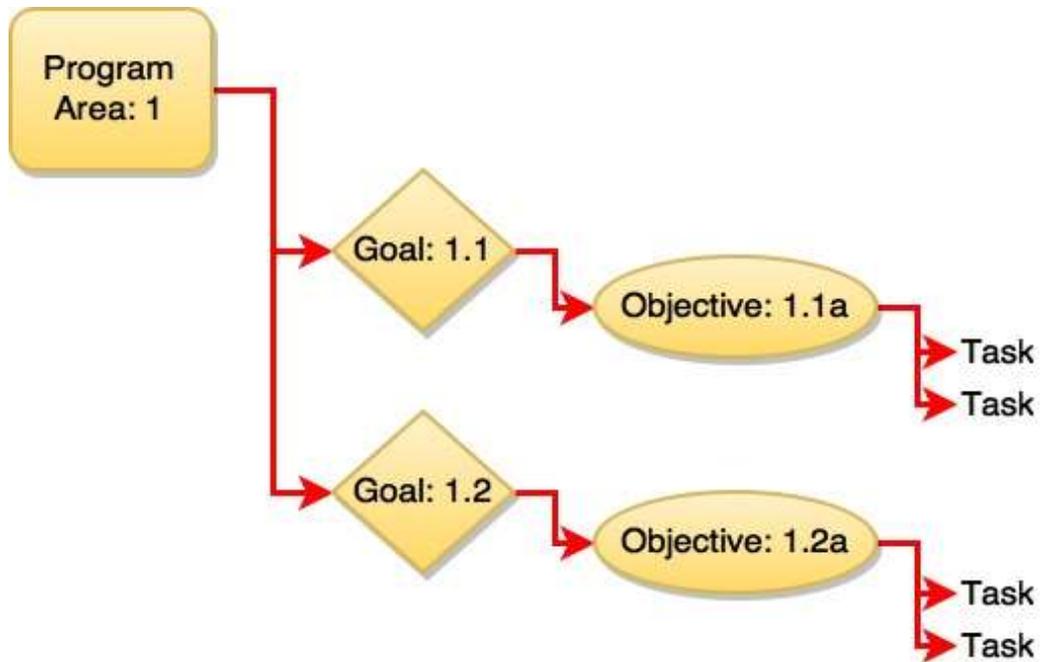
The scope of this Work Plan is broad and structured into three overarching Program Areas (all contained within Section III). Significant efforts will continue to be devoted to carry out water quality improvement and habitat restoration programs and projects, aimed at achieving the objectives and milestones in the Water Quality and Natural Resources sections of the BRP. The Program Area identified as Water Resources and Quality Improvement relates specifically to the BRP Priority Issue: Water Quality; the Program Area identified as Natural Resource Protection and Habitat Restoration relates specifically to the BRP Priority Issue: Natural Resources. There will also be more focus and efforts in FY17 on implementing programs that interconnect and integrate issues across traditional boundaries such as climate change and comprehensive monitoring. These interdisciplinary issues that cover a broad range of topics are categorized into the Work Plan Program Area: Multidisciplinary and Integrative Programs. The diagram below illustrates the connection between SMBNEP's FY17 Work Plan and BRP 2013 Priority Issues.



Each of the three Work Plan Program Areas are further categorized into broad Goals and can be identified as 1.1, 1.2, etc. The table below illustrates each of the three Work Plan Program Areas and the nine Goals identified as priorities for FY17.

| Work Plan Program Area                        | Work Plan Goal   |
|---|--|
| 1. Water Resources and Quality Improvement    | 1.1 Support regional water quality improvement planning and policies |
|   | 1.2 Improve water quality through pollution control and prevention   |
| 2. Natural Resources and Habitat Protection   | 2.1 Support natural resource protection policies and programs        |
|   | 2.2 Restore wetlands and streams                                     |
|   | 2.3 Restore coastal bluffs, dunes, and sandy beaches                 |
|   | 2.4 Restore intertidal and subtidal habitats                         |
| 3. Multidisciplinary and Integrative Programs | 3.1 Promote climate change vulnerability assessment and adaptation   |
|   | 3.2 Conduct public outreach  |
|   | 3.3 Support planning, monitoring, and organizational management      |

The Work Plan Goals are further divided into Objectives (at the level of 1.1a, 1.1b, etc.). Each of these Objectives have their own subsection within Section III and contain a series of tasks identified within a table that will take strides towards reaching those Objectives. The diagram below illustrates the Work Plan structural outline.



### Partnerships and Roles

In addition to projects led and carried out directly by entities of SMBNEP, staff will work with partner organizations and other stakeholders toward collaborative programs, and facilitate and promote activities by partner organizations and stakeholders to achieve the objectives and milestones of the BRP. The role of each SMBNEP entity (SMBRC, TBF, or SMBRA) may differ for each specific Work Plan task and their roles are clearly identified in the Work Plan as one or more of the following:

**Lead:** SMBNEP entity is the lead sponsor and oversees completion of the project activity, and/or the entity carries out the projects directly. These tasks are priorities for the current fiscal year.

**Participate:** SMBNEP entity contributes staff and/or other resources and actively engages in project activities.

**Facilitate:** SMBNEP entity provides assistance in coordination, consensus and partnership-building, information exchange, fund raising, etc.

**Promote:** SMBNEP helps to accomplish the project by actively campaigning for, and/or helping to disseminate information, etc. for the associated activities.

**Support:** SMBNEP advocates for the project or activity by adopting policy statements, offering endorsements, providing supporting letters, testimony, etc.

### **III. TASK DESCRIPTIONS**

This section outlines each of the FY17 Work Plan goals and objectives and provides project narratives and background with task level details summarized in a table for each goal. Each task table articulates which SMBNEP entity(ies) are involved, their role, major project partners, and key actions and deliverables. Tasks in which an SMBNEP entity is identified as the lead or tasks which are identified as SMBNEP priorities for FY17 will also have a supplemental narrative containing details about the task and the project(s) it may contain.

The particular BRP objectives and milestones that are linked to each task are identified, along with the anticipated environmental results. Environmental results are divided into Outputs (i.e., an activity or effort and/or associated work products that are produced or provided over a specific period of time) and Outcomes (i.e., long term environmental changes or benefits resulting from such activities/ efforts) and refer to results that are expected to be achieved in FY17.

Many of the FY17 tasks are continued from previous efforts or projects. Tasks which are new for this fiscal year are identified with a double asterisk in the tables; all others should be assumed to be ongoing. Completed tasks are often closely connected to ongoing, similar projects, and/or are part of a larger project. Thus, relevant recent completed tasks are identified in the summary narrative for each individual project.

## Program Area 1: Water Resources and Quality Improvement

Tasks and activities in this section of the Annual Work Plan are intended to advance the goals, objectives, and milestones that address water quality-related issues, as laid out in Priority Issue 1, Water Quality, of the BRP. Section A of the BRP lays out goals, objectives, and milestones for addressing major water quality issues existing in the Bay and the Bay watershed. One primary goal of this Section is to improve water quality through enhancement of current regulatory framework and collaborative, integrated watershed-wide planning and implementation (Goal #1). To achieve this goal, SMBNEP has worked, and will continue to work with, parties responsible for meeting allocations of total maximum daily loads (TMDLs) and dischargers responsible for complying with National Pollutant Discharge Elimination System (NPDES) permits. The following table summarizes the Goals and Objectives for Program Area 1 in the FY17 Work Plan.

| Goal   | Objective   |
|--|---|
| 1.1 Support regional water quality improvement planning and policies | 1.1a Implement storm water pollution control BMP funded through Prop. 84 bond and other grant programs          |
|  | 1.1b Promote and participate in integrated watershed-wide water quality improvement planning and implementation |
| 1.2 Improve water quality through pollution control and prevention   | 1.2a Implement green infrastructure and LID projects  |
|  | 1.2b Implement the Boater Education Program   |
|  | 1.2c Implement the Clean Bay Restaurant Certification Program   |

### 1.1 Support regional water quality improvement planning and policies

Specific contributions of SMBNEP towards regional water quality improvement planning and policies include recommending awards and overseeing implementation of State Proposition (Prop.) 50 and 84 grant funding for storm water pollution reduction projects, and facilitating other sources of State funding. SMBNEP has also facilitated, and will continue to facilitate the achievement of TMDL waste load and load allocation targets through integrated regional water resource management approach, which will not only improve the Bay’s water quality, but also aid in recharging local groundwater supplies and conserving water.

*1.1a Implement storm water pollution control BMP funded through Prop. 84 bond and other grant programs*

SMBRC Governing Board recommends funding of projects through this program to the State Water Resources Control Board (SWRCB) after a public process to ensure they meet the BRP objectives and address the BRP priorities, meet the requirements of the enabling legislation, and are consistent with USEPA’s Strategic Plan. Adequate oversight of these projects is essential and

entails close coordination with SWRCB staff and project proponents in preparing grant agreements, project execution, and project reporting.

#### Prop. 84 Grants

In FY16, two Prop. 84 projects were completed, including the City of Torrance’s “Stormwater Basin Enhancement” and the California Department of Parks and Recreation’s “Phase 1 Arroyo Sequit Fish Barrier Removal – Planning and Design” project. The Stormwater Basin Enhancement project’s objective was to improve three stormwater detention facilities to improve water quality, enhance native habitat, and conduct active and passive recreation improvements. The primary objective of the Arroyo Sequit project was to design three fish barrier removal projects to improve steelhead trout access to Arroyo Sequit Creek and restore native habitat. Appendix A includes project details for these two, recently completed Prop. 84 projects.

FY17 and future years, SMBRC will continue to provide oversight of, and technical support for pollution prevention and habitat restoration projects funded through Prop. 84 grant programs and SMBRC staff will work with SWRCB to oversee implementation of the ongoing projects. At the time of drafting this work plan, there are four ongoing and continuing Prop. 84 projects, including: Phase 2 Arroyo Sequit Fish Barrier Removal – Implementation, University Park Rain Gardens, Milton Street Park Project, and Oxford Retention Basin Water Quality and Multi-Use Enhancement Project. These projects range in objectives from increasing native habitat, restoring waterways, diverting and treating stormwater, and conducting overall water quality improvements. For additional details on these four ongoing Prop. 84 projects, see Appendix B.

#### Prop. 1 Funding

Additionally, SMBRC and TBF will facilitate availability of Prop. 1 funding for a set of new projects, most of which will implement projects identified in the Watershed Management Plans (WMPs) and Enhanced Watershed Management Plans (EWMPs) to comply with the Los Angeles County MS4 permit.

#### *1.1b Promote and participate in integrated watershed-wide water quality improvement planning and implementation*

SMBRC will continue to support the collaborative effort of local environmental, municipal and business communities to increase funding for water resiliency. SMBRC and TBF will also continue to participate in activities of sub-region stakeholder groups and other mechanisms.

#### Sub-Region Steering Committees

SMBRC also sits on the Steering Committees for the North Bay and South Bay sub-regional watershed groups. SMBRC will continue its role on the Steering Committee to work with other sub-regional groups to develop and recommend projects for the sub-regions for funding made available for implementation of the IRWMP.

#### Integrated Water Resource Management Plan

In 2013, SMBRC was re-elected as one of ten members of the Leadership Committee charged with developing an integrated water resource management plan (IRWMP) for the Los Angeles Metropolitan region (which includes the entire Santa Monica Bay watershed). Also in 2013,

SMBRC lead the development of a new and ground-breaking element focusing on Open Space for Habitat and Recreation during the IRWMP update.

During FY17, SMBRC will continue to participate in the activities of the leadership group and provide necessary technical and advisory support. In addition, SMBRC will continue to work with LARWQCB staff and others to identify and incorporate regulatory priorities into the selection of specific projects included in the IRWMP, especially projects that lead to water quality improvement by reducing storm water pollutant loading, regulated by the MS4 permit, specific TMDL implementation plans, and related efforts.

| Task Description   | Engaged SMBNEP Entities |             | Partners  | Key Action(s) / Deliverable(s)  |
|--|-------------------------|-------------|---|---|
|  | Entities                | Role        |   |   |
| <i>1.1a Implement storm water pollution control BMP funded through Prop. 84 bond and other grant programs</i>          |                         |             |   |   |
| Oversee pollution control BMPs funded through Prop. 84 bond grants   | SMBRC                   | Lead        | SWRCB, LARWQCB, MS4 permittees  | Grant agreements drafted in Oct 2016; project implementations: April 2016 – 2019  |
| Facilitate availability of Prop. 1 funding for WMP and EWMP projects   | SMBRC, TBF              | Facilitate  | LARWQCB, MS4 permittees   | Attend six public comment and TAC meetings state-wide; occasional meetings with local agencies  |
| <i>1.1b Promote and participate in integrated watershed-wide water quality improvement planning and implementation</i> |                         |             |   |   |
| Support efforts to increase funding for water resiliency   | SMBRC, TBF              | Support     | LA County, MS4 permittees   | Specific events (e.g. funding ballot measure) are contingent on the pending timeline of the LA County Drought Resiliency Work Plan and funding mechanism report |
| Participate in sub-region Steering Committees  | SMBRC                   | Participate | LARWQCB, MS4 permittees   | See Appendix C for list of groups and meeting frequency   |
| Participate in IRWMP leadership group and provide technical support  | SMBRC                   | Participate | Los Angeles County Dept. of Public Works (LACDPW)*, municipalities in watershed, Los Angeles County | Quarterly meetings  |

| Task Description | Engaged SMBNEP Entities |      | Partners   | Key Action(s) / Deliverable(s) |
|------------------|-------------------------|------|--|--------------------------------|
|                  | Entities                | Role |  |                                |
|                  |                         |      | Sanitation District (LACSD), West Basin Water District |                                |

\* Project lead

Linked BRP Objectives and Milestones: 1.1a-d

Environmental Results: Outputs: Progress toward TMDL and stormwater permit compliance. Number of projects initiated, in progress, or completed.

Environmental Results: Outcomes: Reduction in “miles of” or “days of” beach closures, exceedances of water quality criteria, and pollutant loadings.

Performance Measures: Improved beach water quality grades at Santa Monica Bay beaches; decreased pollutant concentrations and loading in 303(d)-listed waterbodies.

**1.2 Improve water quality through pollution control and prevention**

Another important goal in the Water Quality Section of the BRP is to improve water quality through pollution prevention and source control (Goal #2). This goal is aimed at implementing projects to reduce and prevent the generation of pollutants at their sources before entering the region’s waterways. To achieve this goal, SMBNEP has spearheaded and carried out several successful pollution source control programs including the residential rain garden program, Southern California boater education program, and the Clean Bay Restoration Certification program. In FY 17, SMBNEP will continue to implement and seek opportunities to expand these programs.

*1.2a Implement green infrastructure and LID projects*

Green infrastructure and low impact development (LID) practices are increasingly used as an effective tool to capture, treat, and infiltrate storm water on-site. In addition to improving surface water quality, these practices also provide multiple benefits including creation of native habitat, beautification of the urban landscape, and reduction of outdoor water use for irrigation, etc. SMBNEP has given priority to green infrastructure projects when recommending the allocation of the state bond funding (Prop. 50, 84, see Section 1.1a) and seeking grants to implement (TBF) LID projects directly.

In FY15, TBF was awarded a grant from the Metropolitan Water District’s (MWD) Innovative Conservation Program and used the grant in FY16 to install rainwater harvesting techniques at

four residential properties and evaluated their successes through pre- and post-installation monitoring. TBF completed the post-installation monitoring, and will complete the final report for this project in July 2016. It will be posted on the technical report page of TBF's website: [www.santamonicabay.org](http://www.santamonicabay.org). TBF was also awarded and completed a Los Angeles Department of Water and Power (LADWP) Community Partnership grant that used a diverse outreach strategy to educate the public about energy efficiency and water conservation throughout our region. This project was completed in the summer of 2015 and reached over half a million people.

During FY17, TBF will continue to seek new partnership and funding opportunities for new rain garden, water conservation, and other LID projects, including development and implementation of LID projects on various parkland locations and encourage monitoring of Ballona creek rain gardens.

### *1.2b Implement the Boater Education Program*

The Boater Education Program (BEP) was initiated in 1996, funded solely through a grant to SMBRA from the California State Parks Division of Boating and Waterways (DBW). Since its inception, BEP has received funding from California Coastal Commission (CCC), DBW, CalRecycle, the Environmental Protection Agency, Sea Grant, and State Water Resources Control Board. Pollutants of concern addressed by BEP include: household hazardous waste, invasive species, oil, plastics, sewage, and trash. BEP works to reduce these pollutants through direct outreach, materials development, technical assistance, networking, and partnerships. BEP has reached hundreds of thousands of boaters, created and printed four editions of the Southern California Boater's Guide, produced the "Our Playground, Their World" clean boating video, published its first ever iPad application with Clean Vessel Act (CVA) grant funds, established 21 used oil recycling programs, and has forged numerous partnerships within the boating community and industry. BEP tasks are categorized into Pumpout Monitoring, Honey Pot Day, Boating Outreach Events, Dockwalker Volunteer Program, Used Oil Recycling, and Copper TMDL Outreach.

