CA B-WET FY 19: San Francisco Bay Watershed		
Grant Recipient	**Project Description**	**Funded Amount**
Marine Science Institute (Student MWEE)	**"*Redwood Creek Watershed Investigators & Sea Level Rise Heroes (R-WISH)*"-** All 300 6th grade students in an underserved and primarily Hispanic San Mateo County Redwood City middle school will experience and build perspectives on their local watershed's connection to the ocean, and the possible changes to it from climate change and sea level rise. Monthly exploration and action, in and out of the classroom, including 2 stream studies, 2 canoe-based creek studies, and 6 classroom experiences will provide hands-on practice of the scientific method. This comprehensive program will include activities to reduce marine debris in the watershed, conduct water quality surveys, increase knowledge of sea level rise and climate change topics, and incorporates an environmental mentorship between high school students and 6th graders.	$55,701
Treasure Island Sailing Center (Student MWEE)	**"Sailing to Save the Sea"**- This program will help low-income San Francisco public school 5th graders with an in-depth and hands-on exploration of SF Bay watershed pollution issues and ways to address them. The three core questions students will focus on are: 1. What pollution affects the SF Bay watershed? 2. What does pollution do in the SF Bay watershed? 3. What can we do about it?	$56,767
The Watershed Project (Student and Teacher MWEE)	**"Wild Oysters, Living Shorelines and out Changing Climate"**-The Watershed Project (TWP) will offer 6-7 interactions, including four classroom visits and 2-3 local outdoor experiences, to 6-8 teachers and 400 high school students in San Francisco, Alameda, and Contra Costa counties in the 2018-2019 school year. We will work with approximately 200 ninth graders, 120 tenth graders and 80 eleventh and twelfth graders. This program will focus on how climate driven ocean acidification is affecting oysters in the San Francisco Bay and Greater Farallones National Marine Sanctuary and the resilience of those ecosystems.	$59,546
Greater Farallones Association (Student MWEE)	**"LiMPETS Climate Literacy Project: Meaningful Watershed Educational Experiences for San Francisco Bay Area Students"**- During the 2018-2019 school year, the Greater Farallones Association will provide Meaningful Watershed Educational Experiences for Students that focus on climate change education at four Title 1 schools in the San Francisco Bay Area through LiMPETS. Students). LiMPETS is a hands-on marine science education program in which students contribute to a statewide effort to monitor rocky intertidal and sandy beach habitats of California's national marine sanctuaries. Through the Project, four	$42,130

	teachers and 320-340 students will focus their most-monitoring discussions and data analysis on climate-related trends and issues.	

Napa County Resource Conservation District (Student MWEE)	**"LandSmart Youth Stewards - Salmon to Sanctuary (S2S)"-** Through S2S, students will explore how salmon population size and health are related to both freshwater and ocean conditions. Students will investigate how climate change impacts salmonid population by exploring core issues of Ecosystem Resiliency, Consumer Choices, and Ocean Acidification (OA). Through the MWEE, RCD will guide students into examining how 1) human activities are changing earth's climate, 2) collective actions are needed to adapt our carbon footprint and lower overall emissions to preserve and maintain biodiversity, and 3) students' choices and actions today that can make a difference into the future.	$59,382
Sonoma Ecology (Student and Teacher MWEE)	**"*Water Wonders and Climate Champions: Inspiring the Next Generation of Environmental Stewards*"-** Sonoma Ecology Center will engage students in every Sonoma Valley public school in our fifth grade Water Wonders and sixth-grade Climate Champions programs. Our Water Wonders program teaches concepts of the watershed, water pollution, and the salmon life cycle, and connects impacts in the Sonoma Creek watershed to impacts in San Pablo Bay and the Pacific Ocean. Students learn with interactive models, hands-on investigations, and a salmon dissection. A four-hour field experience to Sugarloaf Ridge State Park includes water quality testing of Sonoma Creek and the study of creek ecology through observations of riparian trees and aquatic life. In our sixth-grade Climate Champions program, students build on their experience in the fifth grade Water Wonders program. Through interactive models, demonstrations, and hands-on investigations, Climate Champions teaches students how climate is regulated by complex earth systems. It teaches about the greenhouse effect, and about the carbon cycle and human influences on it. Impacts of a changing climate on our watershed are explored. We include sea level rise and how the ocean is a "climate heart" that pumps cycles of rain and drought on shore. Students collect streamflow and stream transect data in the field, and analyze relationship between stream conditions and climate, adding data annually to track local rainfall variability. At Sugarloaf Ridge State Park, students will learn about the impacts of the 2017 Nuns Fire that burned approximately 80% of the park.	$39,986

Earth Team (Student)	**"Aqua Team- Sustainable Youth Watershed Internships"**- This project will implement an immersive afterschool watershed education and stewardship program directly serving 56 public high school students, recruited as paid interns each year from four local public high schools in the San Francisco Bay Area. Indirectly the program activities will benefit 400 career academy students and 12 teachers. The direct service learning approach of the program will focus on watershed field research, data collection, habitat restoration action and community outreach.	$47,159
Kashia Band of Pomo Indians (Student)	**"Promoting Watershed & Ocean Stewardship through a Cultural Context"-** Kashia Band of Pomo Indians Department of Environmental Planning (KDEP) will work in close association with Kashia Elementary School to provide a meaningful watershed educational experience to all K-8th grade students enrolled in the Kashia Elementary District. Building upon the California Department of Fish & Wildlife's Steelhead in the Classroom Program, KDEP will expand upon program content to educate students on watershed and ocean stewardship through a cultural context. Incorporating traditional stories, historical accounts and cultural values, students will establish a sense of place within their community and the environment. Throughout the duration of the program students will focus on answering 3 core questions. Questions include: (1) What are the main sources of pollution in the Gualala river watershed? (2) How does this pollution affect the watershed and nearby coastal ecosystem? and (3) What actions can we take to protect our watershed and ocean resources? It is expected the program will instill a sense of environmental responsibility and encourage youth to be active environmental stewards within their community.	$17,610