



# CITY OF NEWPORT BEACH

## PUBLIC WORKS DEPARTMENT

Stephen G. Badum, Director

### Progress Report

**Progress Report # 3**

**Reporting Period:** June 15 to  
November 19, 2012

**Submittal Date:** **November 20, 2012**

**Agreement No:** 10-414-550

**Project Name:** Newport Coast ASBS Protection Implementation Program

**Contractor Name:** City of Newport Beach

**Program Director/Designated Representative:** Robert Stein

#### **Summary of Work Completed to Date:**

<u>Task</u>	<u>Deliverable by Subtask #</u>	<u>% of Work Complete</u>	<u>Date Submitted</u>
A. Plans and Compliance Requirements	2.1 Project Assessment and Evaluation Plan	100%	
	2.2 Monitoring Plan	100%	
	2.3 Quality Assurance Plan	100%	
	2.4 Data Management	50%	
	6. Signage	50%	
B. WORK TO BE PERFORMED BY GRANTEE			
1.0 Runoff Reduction Program (Consultant: Valley Soils)	1.1 Prepare assessments	95%	
	1.2 Marketing campaign	95%	
	1.3 Irrigation evaluations	95%	
	1.4 Baseline monitoring	75%	
	1.5 Installations	90%	
	1.6 Verification inspections	85%	
	1.7 Outreach	95%	
	1.8 Program effectiveness evaluation	0%	
2.0 Buck Gully Erosion Control/Wetlands Project and Storm Drain Infiltration Gallery (Contractor: ECI; Consultant: Weston Solutions)	2.1 Buck gully Erosion Control/wetlands project	100%	
	2.2 Storm Drain Infiltration Gallery	75%	
3.0 Crystal Cove Park Parking Lot Improvements (Consultant: Weston Solutions)	3.1 Design	75%	
	3.3 Construction	0%	

4.0 Los Trancos Pond Improvement Project (Consultant: Weston Solutions )	4.1 Design	60%	
	4.3 Construction	0%	
5.0 Pesticide Management Program	5.1 Pesticide use campaign	90%	
	5.2 Workshops	90%	
	5.3 CASQA participation	90%	
6.0 Public Impact Reduction	6.1 Program Development	50%	
	6.2 Interpretive signage	25%	
	6.3 Monitoring	25%	
7.0 Little Corona Rocky-intertidal Restoration Pilot Program (Consultants: Cal-State Fullerton and Weston Solutions)	7.1 Implement Pilot Program	50%	
	7.2 Biological survey	50%	
8.0 ASBS Collaborative Management Program (City is the lead on this task)	8.1 Create centralized website	50%	
	8.2 Ecosystem impact metric	5%	
	8.3 Annual report	0%	

## Introduction

This grant project implements eight tasks to protect water quality and habitat of the ASBS through projects and public outreach. Highlights for the latest period include:

- **Task 1.5:** Over 700 residential irrigation controllers have been installed in Newport Coast. This program has been a big hit with the community.
- **Task 2.2, Task 3 and Task 4:** The design for these projects is moving steadily forward and should be completed in time to permit construction in Spring 2013.

Overall, Program tasks are approximately 60 to 65 percent complete and we continue to be on track to meet the contract schedule.

## Task Accomplishments

This section describes the work completed in the past period for completing each of the contract tasks.

### **TASK A: Project Assessment and Evaluation Plan (PAEP), Monitoring Plan, Quality Assurance Project Plan (QAPP) and California Environmental Quality Act**

Tasks 2.1, 2.2 and 2.3 - These tasks are completed.

Task 2.4 –This task is on-going. We are coordinating with SCRIPPS on the data collection and using the results to inform the monitoring, study questions and methods. The collaboration includes identifying the importance of fresh water inputs from both storm drains and larger regional sources including the canyon creeks and Newport Harbor as potential sources of temporary



impacts to the ASBS. These findings are important in developing the impact metric as a tool to assess impacts to ASBS and the potential sources of the impacts using a weight of evidence approach.

Task 6 – Task is about 50% complete. Signage will be posted at the three construction project sites this Spring at Shore Cliffs, Crystal Cove Park parking lot, and Los Trancos Creek ponds.