#### Pumpout Monitoring

The goal of pumpout station monitoring is to promote a sense of accountability for condition and operational status of pumpout stations, promote useful pollution prevention amenities for boaters, and decrease the amount of sewage discharged into waterways.

In FY17, TBF staff will continue quarterly monitoring of 68 pumpout stations throughout Southern California's major harbors including: Santa Barbara, Ventura, Channel Islands, Marina del Rey, King Harbor, Los Angeles, Long Beach, Huntington Harbour, Newport, Oceanside, Dana Point, and San Diego. Staff will continue to submit quarterly monitoring reports to DBW. In spring 2017, monitoring data from 2015 and 2016 will be published in an Annual Pumpout Usage Report. TBF staff will continue to work with program partners, San Francisco Estuary Partnership (SFEP) and DBW, on developing consistent data analysis, monitoring protocols for the State of California, and will publish the Annual Pumpout Usage Report in Spring 2017.

### Honey Pot Day

The goal of Honey Pot Day (HPD) is to promote the use of proper sewage disposal for boats by implementing a free boat-to-boat pumpout service.

In FY17, TBF staff will offer HPD in four harbors including, Marina del Rey, King Harbor, Los Angeles, and Long Beach in summer 2017. Expectations of this program include the safe disposal of 4,500 gallons of vessel sewage by providing one-time complimentary mobile pumpout services to recreational boaters. Additional education of 120 participants will occur through an online course and quiz (available at [www.honeypotday.org](http://www.honeypotday.org)), and follow-up education. Lastly, outreach tools will be developed to increase boater familiarity with boat-to-boat pumpout services, such as the website, flyers, email outreach, press releases, and banners. For more information about this task, go to [www.honeypotday.org](http://www.honeypotday.org).

### Boating Outreach Events

The goal of attending boater outreach events is to provide the boating community with face-to-face education and outreach about proper sewage disposal, and to encourage the use of local sewage pumpout stations.

In FY17, TBF staff will develop the Southern California Tide Tables & Marina Guide (2016 and 2017), produce five Changing Tide newsletters, publish the Southern California Boater's Guide, Version 2.0 App, attend three boating events, and maintain a contacts database of partners and boaters who have received clean boating education and outreach.

### Dockwalker Volunteer Program

The Dockwalker Volunteer Program exists to promote leadership and behavioral change through peer-to-peer outreach. This program coordinates volunteers and conducts trainings to distribute information about safe and clean boating practices. Partners for this task include: DBW, CCC, Contra Costa County, US Coast Guard, US Power Squadrons, boating community, marinas and yacht clubs, volunteers.

In FY17, TBF staff will produce and distribute 7,000 Boater Kits statewide, 3,500 in Northern California (by DBW, CCC, and Dockwalker volunteers) and 3,500 in Southern California (by TBF and Dockwalker volunteers). Each kit is accompanied by a questionnaire to test boater knowledge. To receive a Boater Kit, the recipient must complete a questionnaire. Each Boater Kit will include an oil absorbent pillow, tide tables, "How to Keep Pollutants Out of the Water" binder card, West Marine coupons, "When Nature Calls" brochure, and an order form for the Southern California Boater's Guide. TBF staff will host 3-4 Dockwalker trainings in Southern California and coordinate Dockwalker participation at 10 boating events. TBF will also partner with DBW and California Coastal Commission's "Boating Clean & Green Campaign" to coordinate and implement the Dockwalker Program. Coordination includes regular conference calls to update training materials and presentations, a Dockwalker newsletter announcing statewide Dockwalker efforts, an annual check in with the Dockwalker Technical Advisory Committee, data management of boater questionnaire results, support for volunteers to encourage their outreach activities, promotion of outreach events for potential "Dockwalking", year-end awards for top Dockwalkers, and management of new contacts. For more information

on the Dockwalker Program go to:

<http://dbw.ca.gov/Environmental/CleanGreen/Dockwalker.aspx#DOCKWALKERS>.

#### Used Oil Recycling

In FY17, TBF will also make an effort to increase used oil recycling opportunities, promote new technologies for boaters to access clean boating amenities (i.e., via smart phone apps), and investigate additional funding sources for these activities.

#### New: Copper TMDL Outreach

Copper is used in antifouling paints to prevent marine organisms from attaching to boat hulls by passively leaching into the surrounding waters. Due to the density of boats in Marina del Rey Harbor and poor tidal action, copper-based antifouling paints are the primary source of dissolved copper to the water column to levels that are harmful to aquatic life. To protect aquatic life and activities that depend on a healthy aquatic ecosystem (such as recreation, wildlife habitat, and fishing), LARWQCB updated the existing toxic pollutants TMDL, which requires an 85% reduction in the amount of copper entering Marina del Rey Harbor.

The County of Los Angeles was recently awarded a SWRCB 319h grant to reduce the copper loading to Marina del Rey Harbor from copper based antifouling boat hull paints by providing boat owners with inflatable boat lifts. Under a contract with the County, TBF will lead the outreach and education component of this project (expected contract execution date is January 2017).

In FY17, TBF will conceive, design, and electronically post and distribute 1-3 outreach and promotional tools such as postcards, fact sheets, newsletter articles, and brochures regarding the Marina del Rey Harbor copper TMDL, integrated pest management solutions, and the County's Boat Lift Program. TBF will be responsible for distribution of outreach tools and materials to boaters through email, social media posts, and at a minimum of four boating events (through the course of the three year contract). TBF will manage the strategy behind the outreach campaign and support development of program logistics (i.e. how boaters obtain inflatable boat lifts).

#### *1.2c Implement the Clean Bay Restaurant Certification Program*

TBF initiated the Clean Bay Restaurant Certification Program (aka Clean Bay Certified) in 2008 to help beach communities address a significant potential source of pollution – local restaurants. Clean Bay Certified is a collaborative partnership between local agencies, businesses, and consumers and advocates for environmental stewardship. The program helps cities meet TMDL requirements by preventing restaurants from contributing to storm water pollution. Two additional cities (Culver City and Inglewood) joined the program during FY16, bringing the total number of participating cities to 9, and the number of certified restaurants to 450. For more information, go to <http://www.santamonicabay.org/learn/our-work/clean-bay-restaurants/>.

#### Clean Bay Certified Promotion

In FY17, TBF will promote certified restaurants on the TBF website, city websites, and social media outlets (i.e. Facebook, Instagram, and Twitter). If funding is available, TBF staff will attend events to promote the restaurants to the general public, as well as educate people on

stormwater pollution and the importance of citizen action. In early 2017, TBF staff will host Clean Bay Certified award events in each participating city to celebrate the most innovative and ocean-friendly restaurant.

Restaurant Inspections

Participating cities are responsible for annual restaurant inspections for Clean Bay Certified. The City of Redondo Beach inspects restaurants monthly. Upon completion of inspections, cities forward all inspection forms, including a list of newly certified restaurants, to TBF for organization and promotion on its website.

In FY17, TBF will continue to support inspection and certification of restaurants, approximately 450 restaurants annually. TBF will hold annual inspector trainings and partner meetings, work with cities on any Clean Bay Certified Inspectors Handbook revisions, and update criteria (if needed). TBF will also provide technical support on various inspection points, such as research sustainable take-out containers or assist a restaurant in developing a recycling program.

| Task Description  | Engaged SMBNEP Entities |            | Partners                                    | Key Action(s) / Deliverable(s)  |
|---|-------------------------|------------|---|---|
|   | Entities                | Role       |   |   |
| <i>1.2a Implement green infrastructure and LID projects</i>                               |                         |            |   |   |
| Seek new partnership and funding opportunities for new rain garden and other LID projects | TBF                     | Lead       | LADWP, MWD                                  | Conduct monthly program meetings, seek grants and funding (ongoing)   |
| Facilitation of storm water monitoring and monitoring of LID effectiveness                | TBF, SMBRC              | Facilitate | LARWQCB*, MS4 permittees                    | Participation of TAC review when possible; opportunistic monitoring of Ballona Creek rain garden, pending funding |
| <i>1.2b Implement the Boater Education Program</i>  |                         |            |   |   |
| Conduct pumpout monitoring  | SMBRA, TBF              | Lead       | San Francisco Estuary Partnership, DBW, CCC | Quarterly monitoring and annual report  |
| Implement Honey Pot Day   | SMBRA, TBF              | Lead       | San Francisco Estuary Partnership, DBW, CCC | Implementation of Honey Pot Day in summer; final report   |

| Task Description   | Engaged SMBNEP Entities |         | Partners  | Key Action(s) / Deliverable(s)   |
|--|-------------------------|---------|---|--|
|  | Entities                | Role    |   |  |
| Attend and promote boating outreach events                           | SMBRA, TBF              | Lead    | DBW, CA Coastal Commission, Contra Costa County, US Coast Guard Auxiliary, US Power Squadrons, boating community, marinas and yacht clubs, volunteers | Produce 4,500 Southern California Tide Tables & Marina Guides (2016 and 2017), 5 Changing Tide newsletters, Southern California Boater's Guide, Version 2.0 App, attend 3 boating events, manage contacts database of partners and boaters to track education and outreach efforts |
| Coordinate Dockwalker Volunteer Program                              | SMBRA, TBF              | Lead    | DBW, CCC, marinas and yacht clubs, volunteers   | 3-4 trainings per year; 7,000 Boater Kits; >100 boater questionnaires; 10 Dockwalker training events; one newsletter; TAC meeting in winter 2016/17; award top volunteers in winter 2016/17  |
| Seek funding for used oil recycling                                  | TBF                     | Lead    | Harbor management throughout Southern California, CalRecycle  | Seek funding in spring 2017 to install additional used oil recycling opportunities   |
| ** Conduct copper TMDL outreach                                      | TBF                     | Support | DBH, LARWQCB, marina managers, boating community  | 1-3 outreach and promotional pieces; promotion of the Boat Lift program; four boating events over three years  |
| <i>1.2c Implement the Clean Bay Restaurant Certification Program</i> |                         |         |   |  |
| Implementation of the Clean Bay Certified program                    | SMBRC, TBF              | Lead    | Cities in the Bay Watershed   | Monthly program meetings; seek grants and funding (ongoing); semi-monthly online promotion; award events in Jan/Feb 2017   |

| Task Description                         | Engaged SMBNEP Entities |         | Partners                     | Key Action(s) / Deliverable(s)                             |
|--|-------------------------|---------|------------------------------|--|
|  | Entities                | Role    |                              |  |
| Support restaurant inspections by Cities | TBF                     | Support | Cities in the Bay Watershed* | Annual or monthly inspection of restaurants (450 annually) |

\* Project lead

\*\* New project for FY17

Linked BRP Objectives and Milestones: 2.1d-f, 2.4a-d, 2.5a

*Environmental Results: Outputs: Number of new residential rain gardens and water conservation and storm water retention devices; Southern California Boater’s Guide (interactive eBook), Boater Kits, and other educational materials; number of restaurant inspections, and number of restaurants certified. Volume of storm water collected/infiltrated, volume of potable water conserved;*

*Environmental Results: Outcomes: Increased opportunities to receive environmental education about boat generated pollution, decreased amount of illegal sewage discharges; greater awareness of clean Bay issues leading to greater involvement by the public and increased participation of restaurants, and reduced runoff from participating restaurants.*

*Performance Measures: Improved storm water quality and beach water quality grades at Santa Monica Bay beaches, indirect measurements of numbers of individuals reached through social marketing techniques (e.g., number of individuals at Dockwalker trainings and events, boat shows, and other boating-related events) and through newsletters and other education and outreach avenues, indirect measurements of the outreach effectiveness via Clean Boater Questionnaires, and amount of properly disposed sewage; number of cities participating, number of restaurant inspections, and number of restaurants certified.*

## **Program Area 2: Natural Resource Protection and Habitat Restoration**

Tasks and activities in this section of the Annual Work Plan are intended to advance the goals, objectives, and milestones that address natural resources-related issues, as laid out in Priority Issue 2, Natural Resources, of the BRP. The BRP addresses the natural resources-related issues first by supporting better information gathering and implementation of more effective protection policies, regulations, and management programs (Goal #4), and by laying out specific steps and projects needed for protection and restoration for each of the major habitats in the Bay (Goals #7–10). The following table summarizes the Goals and Objectives for Program Area 2 in the FY17 Work Plan.

| <b>Goal</b>   | <b>Objective</b>  |
|---|---|
| 2.1 Support natural resource protection policies and programs | 2.1a Promote marine ecosystem protection                    |
|   | 2.1b Support stream protection and policies                 |
| 2.2 Restore wetlands and streams                              | 2.2a Facilitate restoration of priority wetlands            |
|   | 2.2b Facilitate stream restoration and fish barrier removal |
| 2.3 Restore coastal bluffs, dunes and sandy beaches           | 2.3a Restore coastal dune and bluff habitats                |
|   | 2.3b Protect and restore sandy beach habitats               |
| 2.4 Restore intertidal and subtidal habitats                  | 2.4a Promote protection of rocky intertidal habitats        |
|   | 2.4b Restore and enhance rocky reef habitat                 |
|   | 2.4c Reintroduce and restore abalone                        |

### **2.1 Support natural resource protection policies and programs**

The lack of enforceable regulations and and/or conservation policies have been identified as a major cause of loss and degradation for all types of habitats, either land or ocean based. Goal #4 of the BRP calls for new regulations and policies such as a stream protection ordinance, enhanced assessment and effective management of Marine Protected Areas (MPAs), and support development of fishery management plans to prevent further loss of the remaining habitat areas and living resources within the watershed and Bay.

#### *2.1a Promote marine ecosystem protection*

##### Ocean Vessel Aerial Monitoring

Objective long-term data on the type, extent, and location of boating and boat-based fishing directly supports the success of marine spatial planning and resource management of coastal oceans. Initiated in 2010, the ocean vessel aerial monitoring project (BRP Milestone 4.2d) documents the location, type, and activity of ocean vessels operating in state waters with the purpose of informing the south coast Marine Life Protection Act Initiative with a fishery-

independent data set on the expanse and type of fishing effort in Southern California. This project also contributes data directly to the MPA collaborative and is conducted in partnership with LightHawk, a 501 (c)(3) non-profit organization that engages over 200 volunteer pilots to benefit conservation projects.

The first two phases of this project, which started in 2008 at LA Waterkeeper, collected information on approximately 40 flights prior to the initiation of the MPA network (first phase) and approximately 40 flights after (second phase). Data collected throughout the first two phases of the project were analyzed to describe trends and responses by the fishing community and others, resulting from the newly established network of MPAs and to aid CDFW in improving the effectiveness of MPA enforcement throughout Southern California. The final report can be found here: [http://santamonicabay.org/wp-content/uploads/2014/04/AerialMonitoring\\_FinalReport\\_08.26.13.pdf](http://santamonicabay.org/wp-content/uploads/2014/04/AerialMonitoring_FinalReport_08.26.13.pdf).

Subsequent to the first two phases, funding has periodically allowed for supplemental data to be collected to provide information on long-term trends over time. In FY17, TBF will continue quarterly ocean vessel aerial monitoring flights and produce an annual report summarizing the quarterly data. In addition to the flights, this program includes communication with the MPA Collaborative, Ocean Science Trust, Vantuna Research Group, LA Waterkeeper, Heal the Bay, Fishing Community, Pepperdine University, LA County Department of Beaches and Harbors, State Parks, Statewide MPA Watch Program, and CDFW. Additional outreach will also continue through opportunistic presentations given at conferences and seminars throughout the region and through the use of online media.

#### Marine Protected Area Collaborative

The network of MPAs in the Southern California Region established by the State of California in 2012 include four MPAs in Santa Monica Bay. Two are located along the north coast (i.e. Point Dume State Marine Conservation Area and Point Dume State Marine Reserve), and two are located along the Palos Verdes Peninsula coastline (i.e. Point Vicente State Marine Conservation Area and Abalone Cove State Marine Conservation Area). A full map of MPAs for the Southern California Region can be found here:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=105396&inline>.

To ensure that these MPAs are truly effective in protecting the region's critical habitats and living resources, an adaptive management approach has been designed to provide adequate outreach, and to inform monitoring and enforcement. For additional background details on MPAs, refer to the California Department of Fish and Wildlife's (CDFW) website:

<https://www.wildlife.ca.gov/Conservation/Marine/MPAs/Network/Southern-California>.

In FY17, TBF will continue to explore funding and partnership opportunities to promote sustainable fishery resource management and marine ecosystem protection. Specifically, TBF will continue to participate in the Los Angeles MPA Collaborative to facilitate management and overcome monitoring and enforcement challenges.

### Sustainable Fishery Management

The outreach associated with the kelp restoration project, aerial monitoring project, efforts of the SoCal MPA Collaborative are key components for the promotion of sustainable fishery management in Santa Monica Bay and Southern California coastal waters. Communication of the results of these efforts will be made through various methods including web based material, press releases, publication of reports and presentations to resource managers and other organizations and individuals interested in fishery management issues. Additionally, TBF will also continue to encourage and promote efforts by CDFW to complete the development of a fishery management plan for high priority fisheries, including a stock assessment of California halibut.

### Expansion of Acoustic Telemetry Network

California State University, Long Beach (CSULB) leads an effort to monitor and maintain an existing network of acoustic telemetry receivers that track the movement of a number of marine species of interest (e.g. great white sharks, giant black sea bass, white croaker, and barred sand bass). These species and their movements in and around the Bay are of special interest to expand knowledge of their known ecology, biology, and as targeted species for fishing. In addition, white croaker and barred sand bass, which are target species for recreational fishing, may contain high levels of PCBs, DDT, and DDE. The public health impacts of consuming these species and others supports an ongoing effort to determine the spatial extent of human exposure to these, (and other species) of contaminated fish.

Additionally, both great white sharks and giant black sea bass are protected by state and federal regulations but are accidentally caught or purposefully targeted by fishermen. The expansion of the telemetry network will provide data as to the presence and movement of these species off the Malibu coastline. This information will allow for outreach to resource management, and the public on ways to safely interact and protect these ecologically significant species.

In FY17, the expansion of this network into the North Bay will provide valuable data that will assist the public and the efforts of the USEPA and project partners in work related to The Fish Contamination Education Collaborative (FCEC). Which is the public outreach and education component of the United States Environmental Protection Agency's (USEPA) program to protect the most vulnerable populations from the health effects of consuming contaminated fish related to the Palos Verdes Shelf Superfund Site. More information can be found at [www.pvsfish.org](http://www.pvsfish.org).

Specifically, in FY17, TBF will provide three acoustic receivers to the Shark Lab at CSULB. These receivers will be deployed, data will be downloaded quarterly, and reports will be completed by the Shark Lab. TBF will assist with outreach regarding these findings and contribute to the ongoing and adaptive management of the Acoustic Telemetry Network in southern California coastal waters.

### MDR Youth Fishing Program

In FY17 SMBNEP will continue to support the Marina Del Rey Anglers Youth Fishing Program. This program provides an opportunity for hundreds of disadvantaged youth annually to go "catch and release" fishing with the anglers and receive presentations on sustainable fishing practices.

*2.1b Support stream protection and policies*

Over 80% of the natural streams in our watershed have been paved over, culverted, or channelized, significantly reducing the ecosystem functions and services that they provide. Thus, preserving the natural quality of the remaining stream systems/sections has become more critical over the years. This task is directly connected to BRP Objective 4.1.

In FY17, TBF and SMBRC, in partnership with other stakeholder groups, will build upon communications and data collection efforts made in previous years, and will continue to facilitate and support creation and adoption of stream protection ordinances by local jurisdictions.

| Task Description  | Engaged SMBNEP Entities |             | Partners   | Key Action(s) / Deliverable(s)                              |
|---|-------------------------|-------------|--|---|
|   | Entities                | Role        |  |   |
| <i>2.1a Promote marine ecosystem protection</i>               |                         |             |  |   |
| Implement ocean vessel aerial monitoring project              | TBF                     | Lead        | LightHawk, Vantuna Research Group (see narrative for additional collaborators)                           | Quarterly surveys and annual report                         |
| Participate in MPA Collaborative                              | SMBRC, TBF              | Promote     | Heal the Bay, Los Angeles Waterkeeper, Orange County Coastkeeper, WildCoast, Santa Barbara Channelkeeper | Participate in semi-annual meetings; ongoing communications |
| Promote sustainable fishery management                        | SMBRC, TBF              | Promote     | CDFW*  | Opportunistic participation in meetings and communications  |
| Expand acoustic telemetry network                             | TBF                     | Participate | CSULB*, FCEC, County Lifeguards  | Deploy three sensors in fall 2016; quarterly data download  |
| Support MDR Youth Fishing Program                             | TBF                     | Support     | Marina Del Rey Anglers   | Continue communications and outreach                        |
| <i>2.1b Support stream protection and policies</i>            |                         |             |  |   |
| Promote creation and adoption of stream protection ordinances | TBF                     | Promote     | City of LA*, other watershed   | Ongoing communications                                      |

| Task Description | Engaged SMBNEP Entities |      | Partners             | Key Action(s) / Deliverable(s) |
|------------------|-------------------------|------|----------------------|--------------------------------|
|                  | Entities                | Role |                      |                                |
|                  |                         |      | cities, Heal the Bay |                                |

\* Project lead

*Linked BRP Objectives and Milestones: 4.1a, 4.2a-d, 4.3a-c*

*Environmental Results: Outputs: Aerial monitoring data; newly adopted fishery management plans; stream protection policy and ordinance adopted by watershed cities.*

*Environmental Results: Outcomes: Increased population and diversity of marine organisms as shown by monitoring data; increased and more sustainable harvest of local seafood, increased public awareness of the value of marine resources measured by number of outreach events and participants; linear miles of streams protected.*

*Performance Measures: Increased resources for enforcement and monitoring of established MPAs, reduced number of MPA regulation violations, increases in species diversity and abundance in MPAs; adopted stream restoration policies and linear miles of streams protected.*

## 2.2 Restore wetlands and streams

Wetlands, streams, and riparian zones are lifelines of the Bay watershed ecosystem and their preservation and restoration is a high priority. Goal #7 of the BRP calls for restoration of wetlands, streams, and riparian zones and outlines specific objectives and milestones for restoration of the Ballona Wetlands Ecological Reserve (Reserve), Malibu Lagoon, Topanga Lagoon, and other coastal wetlands. Specific objectives and milestones are also established to restore streams through removal of fish barriers, restore or daylight culverted streams in urban areas, and construct greenways along urban streams. Invasive plants and animals have also become a major threat to the integrity of many wetland and stream habitats in the Bay watershed as addressed by Goal #6 of the BRP, and specific objectives and milestones were established to investigate, control, and eradicate invasive species that affect wetland and riparian habitats, such as New Zealand mudsnail, crayfish, ice plant, and others.

### 2.2a Facilitate restoration of priority wetlands

California’s coastal wetlands support a wealth of precious wildlife habitat and play a crucial role in improving coastal water quality and reducing the harmful effects of floods and erosion on surrounding communities. Over 96% of the vegetated estuarine wetlands have been lost over the past century and a half in the Los Angeles region. Thus, restoration to bring back higher level ecosystem functions and services of wetlands is of the utmost importance in our area.

The Ballona Wetlands Ecological Reserve (Reserve), located on the Los Angeles County coast, is an example of this wetland loss, having suffered from over a century of abuse and land degradation, including the channelization of Ballona Creek, dumping of over 3.1 million cy of

sediment on the site, and the continued encroachment of habitat-altering invasive species. Restoration of the Reserve is a top priority of the SMBNEP. The development of the Ballona Wetlands Restoration Plan for the Reserve has been a multi-year process, which entered the CEQA/NEPA process in 2012 with the release of the Notice of Intent/Preparation. The lead agencies are CDFW (state lead) and the Army Corps of Engineers (Corps) (federal lead). For more detailed information about the site, and links to all of the technical reports discussed below, refer to the project website: [www.ballonarestoration.org](http://www.ballonarestoration.org). Technical reports, scientific memoranda, lists of public meetings, electronic newsletter, and additional information can all be found by clicking “News” (<http://ballonarestoration.org/news/>).

With funding support from SCC, TBF conducted and completed a baseline data collection and monitoring project over more than a five-year time period (2009-2015), and provided technical expertise to the restoration Project Management Team (PMT). Technical reports that were produced as part of this funding support in FY16 included two significant documents, the [Ballona Wetlands Ecological Reserve Comprehensive 5-Year Monitoring Report](#) and the [Condition Assessment of the Wetland Habitats in the Reserve](#). These and additional reports from previous FYs can be found here: <http://ballonarestoration.org/news/>. TBF will continue data collection if new funding is applied for and obtained or is otherwise directed by PMT.

#### Ballona Reserve – Community Stewardship Project

In FY15, TBF applied for and received funding to implement an interim stewardship management project at the Reserve through community engagement and invasive species removal in a portion of the Reserve that will not be affected by the larger restoration project planning efforts. TBF will organize public, community functions that will provide a diverse range of community members and students the opportunity to participate in hands-on wetland restoration activities to restore three acres of degraded wetland habitat, and become engaged in the larger restoration planning effort. TBF began implementation of this project in FY16 through initiation of public processes and permit applications.

In FY17, specific activities for this task will include conducting approximately 5-10 public, community restoration events and the restoration of up to three acres of invasive iceplant in the Reserve. Activities will also include pre- and post-restoration monitoring, and completion of an annual report. TBF will also continue to participate in other cleanup efforts and trash removal projects throughout the Reserve.

#### Ballona Reserve – Draft Environmental Impact Report/Statement

The release of the draft Environmental Impact Report/Statement (EIR/S) is scheduled by the project lead agencies in summer 2016. In FY17, TBF will continue to help the lead agencies with draft EIR/S review for the restoration of the Reserve. Specific activities in FY17 include completion of technical review of the draft EIR/S; assistance with review of public comments; and further technical input as requested by the PMT. For more information about the draft EIR/S process, and to stay up-to-date on project activities, click on the project website: [www.ballonarestoration.org](http://www.ballonarestoration.org), or [sign up to receive the Ballona Restoration newsletter](#).

### Ballona Reserve – Public Outreach

In FY17, TBF will also continue to develop and implement communications strategies in partnership with the lead agencies to continue to involve the public using a variety of methods and opportunities for engagement. Specifically, TBF staff will conduct community outreach through a variety of online and print media, conduct tours, give presentations, update websites, distribute electronic newsletters, and assist with social media, including information relevant to the release of the draft EIR/S.

### Malibu Lagoon Maintenance and Monitoring

After years of planning and construction, restoration of the Malibu Lagoon was completed successfully in May 2013. SMBRA and TBF have led semi-annual post-restoration biological, chemical, and physical monitoring activities and produced annual reports which can be found on TBF's website: [www.santamonica.org](http://www.santamonica.org). Based on data collected thus far, the project has been a resounding success, showing increases in water circulation and movement, removal of the pre-restoration “dead zones”, and a healthy and thriving wildlife community. Monitoring and reporting will continue for five years post-restoration, ending in the completion of the program in 2018.

In FY17, SMBRA and TBF will continue to coordinate and work with partners and other stakeholders to conduct post-restoration maintenance and monitoring for the fourth monitoring year, continue assistance in invasive plant removal, complete one annual public report, and conduct public outreach

### Level 3 Regional Wetland Monitoring Program

A regional wetland monitoring program is imperative to understanding the health of coastal estuarine systems. Programs such as these inform wetland restoration projects from the scale of the Ballona Reserve, down to the small, 3-6 acre lagoons in the northern portion of the Santa Monica Bay. Understanding current conditions allows for the most scientific development of robust restoration planning documents.

Based on the results of TBF's wetland monitoring programs, a regional, Level 3 (site-intensive) long-term monitoring program for wetland habitats was conducted at five major estuaries in Southern California from 2011 through 2015. With grant funding awarded from the USEPA Wetland Program Development Grant, SMBRA and TBF partnered with the Southern California Coastal Water Research Project (SCCWRP), California State University Channel Islands (CSUCI), and the Southern California Wetlands Recovery Project (WRP) to develop the framework for Level 3 monitoring, field test numerous protocols, and produce a Monitoring Manual and regional monitoring report. The grant for this project ended in FY16. In FY16, SMBRA, TBF, and their partners applied for and received a new USEPA Wetland Program Development Grant to continue and expand the regional wetland monitoring program to evaluate data from additional wetlands between Point Conception and the Tijuana border.

In FY17, activities will include initiating this program, consolidating regional datasets, and beginning analyses in conjunction with multiple project partners. One workshop will be held in fall 2016 to determine the next steps and identify data gaps for monitoring needs.

### Other Coastal Lagoon Restorations

Restoration of the Oxford Basin (a small estuarine wetland in Marina del Rey) was completed by the County of Los Angeles DPW in May of 2016. Ongoing maintenance and monitoring continues by the County, with technical advice from TBF and SMBRC, when requested. For additional details on Oxford Basin, refer to Appendix B.

SMBRC and TBF will continue to facilitate restoration of other coastal lagoons in Santa Monica Bay (e.g. Trancas Lagoon) through partnership building, outreach, assistance with coordination, and information exchange. Opportunities to apply for funding will also be explored.

### *2.2b Facilitate stream restoration and fish barrier removal*

SMBNEP has been active in leading and facilitating stream restoration programs and projects through sponsorship of the [Ballona Creek Watershed Historical Ecology Study](#), writing the [Greenway Plan for Ballona Creek](#), coordinating maintenance events, documenting and controlling impacts of invasive species and participating in fish barrier removals. Removal of barriers are imperative to the survival of important species such as the Southern California Steelhead Trout, a federally endangered species. It is estimated that due to damming and other human impacts that Steelhead Trout have lost 80 – 95% of their historic habitat range.

### Stone Canyon Creek Maintenance

The once mighty Stone Canyon Creek was formerly a dominant feature of the University of California, Los Angeles (UCLA) campus. But over the years, as the campus expanded, the Creek was routed underground and now only one small segment running behind the Anderson School of Management remains. The vegetation that continues to grow at the creek site is dominated by invasive plants which are overtaking and trying to push out the few remaining native plant and wildlife species.

TBF and the UCLA Lab School (ULS) have worked together, with thousands of volunteers over more than five years, to help restore the ecosystem of the only remaining section of unburied creek on the UCLA campus. Serving as a ‘living classroom’ for the school, huge progress has been made, but it requires ongoing maintenance to preserve the habitat for native vegetation. Newly established vegetation removes pollutants from the water to improve water quality and serves as habitat to birds and other wildlife on campus. From this project, the UCLA Lab School was also named part of the National Wildlife Federation’s Certified Schoolyard Habitat program.

In FY17, TBF will continue ongoing monthly volunteer maintenance and invasive species removal events at Stone Canyon Creek.

### New Zealand Mudsail Monitoring Surveys

New Zealand mudsnails (NZMS), *Potamopyrgus antipodarum*, are tiny (3-5 mm), highly invasive, aquatic snails. A single snail is capable of producing a colony of 40 million progeny in the course of a single year by reproducing parthenogenetically, by cloning. The highly invasive NZMS was first reported in the Santa Monica Mountains in 2005. The snails were collected in 4 streams during bioassessment monitoring of the Malibu Creek watershed as part of a watershed-wide monitoring program. As of 2014, NZMS have been detected in 14 streams in the Santa

Monica Mountains. TBF is currently funding research to help determine the impacts of NZMS on benthic macro-invertebrates in northern Santa Monica Bay watersheds. Stakeholders, including California State Parks, Mountain Restoration Trust, National Parks Service, and SMBNEP, are currently considering the use of biological control methods being proposed by Dr. Tom Dudley from the Riparian Invasion Research Laboratory at UC Santa Barbara. SMBNEP is also evaluating the potential uses of environmental DNA (eDNA) as an early detection method for NZMS and other aquatic invasive species. The most recent SMBNEP New Zealand Mudsnail Survey Report from 2015 is available on SMBRC's website: [http://www.smbrc.ca.gov/news\\_events/docs/nzms\\_rpt2015.pdf](http://www.smbrc.ca.gov/news_events/docs/nzms_rpt2015.pdf).

In FY17, SMBRC and TBF will continue to lead efforts to address the environmental damage caused by invasive species, including continuing to conduct and report on the result of the annual mudsnail infestation surveys in the Northern Bay watershed.

#### Invasive Crayfish Control Efforts

Non-native Louisiana red swamp crayfish are harmful to the ecosystem of the Santa Monica Mountains. Native amphibians and fish are threatened by the propagation of this species, causing a disturbance to the ecosystem. They prey on native species, reduce water quality, and cause problems with creek bed erosion. To date, volunteers working with TBF and Mountains Restoration Trust have removed over 11,000 crayfish from Malibu Creek.

In FY17, SMBRC and TBF will continue to seek funding for and participate in projects for the control of invasive crayfish in the North Bay/Santa Monica Mountains watersheds in partnership with Mountains Restoration Trust.

#### Arroyo Sequit Creek

Southern California steelhead trout are a federally listed endangered species. They are also a California state listed Species of Special Concern. They are considered to be the most jeopardized of all populations within California. Historically, thousands of fish spawned each year throughout the streams in the Santa Monica Mountains. Today only three streams, Arroyo Sequit, Malibu, and Topanga creeks, are known to contain steelhead trout, and their numbers are few. In August of FY16, TBF assisted State Parks with the removal of a two and a half foot check dam that was blocking fish passage in the Arroyo Sequit Creek. The check dam removal, in combination with two additional barrier removals will open four and a half miles of new habitat for fish to access.