## **TASK B – WORK TO BE PERFORMED**

### **Task 1.0 Runoff Reduction Program**

Over 700 smart irrigation controllers and 18,000 high efficiency irrigation nozzles have been installed in Newport Coast. The program is widely popular and the City is looking for ways to extend it. Under this task, water usage reduction will be calculated and results forwarded to the Board in subsequent progress reports. The City is also looking to install a permanent flow meter in Buck Gully to monitor changes in dry weather flow (primarily due to over-irrigation activities) into the canyon.

### **Task 2.0 Buck Gully Erosion Control/Wetlands Project and Storm Drain Infiltration Gallery**

#### **Task 2.1: Buck Gully Erosion Control/Wetlands Project**

Project construction has been completed successfully including revegetation and the canyon has been replanted including the four-month plant establishment period. Post-construction monitoring has begun and will continue through the rain season. An analysis will be prepared comparing pre-project and post-project water quality.

#### **Task 2.2: Storm Drain Infiltration Gallery**

Construction drawings are 90% complete. Construction is anticipated next Spring. Once constructed, dry weather flows from the Shore Cliffs Community Association, will be captured, filtered and infiltrated.

### **Task 3 Crystal Cove Park Parking Lot Improvements**

This project will make modifications to one of the park's parking lots to collect, filter and infiltrate a first flush storm. Construction drawings are 90% complete. Construction is projected to occur next Spring.

### **Task 4 Los Trancos Pond Improvement Project**

This project will modify the pond and replant with native plants. Design drawings are 30% complete. Construction is projected to occur next Spring.

### **Task 5 Pesticide Management Program**

As reported in the previous progress report, three City staff members attended an integrated pest management program last fall sponsored by the Orange County Stormwater Program. This month, on June 30<sup>th</sup>, the City will be sponsoring a gardener's workshop for community members and landscapers (see the attached flyer). Staff also attended the 2012 CASQA conference in San Diego and participated in discussions to influence various state and federal regulations to reduce or eliminate pesticides known to pollute and impair streams and embayments. Topics included pesticide management, product substitutions and runoff elimination. CASQA is pressing USEPA to ensure that

the pesticide regulatory processes adequately considers potential water impacts so that in the future, water quality impacts are prevented before they result in CWA 303(d) impaired waters listings.

#### **Task 6 Public Impact Reduction**

Task 6.1: A vendor has been selected to put together a custom vehicle that can support and transport marine aquarium and touch tanks. A copy of the vehicle specifications is attached. Customization of the vehicle is proceeding. We are looking for aquaria to be installed in the vehicle. The vehicle is projected to be operation in summer, 2013. I have re-estimated the task percent complete as 50%.

Task 6.2: The Marine Protection Area Council has provided recommendation for the ASBS signage. We are also developing signage specifically addressing water quality issues in Buck Gully which drains to the ASBS at Little Corona Beach. Draft signage exhibits will be included with the next progress report.

Task 6.3: City docents continue to monitor use of the tidepools and are developing data that will be used to gauge changes.

#### **Task 7 Little Corona Rocky-Intertidal Restoration Pilot Program**

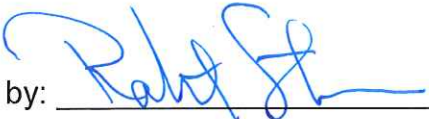
Dr. Jayson Smith of Cal Poly Pomona has performed significant work researching the benefits of removing invasive algae (Sargassum and Caulacanthus) from the Little Corona cove. Initial findings suggest that Sargassum does not have negative impact on native marine organisms. In the mid intertidal zone, where a native algal turf already exists, there appears to be no impact of Caulacanthus on community structure. In the high intertidal zones of this region, native high intertidal turf forming algae are uncommon thus Caulacanthus provides a novel microhabitat for a suite of organisms that normally are not found in the high intertidal zone due to desiccation stress. As a next step, urchins will be observed to see how there presence impacts recovery rates of tide pools with cleared algae plots.

#### **Task 8 ASBS Collaborative Management Program**

Work continues for creating a website for enhancing coordination among ASBS stakeholders and conveying updates on work on ASBS. The website will include and Ocean Spaces tab and also a student citizen science tab, where students can contribute their observations to a virtual species inventory of local tidepools. We are in the process of obtaining permission from NOAA to add different videos as well. This new site will be linked to the City's site.

#### **Project Budget**

An update will be provides shortly based on current discussions on potential modifications to the program budget.

Submitted by:  Date: 11-20-12

**Attachment:** Task 6.1: Specifications for the "Traveling Tidepools" vehicle