In FY17, TBF will oversee the completion of the construction phases of the restoration project, including bridge building, and will continue to participate in the maintenance and removal of invasive vegetation and in monitoring.

#### Rindge Dam Removal

The 100-foot tall dam on Malibu Creek is located in Malibu Creek State Park, about three miles from the coast of Malibu, California. State Parks is the agency leading the effort to conduct a feasibility study for its potential removal. It is the largest barrier to fish passage in Malibu Creek.

In FY17, TBF will support the project through continued communications with the lead agencies to finish the feasibility study and explore the next steps for the project.

Topanga Creek Restoration

In FY17, TBF will continue to promote the effort to restore Topanga Creek narrows, including communications with the project partners to replace the PCH bridge at Topanga Lagoon to allow for additional area for wetland restoration.

Other Stream Restoration and Fish Barrier Removal Projects

Building upon the progress made in previous years, FY17 will also include opportunistic promotion of additional fish barrier removal projects and stream restoration projects, and may include funding searches, collaborative communications, and exploration of partnerships. Specifically, TBF and SMBRC will continue discussions with lead agencies such as State Parks and RCDSMM to find new projects. Additional effort will be made to build support, and seek funding, for the implementation of stream daylighting projects.

| Task Description   | Engaged SMBNEP Entities |             | Partners                                | Key Action(s) / Deliverable(s)  |
|--|-------------------------|-------------|---|---|
|  | Entities                | Role        |   |   |
| <i>2.2a Facilitate restoration of priority wetlands</i>                              |                         |             |   |   |
| Implement Ballona Reserve community stewardship and invasive species removal project | TBF                     | Lead        | CDFW, FBW, CUREs                        | Organize and conduct 5-10 removal events; complete by Dec 2017; one annual report                                 |
| Assist with the draft EIR/S review for the Ballona Reserve                           | TBF                     | Participate | CDFW*, USACE, SCC, LAC Flood Control    | Draft EIR/S expected in summer 2016; public review through fall 2016  |
| Conduct public outreach about Ballona Reserve  | TBF                     | Participate | CDFW*, SCC, Friends of Ballona Wetlands | Conduct at least one activity per month   |
| Conduct Malibu Lagoon post-restoration maintenance and monitoring                    | SMBRA, TBF              | Lead        | State Parks, RCDSMM, Cooper Ecological  | Maintenance and volunteer events once monthly; monitoring ongoing 2013-2018; annual monitoring report in May 2017 |

| Task Description  | Engaged SMBNEP Entities |             | Partners  | Key Action(s) / Deliverable(s)  |
|---|-------------------------|-------------|---|---|
|   | Entities                | Role        |   |   |
| Implement Level 3 regional wetland monitoring program   | TBF                     | Lead        | SCCWRP, CSUCI, CWMW                                     | Workshop in fall 2016; beginning data consolidation                                     |
| Facilitate restoration of other coastal lagoons in northern Santa Monica Bay                            | TBF                     | Facilitate  | RCDSMM, LA County DPW, NPS, NMFS, Caltrans              | Meetings attended opportunistically as lead agencies progress; ongoing funding searches |
| <i>2.2b Facilitate stream restoration and fish barrier removal</i>                                      |                         |             |   |   |
| Conduct Stone Canyon Creek maintenance  | TBF                     | Lead        | UCLA  | Monthly volunteer restoration events  |
| Conduct mudsnail surveys in the Northern Bay watershed  | SMBRC, TBF              | Lead        | N/A   | One annual summer survey, pending funding   |
| Facilitate projects to control crayfish and other invasive species in Santa Monica Mountains watersheds | SMBRC, TBF              | Participate | National Parks Service*, MRCA                           | Annual surveys; support for removal projects, pending funding                           |
| Complete Arroyo Sequit fish barrier removal project   | TBF                     | Participate | State Parks   | Removal complete by winter 2016/17; ongoing vegetation maintenance                      |
| Facilitate completion of Rindge Dam removal feasibility study   | SMBRC, TBF              | Facilitate  | U.S. Army Corps of Engineers (Corps)*, State Parks, SCC | Targeted study completion: Dec. 2017; targeted removal start in 5-10 years              |
| Participate in restoration of lower Topanga Creek   | SMBRC, TBF              | Participate | State Parks*, RCDSMM                                    | Opportunistic communications throughout the work plan time period                       |
| Seek funding and promote stream restoration and fish barrier removal projects                           | SMBRC, TBF              | Promote     | TBD   | Opportunistic communications and funding searches throughout the work plan time period  |

\* Project lead

*Linked BRP Objectives and Milestones: 7.1a, 7.1b, 7.2a, 7.4a-e, 7.5a-c, 7.6a, 7.8a, 7.8b*

*Environmental Results: Outputs: Development of restoration plans and restoration project(s) initiated.*

*Environmental Results: Outcomes: Acres of wetland habitat restored, improvement in ecosystem functions and connectivity in major coastal wetland complexes measured by CRAM scores, and increased public and stakeholder engagement; restored, improved riparian - aquatic habitat and biodiversity as measured by California Stream Condition Index (CSCI) scores, increased linear miles of passage for endangered southern steelhead trout, improved water quality measured by fewer related 303d listings, reduced erosion/sedimentation as shown by monitoring data, and reduction and effective control of invasive species populations.*

*Performance Measures: Completed EIR/EIS documents, monitoring protocols, reports of monitoring results, acres of habitat protected or restored; number of stream restoration projects planned or underway, and linear miles of streams protected/restored.*

### **2.3 Restore coastal bluffs, dunes, and sandy beaches**

Coastal dunes, bluffs, and sandy beaches are prominent features and dominant habitat types along the Bay coastline and support a variety of plant and animal species. Goal #8 of the BRP calls for restoration of coastal bluffs, dunes, and sandy beaches and outlines specific objectives and milestones for restoration of specific dune habitats including dune habitats at LAX, and comprehensive measures to protect, manage, and restore sandy beaches.

#### *2.3a Restore coastal dune and bluff habitats*

SMBNEP has a long history of supporting and engaging in the restoration of coastal dune and bluff habitats, including restoration of coastal dunes in the Ballona Reserve, beach bluffs along Redondo Beach, and three coastal bluff sites on the Palos Verdes Peninsula.

#### New: Monthly LAX Dunes Restoration Events

The El Segundo/LAX Dunes (LAX Dunes) in the City of Los Angeles, at the Los Angeles World Airports (LAWA), is the largest remaining contiguous dune system in Southern California. Covering a total area of over 300 acres, it is home to an estimated 900 species of plants, insects, and other wildlife. Set aside as a natural wildlife preserve by LAWA, native plants and animals that once seemed destined for extinction, including the El Segundo blue butterfly and the California legless lizard, are thriving once again, thanks to large-scale habitat restoration efforts by LAWA and partners. However, invasive species continue to encroach on the native plants, reducing the diversity and health of the ecosystem. TBF has been supporting restoration efforts of the LAX Dunes at LAWA through coordination of monthly volunteer non-native vegetation removal events. In FY16 TBF applied for and received an SCC Explore the Coast grant to continue monthly restoration events for three years.

In FY17, TBF will continue monthly events, with an emphasis on middle and high school student opportunities.

New: Dune Restoration Partnerships

In FY17, TBF will explore additional opportunities and partnerships to participate in and promote restoration of more coastal dunes and bluffs along the Bay coast, including a partnership between SMBRA, TBF, and LAWA to restore the northern 48-acre portion of the LAX Dunes, which is still dominated by invasive vegetation.

Coastal Clean-up Day

Coastal Clean-up Day (CCD) is the biggest single-day volunteer event on Earth, with over 600,000 volunteers worldwide. There is a new national movement to consider trash as not just limited to cigarette butts and fast food wrappers. Invasive plants harm our treasured coastal spaces just as much. TBF works directly with Heal the Bay, who is the regional coordinating group for CCD in the LA area. In FY16, 70 volunteers removed over 2,000 lbs (one ton) of invasive vegetation species from the LAX Dunes.

In FY17, TBF will partner with Friends of the LAX Dunes (FOLD) to help restore Los Angeles County's largest remaining dune system, the LAX Dunes. This unique opportunity also provides coastal access to volunteers at a site normally closed to the public (within Los Angeles World Airport private property). Over 50 volunteers are expected to participate in FY17, and the event will be funded by a grant from SCC.

*2.3b Protect and restore sandy beach habitats*

Sandy beaches are the most prominent feature along the Santa Monica Bay coastline. Although sandy beaches traditionally have been, and continue to be managed primarily as recreation areas, they are also important natural ecosystems that link marine and terrestrial environments and are considered one of the seven major natural habitats in the Bay. Animals and plants, including many endemic species, depend on sandy beaches for critical periods of their lives. The habitat provides foraging and nesting grounds for many shore birds, fish, and marine invertebrate species, and is essential to the population recovery of two endangered species, the California least tern and Western snowy plover. The protection of sandy beaches and an understanding of their condition has become increasingly important because of the roles of beaches in addressing the impacts of sea level rise.

Santa Monica Beach Restoration Pilot Project

The Santa Monica Beach Restoration Pilot Project conducted in partnership with the City of Santa Monica will restore several acres of sandy coastal habitats on the beaches of Santa Monica to bring back a healthy, diverse coastal plant and wildlife community. The project will evaluate increased protection for our coastal infrastructure and residences from sea level rise and erosion, while also providing a vital refuge for invertebrates, birds, and rare coastal vegetation species. It will also serve as a model for the region, showing that heavy recreational use of Los Angeles beaches and meaningful habitat restorations are both possible.

Monitoring data will be collected to evaluate the effectiveness of restored natural functions of sandy beaches in protection of coastal infrastructure from sea level rise and erosion, while providing a vital refuge for wildlife. In FY16, six conceptual renderings were completed, implementation and monitoring planning began, an application for a Coastal Development Permit was submitted, an MOU was signed with the City of Santa Monica, and multiple public stakeholder meetings were coordinated.

Specific project activities during FY17 will include: conducting pre-restoration monitoring, implementing the project to restore habitat, restricting grooming within the restoration area, conducting post-restoration monitoring, and completing an annual report. For additional details, visit the project webpage: <http://www.santamonicabay.org/santa-monica-beach-restoration-pilot/>.

#### Standardized Sandy Beach Monitoring

The goal of this task is to develop a standard method for ecological assessment of sandy beaches, and engage community-based monitoring to collect baseline data for an initial assessment of the present state of the beach habitats. The task will lay a foundation for long term monitoring of sandy beach habitats, which will increase our regional understanding of beach ecology, allow evaluation of natural variability and beach management practices, and evaluate the benefits and effectiveness of sandy beach protection and restoration policies in addressing the impacts of climate change.

In previous years, SMBRC and TBF have participated in and promoted the All-Ashore sandy beach ecology citizen monitoring project, a collaborative effort of local stakeholders led by Pepperdine University and UCSB researchers. The goal of this program is to develop and implement a protocol for citizen-monitoring of ecological condition of sandy beach habitat, which is necessary for establishing baselines for sandy beach habitat protection. Progress has been made in recent years with development of a draft protocol and implementation of initial field testing and evaluation of a standardized beach survey form. Additionally, TBF has worked with CSUCI to apply a regional scientific sandy beach monitoring protocol to beaches throughout the Bay.

Specific project activities during FY17 include continued participation and promotion by SMBRC and TBF for the All-Ashore and CSUCI projects and similar regional beach monitoring efforts into the next phases, which include refinement and finalization of the monitoring protocols through field testing, baseline monitoring and initial assessment of several pilot beach locations, and refinement of a community-based program for long-term monitoring. Additionally, in FY17, TBF and SMBRC will seek funding to pursue other opportunities to expand beach monitoring efforts in our watershed.

#### New: UCLA “Healthy Beaches” Project

If TBF’s “Healthy Beaches for a Climate Resilient Future” proposal is chosen by UCLA, in FY17, TBF will conduct a project in partnership with a group of UCLA students to conduct geospatial and tool-based analyses as well as field work to evaluate a living, restored shoreline with a diverse wildlife community as an alternate approach to combat climate change. The project will take the next step forward in beach management by developing a site-suitability method to evaluate potential locations for future beach restoration projects and performing on-

the-ground monitoring at several beach locations to ground-truth the evaluations. Specifically, the project will conduct a literature review, develop a monitoring plan, implement the monitoring plan on at least two beaches in spring 2017, and inform beach management decisions (e.g. grooming restrictions).

| Task Description   | Engaged SMBNEP Entities |            | Partners  | Key Action(s) / Deliverable(s)  |
|--|-------------------------|------------|---|---|
|  | Entities                | Role       |   |   |
| <i>2.3a Restore coastal dune and bluff habitats</i>                |                         |            |   |   |
| ** Conduct monthly volunteer restoration events at LAX Dunes       | TBF                     | Lead       | LAWA, FOLD, SCC                                 | Monthly restoration events  |
| ** Explore partnership with LAWA for 48-acre LAX Dunes restoration | SMBRA, TBF              | Lead       | Multiple partners expected (in development)     | Grant initiation expected in late summer 2016; initiate monitoring in late summer 2016        |
| Coordinate Coastal Clean-up Day at LAX Dunes                       | TBF                     | Lead       | LAWA, FOLD, Heal the Bay                        | Annually in September   |
| <i>2.3b Protect and restore sandy beach habitats</i>               |                         |            |   |   |
| Implement the Santa Monica beach restoration pilot project         | TBF                     | Lead       | City of Santa Monica                            | Implement in fall/winter 2016; targeted completion date: December 2017                        |
| Facilitate standardized sandy beach monitoring                     | SMBRC, TBF              | Facilitate | Pepperdine University, UC Santa Barbara, others | Grant applications submitted opportunistically throughout work period; ongoing communications |

| Task Description                              | Engaged SMBNEP Entities |             | Partners | Key Action(s) / Deliverable(s)                                     |
|---|-------------------------|-------------|----------|--|
|   | Entities                | Role        |          |  |
| ** Conduct the UCLA “Healthy Beaches” project | TBF                     | Participate | UCLA     | Literature review; monitoring plan; data collection in spring 2017 |

\* Project lead

\*\* New project for FY17

*Linked BRP Objectives and Milestones: 8.1a-d, 8.2c-e*

*Environmental Results: Outputs: Amount of funding obtained for coastal dune and bluff restoration*

*Environmental Results: Outcomes: Restored coastal dune and bluff habitats that lead to increased native vegetation and re-establishment of endangered species.*

*Performance Measures: Acres of coastal dune and bluff habitat restored, amount of native vegetation planted, recovery of El Segundo blue butterfly population.*

## 2.4 Restore intertidal and subtidal habitats

Relatively sparse and restricted in distribution compared to sandy beach and soft bottom habitats, rocky intertidal and subtidal habitats are highly diverse and productive, and home to hundreds of plant and animal species. These habitats are also highly vulnerable to, and have been greatly impacted by human activities, as well as natural processes. Goal #9 of the BRP calls for restoration of rocky intertidal and subtidal habitats and outlines specific objectives and milestones for kelp restoration through sea urchin removal, education and other management measures to address impacts of visitors to rocky reef habitats, and reintroduction and restoration of abalone populations in the Bay.

### 2.4a Promote protection of rocky intertidal habitats

SMBNEP has promoted rocky intertidal habitat protection through research on the impacts of marine organism trampling and collection, and outreach aimed at reducing these impacts. In FY16, TBF partnered with UCLA to conduct research, education, and outreach regarding rocky intertidal restoration/condition. Information and other assistance were also provided to the Rancho Palos Verdes Junior Ranger Program.

In FY17, TBF will continue to seek additional resources and collaborative opportunities to promote protection of intertidal habitats, including habitats on Palos Verdes through outreach and other mechanisms.

#### 2.4b *Restore and enhance rocky reef habitat*

##### Rocky reef/kelp forest restoration project

Over the past 100 years, the Palos Verdes Peninsula has lost approximately 75% of its giant kelp canopy. Sedimentation, development, urban runoff and storms slowed kelp growth. At the same time, the loss of key urchin predators and competitors allowed urchins to overrun the reef and devour the remaining kelp. Subtidal observations based upon mapping efforts conducted in 2010 identified large expanses of nearshore rocky reef that were dominated by high densities of sea urchins, *Strongylocentrotus purpuratus* and *S. franciscanus*. In total, 61.5 hectares were described to exist as an urchin barren. The purpose of the kelp restoration project is to reduce the density of purple sea urchins (*S. purpuratus*) to approximately two per square meter within the boundaries of sea urchin barrens on the Palos Verdes Peninsula. This will allow for the recruitment and development of giant kelp, (*Macrocystis pyrifera*) and other species of macroalgae. This project will reduce sea urchin grazing pressure to restore biogenic habitat to rocky reefs that historically supported kelp forests, which will, in turn, increase the spatial and temporal stability, biomass, and production associated with rocky reefs on the Peninsula.

SMBNEP has a long history in working with several partner organizations and engaging in restoration of rocky reef/kelp forest habitats, which is one of the most productive and diverse marine ecosystems in the world. The newly expanded, multi-year rocky reef/kelp restoration project by TBF began in the summer of 2013, and to-date has cleared more than 3.3 million purple sea urchins from 34 acres of reef. In FY16, TBF completed an Annual Report for the kelp restoration project. It is posted online at the following link: <http://www.santamonicabay.org/wp-content/uploads/2014/04/Kelp-Restoration-Annual-Report-October-2015-Final.pdf>.

Field conditions, e.g., sea state, visibility, and ocean climate, (temperature and swell) were challenging for the restoration and monitoring efforts for much of FY15 and FY16. These poor oceanographic conditions affected all sites, where persistent poor visibility coupled with high surge made highly accurate and replicable scientific monitoring difficult to conduct. Perhaps more significant was the strong ENSO signature in FY16. Sea surface temperatures were elevated throughout 2015 and affected species composition and recruitment.

In FY17, TBF will continue to carry out this restoration project off the Palos Verdes shelf which is expected to result in restoration of 15 acres of kelp forest in FY17. Semi-annual reports to NFWF, and one annual report to CDFW will be developed to document the activities, including pre and post-restoration monitoring, and results of the project. There are many partners and participating or interested organizations in this project, including (in part): NOAA, Montrose Settlement Restoration Program (MSRP) trustees, NMFS, Vantuna Research Group and Occidental College, Commercial Sea Urchin Harvesters, OPC, SCC, Southern California Marine Institute, CDFW, and others.

#### 2.4c *Reintroduce and restore abalone*

Abalone are functional components of a healthy kelp forest ecosystem, acting as competition for food and space with other grazers, such as sea urchins. Abalone were once abundant along the California coast, but populations have been impacted by habitat loss, Withering Syndrome (WS)

disease, and commercial and recreational fishing. Five of the seven species of abalone native to California (red, pink, black, green, and white) once supported commercial and recreational fisheries. However, by 1997, recreational and commercial fisheries for all abalone species were closed in ocean waters south of San Francisco. Both the subtidal ecosystem and the California economy will benefit from the presence of healthy abalone populations if restoration of this vital species is achieved.

The restoration of abalone species (*Haliotis spp.*) continues to be of great importance to SMBNEP. To facilitate local recovery of these species, TBF obtained grant funding and initiated research on abalone population level genetics and development of disease prevention protocols.

TBF has been actively involved in abalone restoration since 2011, and continues to obtain competitive grant funding to restore abalone populations in Southern California. The major goal of the abalone project is to outplant abalone into the wild at a density that will allow reproduction to once again occur naturally. Past project topics include: genetic analysis of green abalone population structure in Southern California, analysis of abalone populations exposure to the causative agent of Withering Syndrome, and development of abalone outplanting equipment and methods.

Green Abalone Restoration

In FY16, TBF accomplished several major milestones in the abalone project. Marine staff outplanted 846 juvenile green abalone into coastal waters off of the Palos Verdes Peninsula, using the equipment and methods that were developed as part of previous grants. Monitoring at the juvenile outplant site is ongoing to track the progress of the outplants. In FY16, TBF also managed the construction of a new abalone laboratory facility at the Southern California Marine Institute (SCMI), which will allow captive abalone spawning and broodstock conditioning experiments to improve methods for abalone reproduction.

In FY17, monitoring of the outplanted juvenile green abalone will continue bi-monthly.

White Abalone Restoration

In FY17, TBF is expanding the abalone work from green abalone into additional species. Focus will be directed toward restoration of the endangered white abalone (*Haliotis sorenseni*). To begin working on white abalone restoration, staff will conduct spawning and rearing experiments with red abalone, which prefer similar habitat characteristics as white abalone. TBF is also engaged in new partnerships with CDFW, Cal Poly Pomona, the SCMI, and the National Fish and Wildlife Foundation (NFWF).

| Task Description                                     | Engaged SMBNEP Entities |      | Partners | Key Action(s) / Deliverable(s) |
|--|-------------------------|------|----------|--------------------------------|
|  | Entities                | Role |          |                                |
| 2.4a Promote protection of rocky intertidal habitats |                         |      |          |                                |

| Task Description   | Engaged SMBNEP Entities |         | Partners  | Key Action(s) / Deliverable(s)   |
|--|-------------------------|---------|---|--|
|  | Entities                | Role    |   |  |
| Promote protection of rocky intertidal habitats          | TBF                     | Promote | CDFW, NOAA, others  | Continue ongoing communications with agencies; submit opportunistic grant funding applications                       |
| <i>2.4b Restore and enhance rocky reef habitat</i>       |                         |         |   |  |
| Implement the rocky reef/kelp forest restoration project | TBF                     | Lead    | NOAA, MSRP trustees, NMFS, Vantuna Research Group, Commercial Sea Urchin Harvesters | Semi-monthly monitoring; annual report; restore additional 15 acres by Sept 2018                                     |
| <i>2.4c Reintroduce and restore abalone</i>              |                         |         |   |  |
| Restore green abalone                                    | TBF                     | Lead    | NOAA, NMFS, SeaLab, SCMI, NFWF  | Spawning and outplanting events; bi-monthly monitoring of outplanting locations; targeted completion date: Sept 2017 |
| Restore white abalone                                    | TBF                     | Lead    | NOAA, NMFS, SeaLab, CalPoly Pomona, NFWF  | Conduct red abalone spawning experiments   |

\* Project lead

Linked BRP Objectives and Milestones: 9.1a, 9.2a-c, 9.3a, 9.4a, 9.4b

Environmental Results: Outputs: Summary report and publication of research results, amount of funding obtained for rocky reef monitoring and restoration

Environmental Results: Outcomes: Increased biomass and species diversity of organisms with protected rocky intertidal habitats; reintroduction and increase in population of abalone in the Bay; restored rocky reef habitats that lead to increased biomass and diversity of marine life within the restored rocky reef habitats as shown by monitoring data.

Performance Measures: Amount of funding and other resources secured for research and monitoring of the concerned species ; acres of rocky reef habitat restored, amount of sea urchin removed, recovery of giant kelp, (size, density and number) of finfish, invertebrates, and macroalgae.

### Program Area 3: Multidisciplinary and Integrative Programs

Many programs and projects carried out by SMBNEP are considered either multidisciplinary and/or integrated in purpose or structure. Although all these activities can be linked to, and shown to contribute to implementation of specific goals, objectives, and milestones of the BRP, they are closely interrelated and in practice conducted in unison to achieve informed, integrated, and effective messaging.

| Goal  | Objective   |
|---|---|
| 3.1 Promote climate change adaptation                           | 3.1a Implement climate change planning and policy improvements                |
|   | 3.1b Conduct research on local impacts of climate change                      |
| 3.2 Conduct public outreach and increase collaborations         | 3.2a Create and manage communications   |
|   | 3.2b Coordinate the internship and volunteer program                          |
|   | 3.2c Participate in and provide technical support to stakeholder groups       |
|   | 3.2d Participate in the Palos Verdes Shelf Institutional Controls Program     |
|   | 3.2e Implement the Public Involvement and Education (PIE) mini-grants program |
| 3.3 Support planning, monitoring, and organizational management | 3.3a Seek and increase funding for BRP implementation                         |
|   | 3.3b Support comprehensive monitoring of Bay health                           |
|   | 3.3c Support organizational management  |

#### 3.1 Promote climate change adaptation

SMBNEP’s climate change program was initiated around the same time with the implementation of the [Climate Change Implications for the Ballona Wetlands Restoration](#), which was a climate change modeling and adaptation project completed in 2012 with funding support from the USEPA Climate Ready Estuaries (CRE) Program. Since then, SMBNEP’s efforts in addressing the impacts of climate change has been growing and has become broader and integrated with ongoing regional efforts in Southern California.

##### *3.1a Implement climate change planning and policy improvements*

###### Implement BRP Revisions

In FY16, with support from SMBRC, TBF was awarded an EPA grant to conduct a broad, risk-based, climate change vulnerability assessment of the actions and milestones in the BRP. The vulnerability assessment, which is scheduled to be completed by the end of FY16, will identify

strengths and weaknesses of existing milestones and objectives to manage and adapt to the impacts of climate change. Specific tasks included first developing a literature review of existing applicable models for six different climate change stressors: warmer temperatures, warmer waters, sea level rise, increased drought, increased storminess, ocean acidification. Next, a broad set of risks were identified for each BRP objective and milestone, a risk matrix framework based on the “USEPA’s Being Prepared for Climate Change Workbook” was developed by a panel of expert climate scientists. The last step, which will be completed at the end of FY16, is to apply the risk matrix to each BRP objective, have the results reviewed by expert scientists, and finally, produce data visualization graphs to easily display the complex data analyses.

In FY17, SMBRC and TBF will begin the subsequent steps recommended by the “USEPA’s Being Prepared for Climate Change Workbook”, which focuses on developing a risk-based action plan including BRP revision recommendations based on the results of the vulnerability assessment, these results of this exercise will support the planned update of the entire BRP in the upcoming year.

#### Participate in AdaptLA Project

In 2013, SMBRC teamed up with the Los Angeles Regional Collaborative for Climate Action (LARC), USC Sea Grant, City of Santa Monica, and Heal the Bay, to support a successful grant application by the City of Santa Monica for the State Coastal Commission/Conservancy LCP climate change adaptation grant. With the grant award, the collaborative team in the summer of 2014 formally launched Regional AdaptLA, a multi-year project that will gather data and assess the Los Angeles coastal region’s exposure to sea level rise and coastal storms, model regional shoreline change, identify vulnerable communities, assets, and ecosystems, and help communities begin an adaptation planning process. SMBRC and TBF have continued to partner with LARC, USC Sea Grant and other local agencies to disseminate information related to climate change impacts and facilitate climate change adaptation by municipalities in the watershed.

In FY17, SMBRC and TBF will continue to participate in this project and similar efforts, conduct outreach to coastal municipalities in Santa Monica Bay, and facilitate dissemination and exchange of information between agencies, experts, and stakeholders.

#### Promote “Softscape” Measures for Climate Change Adaptation

In FY17, SMBRC and TBF will also continue to promote comprehensive sediment management and other "soft" and “living” measures to address the impact of sea level rise in the beach and adjacent ecosystems of the Bay. As an example, the Santa Monica Beach and Dune Restoration Pilot Project (see Section 2.3a), which will restore several acres of sandy coastal habitats on the beaches of Santa Monica to establish a native fore-dune plant community, will showcase and provide valuation information to evaluate the effectiveness of restored natural ecological functions of sandy beaches in protection of coastal infrastructure from sea level rise and erosion, while providing a vital refuge for wildlife.

3.1b Conduct research on local impacts of climate change

New: Kelp Forest Hydrodynamics Study

In FY16, TBF secured funding for two much-needed research projects on the potential scale and impacts of climate change: Kelp Forest Hydrodynamics Study, and ocean acidification monitoring and assessment. The Kelp Forest Hydrodynamics Study is an integral part of TBF’s on-going kelp restoration program that is specially designed to demonstrate the benefit of kelp restoration in remediating the impacts of climate change through alteration of currents and related sediment transport, ocean acidification, and attenuation of wave energy.

In FY17, activities to be conducted will include monitoring, sensor calibration, downloading of data, data compilations, and ongoing communications with the project lead, UC Davis.

Monitor Ocean Acidification

The second FY16 grant supported installation of a high precision instrument package for pH, dissolved oxygen, and pCO<sub>2</sub> to provide valuable time-series information on acidification and hypoxia in Santa Monica Bay and advance research on status and trends as well as response to acidification by biological communities in the Bay. In collaboration with the Los Angeles County Sanitation District, the City of Los Angeles Environmental Monitoring Division, the Southern California Coastal Water Research Project, and the Los Angeles Regional Water Quality Control Board, installation of the sensors are targeted for completion by September 2016. Data collection and analysis will continue in FY17 and future years.

| Task Description  | Engaged SMBNEP Entities |             | Partners  | Key Action(s) / Deliverable(s)  |
|---|-------------------------|-------------|---|---|
|   | Entities                | Role        |   |   |
| <i>3.1a Conduct climate change vulnerability assessment and policy improvements</i> |                         |             |   |   |
| Implement BRP revisions consistent with vulnerability assessment                    | SMBRC, TBF              | Lead        | Multiple stakeholders<br>TBD  | Convene TAC to review vulnerability product and identify next steps; seek funding; targeted completion date: Dec 2017 |
| Participate in AdaptLA project  | SMBRC, TBF              | Participate | USC Sea Grant*, LARC, Heal the Bay, City of Santa Monica, other coastal jurisdictions | Participate in community meetings; targeted completion date: December 2017  |
| Promote "softscape" measures for adapting to climate change impacts                 | SMBRC, TBF              | Promote     | LACFCD*   | Ongoing dialogue with different parties throughout the work plan time period  |

| Task Description  | Engaged SMBNEP Entities |             | Partners   | Key Action(s) / Deliverable(s)   |
|---|-------------------------|-------------|--|--|
|   | Entities                | Role        |  |  |
| <i>3.1b Conduct research on local impacts of climate change</i> |                         |             |  |  |
| ** Implement kelp forest hydrodynamics study                    | TBF                     | Participate | UC Davis, California State University Monterey Bay                               | Deploy sensors summer 2016; quarterly checks/download; targeted completion date: Sept 2018         |
| Monitor ocean acidification                                     | SMBRC, TBF              | Participate | LA County Sanitation District*, City of LA Bureau of Sanitation, SCCWRP, LARWQCB | Sensor deployment (targeted) Sept 2016; calibrate, download, and maintain sensor (ongoing monthly) |

\* Project lead

\*\* New project for FY17

Linked BRP Objectives and Milestones: All, especially 4.5a-c

Environmental Results: Outputs: Assessment of climate change (sea level rise and storm surge) impact on beach profile, GIS-based maps designed for use by the cities and county departments, number of training sessions conducted and number of people trained, policy and LCP revision recommendations for adapting to the impacts of climate change, updated BRP, and new ocean acidification monitoring station installed.

Environmental Results: Outcomes: Increased awareness of climate change impacts, increased amount and availability of knowledge and tools for use in adaptation planning, wetland restoration planning and long-term management planning with climate change adaption strategies incorporated, improved collaboration among local agencies and research organizations in addressing climate change impacts, and restored acres of coastal strand and dune habitat.

Performance Measures: Report/research publications on climate change impact assessment, number and status of climate change adaption plans developed and LCP updated locally, and pH/CO2 monitoring data collected, analyzed, and utilized for assessment.

### **3.2 Conduct public outreach and increase collaborations**

SMBNEP’s outreach efforts are very broad and are integral parts of every specific program and project under this work plan. Outreach components supporting specific programs and activities are incorporated and described in more detail in the corresponding relevant sections throughout

this work plan. Additionally, SMBNEP also carries out general outreach for the purpose of educating the public about the value and status of the Bay's natural resources, boosting public support for and participation in water quality improvement and habitat restoration activities, informing the public on the background of SMBNEP, and providing timely update on progress of SMBNEP's activities.

### *3.2a Create and manage communications*

#### Conduct Press and Media Communications

SMBRC and TBF will continue efforts to reach out and generate local, regional, and national media coverage in various forms. In FY16, seven press releases were written and distributed to media (at the time of this Work Plan release) regarding a broad range of topics, including new TBF board members, the Boater Education Program, wetland restoration projects, and the State of the Bay Report release. Over 20 newspaper or online blog articles resulted from these press releases and direct media outreach.

In FY17, press releases will continue to be released and posted opportunistically on the TBF media center webpage: <http://www.santamonicabay.org/about-us/media-center/press-releases/>. At least three press releases will be produced in FY17. There will continue to be news items garnered from both press releases and from phone and email pitches. Resulting articles will continue to be posted online: <http://www.santamonicabay.org/about-us/media-center/in-the-news/>.

#### Publish Newsletters and SMBNEP Outreach Materials

In FY17, SMBNEP will continue to conduct general outreach through regular publications. These will include quarterly publication and distribution of the electronic Baywire newsletter, ([http://www.smbrc.ca.gov/news\\_events/newsletters.shtml](http://www.smbrc.ca.gov/news_events/newsletters.shtml)) annual publication of the scientific journal *Urban Coast* (<http://urbancoast.org/>), and annual publication of SMBNEP's Annual Report ([http://www.smbrc.ca.gov/annual\\_reports/](http://www.smbrc.ca.gov/annual_reports/) or <http://www.santamonicabay.org/learn/reports/>) summarizing key activities and programs of that calendar year.

#### Maintain Websites

In FY17, the TBF website home page will continue to be updated with fresh information every two months, and other elements of the TBF website will be updated in summer/fall 2016 to align with an increased climate change focus and expanded programs. TBF also assists in maintaining the Ballona Restoration Project website: [www.ballonarestoration.org](http://www.ballonarestoration.org) and helps facilitate electronic newsletter distribution for CDFW (<http://ballonarestoration.org/news/>).

In FY17, the SMBRC website will continue to be updated at least quarterly with any SMBRC business.

#### Promote Social Media Communications

Social media will continue to be posted regularly throughout the week, at least twice, especially on Twitter (@SMBRF), Facebook (@Santa Monica Bay Restoration Foundation), and Instagram

(@thebayfoundation). TBF's YouTube page (@The Bay Foundation) will continue to be populated with educational and experiential material as created.

#### Attend Conferences

In FY17, SMBNEP staff will attend conferences opportunistically as appropriate for each program. At minimum, two staff will attend the Association of National Estuary Programs (ANEP) National Conference and the ANEP Tech Transfer Conference to facilitate communication and information sharing with other NEPs and to present on new or ongoing projects.

#### *3.2b Coordinate the internship and volunteer program*

TBF will continue to develop and expand its ever popular internship and volunteer program, increasing opportunities for students and members of the public to engage in hands-on action and study. This program began in 2009 and includes over 10,000 hours of volunteer work completed by more than 250 participants and students from 50 universities throughout the world. This program provides firsthand experience in the scientific underpinnings of wetland restorations in the Bay watershed and encourages participation in stream assessment and restorations, rain gardens, kelp restoration, and many other activities.

Specifically in FY17, TBF will continue to provide monthly opportunities for volunteers, interns, and student participants in TBF projects, and will continue coordination with partner organizations and universities. A minimum of three volunteer events will be completed monthly. Examples of volunteer event locations include the LAX Dunes, Stone Canyon Creek, Malibu Lagoon, Ballona Reserve, Loyola Marymount University (LMU) LIONS Garden, and the Culver City Rain Garden. Public events are posted to TBF's events webpage and updated monthly, <http://www.santamonicabay.org/events/>. Additionally, TBF will lead a monthly communications and calendar development meeting in partnership with LMU's Center for Urban Resilience (CUREs) and will continue ongoing recruitment of students and post-graduate volunteers. The internship calendar will include additional opportunities for specialized interns such as conducting scientific wetland or beach monitoring activities.

#### *3.2c Participate in and provide technical support to stakeholder groups*

Effective implementation of the BRP, especially new policies and program initiatives included in the 2013 BRP Update, relies on close coordination and collaboration among all organizations, especially those playing various roles in achieving objectives and milestones as identified in the BRP. Many inter-agency or inter-group task forces and committees already exist and are active in the Bay watershed, addressing issues pertinent to Bay water quality and habitat restoration. Engagement in the activities of these groups in the form of meeting participation and/or technical support are important mechanisms for increasing stakeholder involvement in BRP implementation. Many of them focus on projects directly related to the implementation of BRP objectives and milestones. Appendix C contains a table of the stakeholder groups in which SMBNEP staff participate. The engagement in these groups will continue in FY17.

Palos Verdes Shelf Institutional Controls Program and FCEC

SMBRC has been supporting and participating in USEPA’s PV Shelf Superfund Site Institutional Control Program, especially the activities of the Fish Contamination Education Collaborative (FCEC). SMBRC and TBF will continue to participate in the FCEC’s activities, including the development of the risk communication message and development and distribution of educational materials. SMBRC will also continue to participate in USEPA’s contaminated sediment cleanup efforts for the Palos Verdes Shelf and continue to monitor and participate in other restoration activities overseen by the Montrose Settlement Restoration Program.

*3.2d Oversee the Public Involvement and Education (PIE) mini-grants program*

For more than a decade, the PIE program provided seed money to more than 50 recipients to implement more than 80 projects. These projects have been a catalyst for innovative and engaging outreach and project implementation in our watershed and, through them, SMBNEP raises awareness of local environmental issues and inspires the stewardship needed to protect the health of our waters and our communities. Raising funds for another round of PIE has been challenging over the last several years.

In FY17, TBF will continue to promote the value of the PIE program to potential funders as a helpful source of funding for small-scale grassroots and community efforts and project. If funding is obtained, a new round of the PIE program will be initiated.

| Task Description                                  | Engaged SMBNEP Entities |             | Partners | Key Action(s) / Deliverable(s)  |
|---|-------------------------|-------------|----------|---|
|   | Entities                | Role        |          |   |
| <i>3.2a Create and manage communications</i>      |                         |             |          |   |
| Conduct press and media communications            | SMBRC, TBF              | Lead        | n/a      | Release three press releases annually; respond to media questions as asked                              |
| Publish newsletters and SMBNEP outreach materials | SMBRC, TBF              | Lead        | LMU      | Release <i>Urban Coast</i> annually; release annual SMBNEP report; release quarterly Baywire newsletter |
| Maintain websites                                 | SMBRC, TBF              | Lead        | SWRCB    | Update TBF website bi-monthly; update SMBRC website quarterly   |
| Promote social media communications               | SMBRC, TBF              | Lead        | n/a      | Semi-weekly posts on FB and twitter; youtube posts as available   |
| Attend conferences                                | TBF                     | Participate | ANEP     | Two staff attend ANEP National Conference   |

| Task Description   | Engaged SMBNEP Entities |             | Partners   | Key Action(s) / Deliverable(s)  |
|--|-------------------------|-------------|--|---|
|  | Entities                | Role        |  |   |
|  |                         |             |  | and ANEP Tech Transfer  |
| <i>3.2b Coordinate the internship and volunteer program</i>                        |                         |             |  |   |
| Implement the internship and volunteer program                                     | TBF                     | Lead        | LMU CUREs  | Monthly coordination meetings; ongoing student recruitment; minimum of three volunteer events monthly |
| <i>3.2c Participate in and provide technical support to stakeholder groups</i>     |                         |             |  |   |
| Participate in stakeholder groups involved in BRP implementation                   | SMBRC, TBF              | Participate | Multiple stakeholders  | Ongoing throughout the work plan time period; see Appendix C for frequency                            |
| Participate in PV Shelf and FCEC risk communication activities                     | SMBRC                   | Participate | USEPA*, FCEC, State Office of Environmental Health Hazards Assessment (OEHHA), community-based nonprofits and other stakeholders | Two semi-annual FCEC and technical information exchange group meetings; additional meetings as needed |
| <i>3.2d Oversee the Public Involvement and Education (PIE) mini-grants program</i> |                         |             |  |   |
| Raise funding from local sponsors and initiate a new round of PIE program          | TBF                     | Lead        | Multiple stakeholders (to be determined)   | Opportunistic funding requests or grant applications  |

\* Project lead

*Linked BRP Objectives and Milestones: All, especially 1.1c, 2.6a, 2.6b, 2.7a, 4.6c*

*Environmental Results: Outputs: Outreach publications and other materials, including the Urban Coast journal. Number of website and Facebook visits, Twitter feed, YouTube and Instagram followers and output, etc.; number of media items produced/published. Number of*

*people participating in Coastal Cleanup events, number of PIE projects awarded, in progress, or completed; total amount of PIE grant funding; new strategic plan for the FCEC and number of risk communication/outreach materials distributed, aquatic Invasive Species Management Plan, projects funded under the CBI and Urban Greening programs, wetland monitoring protocol, beach monitoring protocol and best management practice manual, etc.*

*Environmental Results: Outcomes: Greater awareness of SMBNEP's activities and resources (technical, financial, and otherwise) will lead to greater involvement by stakeholders in implementing the environmental improvements mandated the BRP, greater awareness of the Bay issues and resources measured by the type and number of education/outreach events and number of participants; number of people reached with FCEC messages and increased public understanding of fish contamination issues, reduced exposure to health risk from consuming fish from Santa Monica Bay and other nearby coastal waters, improved coordination among stakeholders, improved planning efforts, greater stakeholder involvement in BRP implementation and corresponding, increase in amount of leveraged resources, resolution of issues which may be impeding BRP implementation, and new or improved technical standards for projects implemented.*

*Performance Measures: Increase in the degree to which target audiences have an understanding of and are involved in SMBNEP's BRP implementation efforts, feedback provided by PIE recipients; when applicable, pre- and post-surveys to determine change in public knowledge and behaviors; number of people in target populations who are knowledgeable about fish contamination issues and number who have modified their behavior as a result; number of action items generated/implemented by inter-agency groups, number of new entities brought into the fold, and number of new research and capital projects funded and implemented in the Bay watershed.*

### **3.3 Support planning, monitoring, and organizational management**

An important component of any NEP is a detailed reporting and management strategy and an effective tracking of progress made on BRP implementation. The following sections summarize BRP implementation, funding, and tracking as well as the reporting, planning, and management activities of the entities that make up SMBNEP.

#### *3.3a Seek and increase funding for BRP implementation*

SMBNEP has been successful in securing funding for implementing the BRP (e.g., \$63 million through Prop. 12, 50, and 84 bond funds since 2000). TBF and SMBRA have also successfully identified many new sources of grant funding in recent years. However, available resources are still far from meeting the financial needs of full BRP implementation. Sustaining stable sources of funding to ensure continued progress in BRP implementation is an ongoing challenge. Stable sources of funding and financial reserve are also needed to maintain the organizational capacity of SMBNEP.

Grant awards received by TBF and SMBRA have supported implementation of many important programs and projects under the FY16 annual work plan, and that effort is expected to continue in FY17. Building on the past success, TBF and SMBRA will continue to investigate and develop new partnership opportunities and new sources of grant funding, including grant funding made available under Prop. 1, and continue to work with congressional delegates to solidify and expand support for additional federal funding.

| Task Description  | Engaged SMBNEP Entities |      | Partners                                 | Key Action(s) / Deliverable(s)                            |
|---|-------------------------|------|--|---|
|   | Entities                | Role |  |   |
| <i>3.3a Seek and increase funding for BRP implementation</i>                    |                         |      |  |   |
| Seek grant funding for implementation of specific BRP objectives and milestones | SMBRA, TBF              | Lead | Multiple stakeholders (to be determined) | Opportunistically apply for grants throughout time period |

\* Project lead

Linked BRP Objectives and Milestones: All, especially 1.5a

Environmental Results: Outputs: New sources of financial support for BRP implementation.

Environmental Results: Outcomes: Increase in the rate at which the health of Santa Monica Bay is improving.

Performance Measures: Amount of new funding requested and/or secured, especially from new sources.

### *3.3b Support comprehensive monitoring of Bay health*

The Santa Monica Bay Comprehensive Bay Monitoring Program (CMP) represents SMBNEP’s plan for implementing coordinated monitoring to provide a regional, long-term picture of the status of the various ecosystems in Santa Monica Bay, which are essential information needed to track, assess, and report on the environmental results of BRP implementation. The CMP specifies detailed monitoring designs for broad ecosystem components, each of which coordinates both existing and new monitoring and explicitly links indicator selection, sampling design, and intended data products that focus on specific scientific and management questions.

#### SotB Report Indicator Development

The SotB Report is a science-based comprehensive assessment of the Bay’s environmental condition. The goal of the report is to measure progress in restoring the Bay’s natural habitats and resources, educate the public about the Bay’s valuable natural resources, and identify and help scientists and managers to address remaining and emerging challenges. More specifically,

this report provides information that can be used both to gauge the progress in implementing the BRP and to guide updates of the BRP to meet new and existing challenges.

In FY16, SMBNEP completed its updated [2015 State of the Bay Report](#) (SotB Report). The report compiled efforts from staff, TAC, and additional scientists and stakeholders throughout the Bay watershed into a habitat condition evaluation for each of the major habitats in the Bay. Indicators for each habitat were developed and combined into the evaluation of the condition of that habitat. As part of the report, data gaps and priority monitoring efforts were identified.

TBF has carried out, and will continue to carry out and/or be involved in a significant amount of monitoring activities for several important habitats in the Bay including, but not limited to; wetlands, uplands, rocky-subtidal/kelp, rocky-intertidal, sandy beaches, and coastal dunes. These monitoring efforts contribute directly to implementation of the CMP and to the habitat condition assessments in the next SotB Report.

In FY17, TBF monitoring efforts will be tailored to fill data gaps identified in the SotB Report. Two target areas for FY17 include refining indicators for rocky reefs and sandy beaches.

#### Fish Larvae and Pilot Deep Reef Surveys

Two additional data gaps identified in the SotB Report are understanding fish larvae patterns within the Bay and the condition of deep reefs and submarine canyons. Fish larvae serve as an important indicator of the condition of the pelagic, nearshore and benthic ecosystems. These systems are presumed to be impacted by ocean discharges, ocean intake, fishing effort, and climate change. Determining methods to study and track fish larvae in Santa Monica Bay is germane to numerous management issues and a central component in understanding the overall biological condition of the bay's subtidal habitats.

Similarly there is a dearth of data regarding the condition of deep-reef (> 90 feet) habitat, including banks (Short Bank), canyons (Dume, Redondo, and Santa Monica), and rocky outcrops along the edge of Palos Verdes Shelf. SMBRC and TBF staff have engaged in discussion with the main ocean dischargers (City of Los Angeles Bureau of Sanitation and Los Angeles County Sanitation District) to address these data gaps collaboratively.

In FY 2017, SMBRC and TBF will continue to meet with partner agencies and the TAC to design fish larvae and deep reef surveys. SMBRC and TBF will also work to put together a funding package, including solicitation of additional participants and contributions for implementation of the pilot surveys. Additionally, TBF will purchase a Remotely Operated Vehicle to deploy to the deep reef environments to capture video imagery and presence-absence of species on these poorly understood habitats. This imagery will be placed on [www.santamonicabay.org](http://www.santamonicabay.org) for outreach purposes to the general public and resource managers alike.

#### Eelgrass Monitoring

Sea grasses, e.g. eel grass and surf grass, are considered essential fish habitat by the Magnuson Stevens Fishery Conservation Act. Eel grass and surf grass comprise a biogenic structure that provides nursery habitat for numerous species, improves water quality, retains sediment, and are

viewed as increasingly important carbon sinks. The expanse and health of eel grass in Santa Monica Bay is poorly understood; thus, a better understanding of the condition, persistence, and presumed expansion of sea grasses in Santa Monica Bay is an important data gap to address.

In FY16 NOAA and NMFS contracted side scan sonar surveys to determine the presence and expanse of eel grass in the northern reach of Santa Monica Bay and up the coast towards the Los Angeles-Ventura County Line. Approximately 35 acres of eel grass were identified in this survey.

In FY17, efforts by TBF will focus on SCUBA and ROV based surveys to confirm these results and collect additional data on the composition of the biotic community associated with eel grass beds. Additional efforts in FY17 will focus on prioritization and planning for mapping the remainder of the nearshore environment of Santa Monica Bay with NOAA, NMFS, and other stakeholders.

NPDES Permits

In FY17, SMBRC and TBF will continue to work closely with the LARWQCB and permittees to incorporate implementation of the comprehensive monitoring program into NPDES permits. SMBRC will also work with LARWQCB staff to convene meetings of NPDES dischargers to evaluate progress and facilitate CMP implementation and explore formation of a monitoring coalition and other mechanisms to secure new funding and resources to fill monitoring gaps.

| Task Description   | Engaged SMBNEP Entities |            | Partners   | Key Action(s) / Deliverable(s)   |
|--|-------------------------|------------|--|--|
|  | Entities                | Role       |  |  |
| <i>3.3b Support comprehensive monitoring of Bay health</i>                     |                         |            |  |  |
| Refine indicators and improve data collection mechanisms for SotB Report       | SMBRC, TBF              | Lead       | SCCWRP, State Water Quality Monitoring Council                                     | Work with TAC to incorporate suggestions from 2015 SotB Report               |
| Design and implement a (pilot) fish larvae survey and (pilot) deep reef survey | SMBRC, TBF              | Lead       | LACSD, City of LA Bureau of Sanitation, LARWQCB, SCCWRP, MPA Monitoring Enterprise | Estimated survey plan completion date: June 2017; periodic meetings          |
| Assess offshore eelgrass beds in Santa Monica Bay                              | TBF                     | Facilitate | NMFS*, NOAA  | One SCUBA and ROV survey of north SM Bay; additional surveys pending funding |

| Task Description  | Engaged SMBNEP Entities |             | Partners                       | Key Action(s) / Deliverable(s)           |
|---|-------------------------|-------------|--------------------------------|--|
|   | Entities                | Role        |                                |  |
| Incorporate comprehensive monitoring program into NPDES permits | SMBRC, TBF              | Participate | LARWQCB*, NPDES permit holders | Ongoing based on permit renewal schedule |

\* Project lead

*Linked BRP Objectives and Milestones: All, especially 4.7a-e, 8.2c, 9.4a-b, 10.1a, 10.2a, 11.2b*

*Environmental Results: Outputs: Environmental data generated from implementation of the monitoring program, State of the Bay Report, database of environmental monitoring, and program evaluation.*

*Environmental Results: Outcomes: Better, more comprehensive assessment of environmental conditions and the progress being made. More exposure and awareness of SMBNEP’s accomplishments at the national level, maintenance or increase of SMBNEP’s funding level. Better informed decision-makers and other stakeholders who will be in a better position to act.*

*Performance Measures: Incorporation of monitoring requirements into NPDES permits and amount and quality of monitoring data collected to fill data gaps identified by the CMP. Also, feedback provided by USEPA’s program evaluation team, number of SMBNEP successes highlighted in reports or other publications used to market the National Estuary Program and number of hits on SMBNEP websites, etc. Extent of environmental improvement demonstrated by the State of the Bay Report; SMBNEP successes highlighted in reports or other publications used to market the National Estuary Program.*

### 3.3c Support organizational management

SMBRC, SMBRA, and TBF staff will conduct general management and reporting activities following the procedures and protocols that have been established for ensuring SMBNEP’s fiscal stewardship and program functions.

#### BRP Tracking

Progress in BRP implementation is tracked and reported semi-annually through the work plan activity progress report. Progress is further summarized and highlighted annually through development and publication of SMBNEP annual report. The State of the Bay Report developed every five years, with the most recent 2015 report published in January 2016, also presents progress made on BRP objectives and milestones. In FY17, staff will continue to track BRP implementation progress through the existing semi-annual and annual reporting mechanisms. Staff will also continue to work with the TAC to refine the indicator matrix and improve data collection mechanisms in preparation for the next State of the Bay Report in 2020.

### Government Performance and Results Act Reporting

The annual Government Performance and Results Act (GPRA) reporting requires each NEP program to report on the acres or linear miles of habitat protected and restored, environmental indicators in use, and leveraged resources. SWRCB and TBF staff will compile the information and prepare and submit the GPRA report by September 1, 2017 for the reporting period October 1, 2016 - September 30, 2017. Geographic reference information for habitat restoration actions will also be provided.

### Board and Committee Support

SWRCB and TBF staff will provide logistical and other staff support for meetings of the Governing Board/Bay Watershed Council, the Executive Committee, the Technical Advisory Committee, and the Watershed Advisory Council. SWRCB and TBF staff will provide support for the meetings of SMBRA Board of Directors. TBF staff will provide support for the meetings of TBF Board of Directors. Specific tasks include preparation of meeting notices, agendas, staff reports, minutes, and resolutions.

SWRCB, SMBRA, and TBF staff will conduct general management and reporting activities following the procedures and protocols that have been established for ensuring SMBNEP's fiscal stewardship and program functions. Specific tasks include:

- TBF, with assistance from SMBRC, develops annual work plan and budget, in accordance with a systematic work plan and budget development process and master calendar.
- TBF, with assistance from SMBRC, prepares and submits semi-annual progress report.
- TBF prepares, oversees, and tracks the progress of USEPA grants and contracts associated with work plan.
- TBF processes grant submittals requesting funding from SMBNEP funding sources.
- TBF retains professional bookkeeping services for payroll, invoicing, tax filing, and other fiscal operations: e.g. Prepare audits, insurance reviews, updates, etc.
- TBF conducts personnel management, including recruitment, performance assessments, training, and professional development.
- TBF provides supports for general office functions, including maintaining mailing lists, photocopying, mailing, fielding public inquiries, and ordering supplies.
- SMBRC responds to public information requests.

SMBNEP is committed to implementing “green” measures to the fullest extent possible during all grant activities. TBF has already incorporated applicable “green” requirements into its organizational operating, contracting, and procurement policies and procedures. These policies and procedures will be reviewed in accordance with USEPA grant “greening” requirements and updated if necessary.

| Task Description  | Engaged SMBNEP Entities |      | Partners | Key Action(s) / Deliverable(s)                       |
|---|-------------------------|------|----------|--|
|   | Entities                | Role |          |  |
| <i>3.3c Support organizational management</i>                   |                         |      |          |  |
| Track BRP implementation progress through semi-annual reporting | SMBRC, TBF              | Lead | Many     | Semi-annual reports                                  |
| Track BRP implementation progress through annual GPRA reporting | SMBRC, TBF              | Lead | Many     | Complete and submit GPRA report by September 1, 2017 |
| Support SMBRC GB meetings                                       | SMBRC                   | Lead | n/a      | Meet bi-monthly                                      |
| Support SMBRC EC meetings                                       | SMBRC                   | Lead | n/a      | Meet bi-monthly                                      |
| Support SMBRC TAC meetings                                      | SMBRC                   | Lead | n/a      | Meets quarterly                                      |
| Support SMBRC WAC meetings                                      | SMBRC                   | Lead | n/a      | Meets annually to review / contribute to work plan   |
| Support SMBRA board meetings                                    | SMBRA                   | Lead | n/a      | Meets quarterly or as needed                         |
| Support TBF board meetings                                      | TBF                     | Lead | n/a      | Meets quarterly                                      |
| Conduct general management and reporting activities             | SMBRC, SMBRA, TBF       | Lead | n/a      | Annual work plan, QAPP updates infrequently          |

\* Project lead

*Linked BRP Objectives and Milestones: All*

*Environmental Results: Outputs: Semi-annual progress reports, GPRA report, financial status reports, annual progress report; meeting notices, agendas, staff reports, minutes, and resolutions; presentations; reports on attendance at national meetings, trainings, workshops, etc.*

*Environmental Results: Outcomes: Program functioning (e.g., all reporting requirements are met and on time); program fiscal responsibility (e.g., annual reporting and tax filing,*

*conformance to Board-approved internal controls, etc.); functioning meetings planned with proper public notice; high level of participation by members and the public; and transparent and streamlined decision-making processes.*

*Performance Measures: Results of evaluation provided by USEPA Regional and headquarters staff, results of financial review or audit findings, etc.*

## IV. US EPA 320 GRANT BUDGET SUMMARY

### A. Funding Authorization

| <b>FY 17 Funding Authorization (October 1, 2016 – September 30, 2017)</b> |                  |
|---|------------------|
| EPA FY17 Base Funding   | \$600,000        |
| SWRCB – Match   | \$300,000        |
| Bay Foundation – Match  | \$250,000        |
| Loyola Marymount University – Match                                       | \$50,000         |
| <b>Authorized Funding Total</b>   | <b>1,200,000</b> |

### B. Detailed Budget

| Category           | Subcategory                    | FY17 Budget Request | Match          | Total            |
|--------------------|--------------------------------|---------------------|----------------|------------------|
| <b>Personnel</b>   | Salaries                       | 329,193             | 289,499        | 618,693          |
|                    | Fringe                         | 85,590              | 80,501         | 166,091          |
|                    | <b>Subtotal</b>                | <b>414,784</b>      | <b>370,000</b> | <b>784,784</b>   |
| <b>Travel</b>      | National Conferences           | 6,000               | ----           | 6,000            |
|                    | State and Local travel         | 9,000               | ----           | 9,000            |
|                    | <b>Subtotal</b>                | <b>15,000</b>       | ----           | <b>15,000</b>    |
| <b>Equipment</b>   | None                           | ----                | ----           | ----             |
| <b>Supplies</b>    | Small Equipment Repair         | 1,200               | ----           | 1,200            |
|                    | Office Supplies                | 4,800               | ----           | 4,800            |
|                    | Project & Field & Lab Supplies | 9,000               | ----           | 9,000            |
|                    | <b>Subtotal</b>                | <b>15,000</b>       | ----           | <b>15,000</b>    |
| <b>Contractual</b> | Government Relations           | 54,000              | ----           | 54,000           |
|                    | IT and Web Services            | 12,309              | ----           | 12,309           |
|                    | Project Contracts              | ----                | 50,000         | 50,000           |
|                    | <b>Subtotal</b>                | <b>66,309</b>       | <b>50,000</b>  | <b>116,309</b>   |
| <b>Other</b>       | Communications                 | 4,800               | ----           | 4,800            |
|                    | Printing and Design            | 10,000              | ----           | 10,000           |
|                    | Conferences & Trainings        | 4,800               | ----           | 4,800            |
|                    | SMBRC Meeting costs            | 600                 | ----           | 600              |
|                    | IT & Software & Upgrades       | 2,400               | ----           | 2,400            |
|                    | Utilities                      | 2,021               | ----           | 2,021            |
|                    | Space and Admin Services       | ----                | 180,000        | 180,000          |
|                    | <b>Subtotal</b>                | <b>24,621</b>       | <b>180,000</b> | <b>204,621</b>   |
| <b>Indirect</b>    | <b>@ 12%</b>                   | <b>64,286</b>       | ----           | <b>64,286</b>    |
| <b>TOTAL</b>       | <b>TOTAL</b>                   | <b>600,000</b>      | <b>600,000</b> | <b>1,200,000</b> |

## V. TRAVEL DOCUMENTATION

With respect to participation in federal NEP activities, SWRCB and TBF staff will continue to attend two annual meetings each year and may also be involved in planning the meeting activities and/or lead technical workshops during the meetings. In addition, staff will attend regional NEP meetings, workshops and special NEP-related training workshops when feasible. Staff may identify opportunities to make presentations at conferences and workshops in order to provide educational and technical assistance and share “lessons learned” with other NEPs and watershed-based organizations throughout the nation.

The FY16 travel summary table, below, provides summary details for events and travel from the last fiscal year. The FY17 table, below, provides an estimate of similar information for this fiscal year Work Plan.

| <b>FY16 Travel Summary</b> |   |                       |                                   |                    |
|----------------------------|---|-----------------------|-----------------------------------|--------------------|
| <b>Date</b>                | <b>Event/Trip Purpose</b>   | <b>Location</b>       | <b>Staff Traveling</b>            | <b>Cost</b>        |
| April 11-15, 2016          | CRAM Training, which is a cost-effective and scientifically defensible rapid assessment method for monitoring the conditions of wetlands throughout California. | San Diego, CA         | Rod Abbott, Melodie Grubbs        | \$ 1,002.65        |
| February 2016              | ANEP/EPA National Conference. Conference for NEPs, EPA, and partners.   | Washington, DC        | Tom Ford, Marcelo Villagomez      | \$ 2,813.25        |
| December 2015              | NEP Tech Transfer Conference. Information sharing and technology transfer among NEPs and partners.  | San Juan, Puerto Rico | Tom Ford, Heather Burdick         | \$ 2,671.26        |
| November 5-8, 2015         | WSN Conference on marine science informing policy, and discussion sessions on MPAs.   | Sacramento, CA        | Ariadne Reynolds, Heather Burdick | \$ 680.40          |
| November 6, 2015           | ESRI Conference on maps and geospatial analysis, applicable to Watershed and Marine Programs.   | Redlands, CA          | Melodie Grubbs                    | \$ 326.66          |
| <b>TOTAL</b>               | ----  | ----                  | ----                              | <b>\$ 7,494.22</b> |

| <b>FY17 Anticipated Travel</b> |  |                      |                        |                       |
|--------------------------------|--|----------------------|------------------------|-----------------------|
| <b>Date</b>                    | <b>Event/Trip Purpose</b>  | <b>Location</b>      | <b>Staff Traveling</b> | <b>Estimated Cost</b> |
| Oct – Dec 2016                 | NEP Tech Transfer Conference. Information sharing and technology transfer among NEPs and partners. | TBD                  | Tom Ford, TBD          | \$ 3,000              |
| February 2017                  | ANEP/EPA National Conference. Conference for NEPs, EPA, and partners.                              | Washington, D.C.     | Tom Ford, TBD          | \$ 3,000              |
| All Year, multiple dates       | TAC, MRAC  | Los Angeles          | Staff, TAC members     | \$ 1,000              |
| All Year, multiple dates       | Staff & Stakeholder Meetings and conferences travel  | Various CA Locations | All staff              | \$ 8,000              |
| <b>TOTAL</b>                   | ----   | ----                 | ----                   | <b>\$ 15,000</b>      |

## VI. SMBNEP STAFFING

SMBNEP is a partnership of The Bay Foundation (TBF), Santa Monica Bay Restoration Commission (SMBRC), and Santa Monica Bay Restoration Authority (SMBRA) to implement the BRP via annual Work Plan implementation. TBF coordinates programs that support and supplement the BRP, and many of its programs are implemented entirely by TBF employees. SMBRC is staffed by its ratified Executive Director, Los Angeles Regional Water Resources Control Board (LARWRCB) assigned personnel, and TBF assigned personnel to SMBRC. SMBRA is staffed by the County of Los Angeles assigned personnel and by SMBRC assigned staff. All SMBNEP staff, whether TBF employees, SMBRC staff, or SMBRA staff, contribute to the implementation of the Work Plan by carrying out its described tasks. The following section describes the entity affiliation(s) and responsibilities of each SMBNEP staff.

### **THE BAY FOUNDATION (as of 6/30/2016):**

Executive Director, Tom Ford

#### **Foundation Responsibilities:**

- Oversee the development and implementation of the annual work plan, budget, and expenditures;
- Oversee the general financial and program management of the organization, including management policies, guidelines, and procedures;
- Develop and implement programs, projects, partnerships, and collaborations that restore and enhance the ecological values of the Santa Monica Bay and its watersheds in support of the BRP;
- Interact with State, Federal, and other funding authorities to ensure regulations and funding requirements are met;
- Provide policy and technical guidance to staff in their work assignments, including delegate/supervise staff;
- Carry out responsibilities regarding staff recruitment and development, evaluate staff performance;
- Develop and oversee marine habitat monitoring, research, and restoration projects;
- Engage in scientific forums and advisory committee(s) to further the development and implementation of policies, research, and restoration goals tied to BRP implementation;
- Raise funds, through grant writing and other means, for programs and operations of TBF;
- Participate in outreach, fundraising events, and other program areas for TBF and BRP implementation.

Director of Government Affairs, Scott Valor

**Foundation Responsibilities:**

- Execute TBF activities as assigned by ED.

Director of Watershed Programs, Karina Johnston

**Foundation Responsibilities:**

- Manage grants and conduct activities and projects to support watershed and wetland programs to support implementation of the BRP;
- Apply for grants and funding to support the activities of the watershed and wetland programs to support implementation of the BRP;
- Direct research and monitoring activities and implement projects, including fieldwork and data management;
- Develop partnerships, collaborations, and outreach strategies to facilitate BRP implementation;
- Engage in scientific forums and advisory committee(s) to further the development and implementation of policies, research, and restoration goals tied to BRP implementation;
- Author technical documents, memoranda, and publications;
- Supervise staff, interns, students, and volunteers;
- Participate in organizational development, reporting, and other activities at the request of the ED.

Senior Watershed Advisor, Mark Abramson

**Foundation Responsibilities:**

- Supervise and manage consultants, prepare bid packages, select restoration contractors in accordance with TBF policies and procedures, and supervise restoration activities;
- Design and oversee project monitoring and maintenance of water quality improvement, habitat restoration, and other projects;
- Assist with securing funding for and promoting future projects in the Santa Monica Bay watershed to support implementation of the BRP.

Director of Outreach, Grace Lee

**Foundation Responsibilities:**

- Oversee development and implementation of the Boater program;
- Supervise staff and volunteers;
- Coordinate development, design, and distribution of educational materials;
- Develop partnerships and facilitate various stakeholder meetings, trainings, and workshops;

- Seek new grant opportunities to support outreach and education activities, fulfill existing grant requirements, and oversee budgets;
- Participate in organizational development, reporting, and other activities at the request of the ED.

Communication Director, Julie Du Brow

**Foundation Responsibilities:**

- Develop and update a strategic plan for outreach for TBF, including media relations;
- Implement communication-related functions including; devise communication strategies, produce publications, organize outreach events and conferences, organize donor events, facilitate speaking engagements and presentations, and build and maintain relationships with stakeholders, partners, and the general public;
- Prepare/oversee press releases and media stories, and contact media;
- Facilitate maintenance of and develop content for TBF’s website and electronic social media such as Facebook, Twitter, Instagram, and YouTube;
- Track progress and success of communication efforts.

Administrative Director, Marcelo Villagomez

**Foundation Responsibilities:**

- Oversee TBF’s finances, including increase cash reserves and stabilize and diversify income;
- Oversee administration, accounting, budgeting, invoicing, purchasing, grant management, and audit preparations;
- Maintain and update administrative policies, guidelines, payroll, incentives, operating procedures and manuals, administrative and human resources (HR), and minimize risk and exposure;
- Participate in the development and implementation of TBF’s short- and long-term financial planning;
- Promote opportunities for program impact and organizational cohesion.

Marine Programs Manager and Executive Assistant, Heather Burdick

**Foundation Responsibilities:**

- Manage grants and conduct activities and projects to support marine programs to support implementation of the BRP;
- Contribute to research, monitoring, and ecological restoration for marine program activities;
- Conduct SCUBA based subtidal field work and other field work as needed;
- Supervise staff, interns, students, and volunteers;
- Develop partnerships and collaborations to facilitate BRP implementation;

- Apply for grants and funding to support the activities of marine programs to support implementation of the BRP;
- Serve as Executive Assistant to the ED including scheduling and logistics.

Watershed Programs Manager, Melodie Grubbs

**Foundation Responsibilities:**

- Manage watershed and wetland habitat restoration projects including, but not limited to, restoration and scientific monitoring of wetlands, dunes, coastal strand, and upland habitats;
- Manage external grants, subcontracts, and budgeting for multiple projects;
- Apply for grants and funding to support the activities of watershed and wetland programs to support implementation of the BRP;
- Data entry, QAQC, analyses, and data management;
- Assist the Director of Watershed Programs in authorship of technical documents, memoranda, and publications;
- Supervise and manage part- or full-time staff, interns, and/or students;
- Perform additional tasks as required by TBF's Director of Watershed Programs or TBF's ED.

Water Quality Programs Manager, Vicki Gambale

**Foundation Responsibilities:**

- Contribute to program development and planning;
- Coordinate organization, planning, and development of various stakeholder meetings, trainings, workshops, field work, and outreach emphasis on boating events;
- Research, develop, distribute, and present education and outreach materials;
- Apply for grants and funding to support the activities of the Boater Education Program, water quality projects, and other outreach programs to support implementation of the BRP, train and coordinate volunteers;
- Assist Administrative Director with administrative tasks;
- Assist TBF staff with implementation of additional programs and projects to support the implementation of the BRP, including water quality projects.

Marine Biologist and Project Manager, Ariadne Reynolds

**Foundation Responsibilities:**

- Manage grants and conduct activities and projects to support marine programs to support implementation of the BRP;
- Apply for grants and funding to support the activities of marine programs to support implementation of the BRP;

- Contribute to research, monitoring, and ecological restoration for marine program activities;
- Conduct SCUBA based subtidal field work and other field work as needed;
- Support activities of the watershed program as well as general office assistance;
- Assist Administrative Director with TBF administrative work, including updating policies and procedures, and producing reports.

Watershed Programs Coordinator, Rodney Abbott

**Foundation Responsibilities:**

- Conduct field work, surveys, and research to support the implementation of watershed and wetland programs in the BRP;
- Coordinate and lead field teams, supervise volunteers, internship students, and paid interns;
- Provide support to restoration projects, including, but not limited to wetlands, dunes, beaches, streams, and marine programs;
- Data entry, QAQC, analyses, and data management;
- Plan and coordinate public outreach events, stakeholder meetings, and other events in support of BRP implementation;
- Assist the Director of Watershed Programs in authorship of technical documents, memoranda, and publications;
- Perform additional tasks as required by TBF's Director of Watershed Programs or TBF's ED.

Marine Program Field Technician, Armand Barilotti, Parker House, and Brian Stirling

**Foundation Responsibilities:**

- Conduct research, monitoring, and ecological restoration for marine programs in support of BRP implementation;
- Conduct SCUBA based subtidal field work, including dive records, plans, and permit reports;
- Contribute to data entry, QAQC, data analyses, and data management;
- Safely and responsibly operate research vessel and support topside operations;
- Prepare submissions for conferences and symposia and support grant applications;
- Provide support to other TBF projects, as well as general office assistance;
- Perform additional tasks as required by TBF's ED.

Restoration Technician, Viktoria Kuehn

**Foundation Responsibilities:**

- Conduct field work, surveys, and research to support the implementation of watershed, wetland, and other programs in the BRP;

- Coordinate and lead field teams, supervise volunteers, internship students, and paid interns;
- Data entry, QAQC, analyses, and data management;
- Plan and coordinate public outreach events, stakeholder meetings, and other events in support of BRP implementation Perform additional tasks as required by TBF's Director of Watershed Programs or TBF's ED.

Aquarist, Ben Grimes

**Foundation Responsibilities:**

- Assemble and maintain aquatic life support systems (salt water recirculating system);
- Develop and implement best husbandry practices to provide ideal growing conditions for abalone, such as water quality analyses, cleaning, and feeding;
- Develop laboratory/aquaculture manuals for abalone;
- Coordinate and direct research related to abalone recovery and management;
- Data entry, QAQC, analyses, and data management;
- Coordinate staff, students, and volunteers;
- Conduct SCUBA based subtidal field work.

Outreach Programs Assistant, Georgia Tunioli

**Foundation Responsibilities:**

- Coordinate quarterly vessel sewage pumpout monitoring activities for Southern California harbors;
- Implement Honey Pot Day program;
- Assist the Director of Outreach Programs with program implementation and public outreach;
- Support administrative functions related to outreach and water quality programs;
- Perform additional tasks as required by TBF's Director of Outreach or TBF's ED.

## **SMBRC STAFF (as of 6/30/2016):**

Executive Director, Tom Ford

### **Commission Responsibilities:**

- Serve as principal staff spokesperson and representative for SMBRC;
- Provide policy and technical guidance to SMBRC staff in their work assignments including supervising staff activities;
- Carry out other duties as required by the Governing Board (GB) or Technical Advisory Committee (TAC);
- Provide policy recommendations to the GB and discuss with TAC;
- Develop and implement programs and projects that restore and enhance the ecological values of Santa Monica Bay and its watersheds in support of the BRP;
- Interact with State, Federal, and other funding authorities to ensure regulations and funding requirements are met.

Deputy Director/Staff Scientist, Guangyu Wang

### **Commission Responsibilities:**

- Assist the Executive Director in developing the annual work plan, carrying out annual work plan tasks, and conducting general operations;
- Coordinate the activities of the TAC, including research and review of new scientific findings, and oversee program activities related to scientific and technical studies;
- Contribute to program activities related to tracking, assessing, and reporting Bay Restoration Plan implementation progress and on the Bay's environmental conditions;
- Oversee development and implementation of the Quality Assurance Program Plan (QAPP) in the daily activities of the organization;
- Represent SMBRC on agencies' technical or policy advisory panels and committees and provide expert policy and regulation advice;
- Conduct other tasks at the request of the ED.

Director of Government Affairs, Scott Valor

### **Commission Responsibilities:**

- Coordinate GB meetings, including agenda creation and posting, coordinating staff reports, outreach to GB members, quorum call, elections, response to questions, preparation/coordination of minutes, website posting of staff reports, other materials, updates to amended documents, draft/coordinate resolutions;
- Coordinate Executive Committee (EC) meetings, including agenda creation and posting, coordinating staff reports, outreach to EC members, quorum call, response to questions, preparation/coordination of minutes, website posting of staff reports, other materials, updates to amended documents;
- Coordinate between COGs/their EDs and/or reps and GB/ED;

- Coordinate with legal counsel;
- Coordinate of FPPC issues;
- Contact for California Public Records Act requests;
- Monitor legislative updates.

Administrative Director, Marcelo Villagomez

**Commission Responsibilities:**

- Assist SMBRC with administrative support, including budget preparation, reports, and meeting logistics;
- Support SMBRC with administrative activities, including communications and public requests for documents.

Communications Director, Julie Du Brow

**Commission Responsibilities:**

- Assist ED and conduct SMBRC communications activities upon request, including working with media;
- Arrange and facilitate speaking engagements and presentations;
- Coordinate, research, and prepare materials for distribution related to SMBRC.

Environmental Scientist, Jack Topel

**Commission Responsibilities:**

- Conduct grant oversight and management for state bond-funded projects;
- Coordinate and manage State Water Quality Control Board grants and contracted personnel / entities on state bond-funded projects;
- Coordinate with partner agencies in developing and implementing restoration program and monitoring efforts in support of the BRP;
- Represent SMBRC on various committees and watershed stakeholder groups;
- Compile data and perform environmental assessment and analysis;
- Provide information to state and federal officials as well as the general public on various SMBRC projects;
- Provide support to meetings of the GB and TAC.

Administrative and Project Support, (as assigned)

**Commission Responsibilities:**

- Assist Environmental Scientist with state grant management, request(s) for proposal(s), grant selection processes, and report writing;

- Assist Environmental Scientist with invasive control programs and research activities including, mud snail surveys, California red-legged frog habitat assessment, crayfish trapping and other projects as requested;
- Assist with SMBRC GB activities and meeting logistics.

Administrative Support, (as assigned)

**Commission Responsibilities:**

- Assist TAC on its activities, including planning, following up on action items, and meeting logistics;
- Assist SMBRC with programmatic and administrative support, and assist with GB activities and meeting logistic.

**SMBRA STAFF (as of 6/30/2016):**

Executive Officer (SMBRC Executive Director), Tom Ford

- Serve as principal spokesperson and representative for SMBRA;
- Develop and implement programs and projects that restore and enhance the ecological values of Santa Monica Bay and its watersheds in support of the BRP.

Director of Government Affairs (SMBRC), Scott Valor

- Coordinate SMBRA meetings, including agenda creation and posting, coordinating staff reports, outreach to SMBRA members, quorum call, response to questions, preparation/coordination of minutes, website posting of staff reports, other materials, updates to amended documents, draft/coordinate resolutions.

Administrative Director (SMBRC), Marcelo Villagomez

- Assist SMBRA with administrative support, including budget preparation, reports, audits, and meeting logistics;
- Coordinate grant and contracts applications and invoicing.

Deputy Officer (SMBRC), Guangyu Wang

- Serve as Deputy Officer for Executive Officer;
- Coordinate with Executive Officer, Government Affairs, and Administrative Director.

(County of Los Angeles), Josh Svensson

- Assist SMBRA with administrative support and compliance.

(County of Los Angeles), Amelia Chlebek

- Review SMBRA invoicing for compliance and approve for payment.

(County of Los Angeles), Frank Wu

- Assist SMBRA with projects and compliance.

**Appendix A. Prop. 84: details of completed projects from FY16.**

| <b>Lead Implementer</b> | <b>Name</b>  | <b>Objective</b>   | <b>Project Description</b>  | <b>Project Cost</b> | <b>Accomplishments / Deliverables</b>   | <b>320 Grant Funds</b> | <b>Long Term Outcomes</b>  |
|-------------------------|--|--|---|---------------------|---|------------------------|--|
| City of Torrance        | Stormwater Basin Enhancement                                     | Improve three stormwater detention facilities for water quality, habitat enhancement, education and passive recreation improvements. | Retrofit three stormwater detention basins to provide wetland treatment, enhanced infiltration, habitat restoration, recycled water use opportunities, educational opportunities. | \$4,670,000         | 100% design plans, construction contract issued, construction completed, final report submitted | \$0                    | Compliance with Santa Monica Bay Beaches Bacteria TMDL and Marine Debris TMDL                |
| CA State Parks          | Phase 1 Arroyo Sequit Fish Barrier Removal - Planning and Design | Improve steelhead trout access to Arroyo Sequit Creek.   | Planning, design, and permitting for the removal of two (2) Arizona-type crossings and one (1) check dam on Arroyo Sequit Creek at Leo Carrillo State Park in Los Angeles County  | \$350,000           | 100% design plans, engineers cost estimates, approved permits.                                  | \$0                    | Implementation of plans to restore access to 2 miles of creek for endangered steelhead trout |

**Appendix B. Prop. 84: details of ongoing projects.**

| Name  | Objectives  | Description  | Partners   | Milestones   | Budget      | Long-term Outcomes  |
|---|---|--|--|--|-------------|---|
| Phase 2 Arroyo Sequit Fish Barrier Removal - Implementation | Restore 2-miles of access for endangered steelhead trout, restore native riparian vegetation.   | Remove two crossings and one check dam. Replace crossings with free standing bridges capable of passing 100-year storm event. Remove invasive vegetation and replace with site appropriate native plants upstream and downstream of new bridges. | DPR, SMBRC, TBF, NOAA, California Conservation Corps, RCD Santa Monica Mountains | Removal of two at-grade crossings, removal of check dam, construction of two free standing bridges, revegetated riparian area. | \$2,950,000 | Restoration of self-sustaining population of steelhead trout, stabilized stream banks, suppression of non-native species. |
| University Park Rain Gardens                                | Improve water quality in Ballona Creek by constructing a system to divert and infiltrate or bio-filtrate year-round dry-weather flows and wet-weather low flows from approximately two hundred and nine (209) acres in the University Park area of Los Angeles. | Identify, prioritize, and construct a minimum of 35 rain gardens to capture and treat a three-quarter inch (¾”) twenty-four (24) hour storm (minimum) using native vegetation only.  | City of Los Angeles, USC, University Park Neighborhood                           | Completion of design plans, 2 public meetings, secure contractor, installation of 35 rain gardens                              | \$600,000   | Residents educated about stormwater pollution and potential solutions, contribute to TMDL compliance in Ballona Creek     |
| Milton Street Park Project                                  | Improve water quality in Ballona Creek through Capture, treatment, and infiltration of all dry-weather, and a portion of the wet-weather runoff along   | Install a minimum of 14 vegetated stormwater curb extensions on Milton St. to capture, treat, and infiltrate runoff from Milton St. and an adjacent multi-use park. Project will also install trash  | MRCA   | Complete design plans and cost estimates, submit native plant pallet, install vegetated storm water curbs.                     | \$655,000   | Contribute to TMDL compliance in Ballona Creek.   |

| Name   | Objectives  | Description  | Partners           | Milestones   | Budget      | Long-term Outcomes  |
|--|---|--|--------------------|--|-------------|---|
|  | a 1,000' section of Milton Street in Los Angeles, in the Ballona Creek watershed.                                     | screens on storm drains at east and west of project site.  |                    |  |             |   |
| Oxford Retention Basin Water Quality and Multi-Use Enhancement Project | Improve water and habitat quality, aesthetics, and passive recreational activities at Oxford Basin in Marina del Rey. | Construction of a circulation berm, replacement and reprogramming tide gates, installing bioswales and permeable path, replacing non-native vegetation and contaminated soil with appropriate soil and native vegetation, excavating sediment and constructing a parapet wall. | Los Angeles County | Submit draft MP/QAPP, submit final design plans, complete construction | \$4,700,000 | Contribute to TMDL compliance in Marina del Rey back basins, improved habitat for native species in Oxford Basin, enhanced environmental education for residents and improved passive recreation opportunities. |

**Appendix C. Groups for which SMBNEP staff provide technical support.**

| <b>Group Name</b>   | <b>Engaged SMBNEP entities</b> | <b>Partners</b>  | <b>Frequency</b>            |
|---|--------------------------------|--|-----------------------------|
| GLAC IRWMP  | SMBRC                          | Member entities and agencies   | Bi-monthly                  |
| State Aquatic Species Task Force  | SMBRC                          | CDFW* other resource management agencies   | Quarterly                   |
| Wetland Recovery Project Managers Group   | TBF                            | 17 partner agencies and organizations throughout CA                                  | Bi-monthly                  |
| State Clean Beach Task Force  | SMBRC                          | SWRCB*   | As needed                   |
| Beach Water Quality Work Group  | SMBRC                          | SWRCB*, Health Depts. Storm water management agencies throughout Southern California | Quarterly                   |
| Jurisdictional Group 5&6  | SMBRC, TBF                     | South Bay Cities*  | Bi-monthly                  |
| Beach Ecology Coalition   | SMBRC, TBF                     | Pepperdine University*, local beach management agencies, environmental groups, etc.  | Semi-annually               |
| Green LA Urban Ecosystem Strategic Planning Committee                           | SMBRC                          | City of Los Angeles*   | Quarterly                   |
| California Wetlands Monitoring Workgroup (CWMW)                                 | TBF                            | CWQMC* and many participating agencies and organizations                             | Quarterly                   |
| CWMW, Level-3 Subcommittee  | TBF                            | CWQMC* and many participating agencies and organizations                             | Quarterly                   |
| Palos Verdes Shelf Superfund Investigation Technical Information Exchange Group | SMBRC                          | USEPA* and many participating agencies and organizations                             | Semi-annually or as needed  |
| Southern California Academy of Sciences (SCAS), Board of Directors              | TBF                            | SCAS* and many participating scientists and universities                             | Monthly, during school year |

| Group Name   | Engaged SMBNEP entities | Partners   | Frequency            |
|--|-------------------------|--|----------------------|
| Environmental Life Science Committee   | TBF                     | American Academy of Environmental Scientists*                                    | Monthly or as needed |
| Friends of LAX Dunes, Board of Directors   | TBF                     | Los Angeles World Airports*, City of Los Angeles*, other interested stakeholders | Monthly              |
| Loyola Marymount University's Environmental Stewardship and Sustainability Committee | TBF                     | LMU*   | Periodically         |

\* Group lead