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Bay Trail Beautification Project in East Palo Alto: Final Programmatic Report (Amended)

Recipient Organization/Agency: Acterra

Date Submitted: January 27, 2016

Project Period: 1/01/2013 to 1/31/2016

Award Amount: \$150,000

Matching Contributions: \$184,950

Total Disbursement: \$150,000

Project Number: #8006.12.033288

1. Summary of Accomplishments

The purpose of Acterra's Bay Trail Beautification Project was to enhance the beauty and safety of East Palo Alto's Bay Trail, covering 1.3 miles of the trail between San Francisquito Creek and Cooley Landing Park. The three-year NFWF grant brought Acterra together with Save the Bay, East Palo Alto Charter School, Youth Community Service (YCS), and various other community groups to involve volunteers in beautification efforts along the trail and its surrounding baylands. Key accomplishments included 1.3 miles of trail enhanced through trash pick-up 4,000+ native landscape plants installed along two trailheads; 1,300 pounds of garbage and recyclables removed; 8 species of invasive plants removed; 1,000+ volunteers engaged; 48 community workdays provided; 24 educational sessions provided to students through our YCS collaboration; 5 joint volunteer workdays with Save the Bay implemented; and 14 educational sessions provided to students through our collaboration with East Palo Alto Charter School/Collective Roots.

2. Project Activities & Outcomes

Activities

Below is a summation of primary project activities over the three-year grant period.

Trail Beautification

Planting

The grant enabled us to install and maintain over 4,000 plants in two highly trafficked areas of the trail: 1) the Runnymede Street trailhead, where the Bay Trail meets the Faber-Laumeister trail just outside East Palo Alto Charter School, and 2) at the trailhead where the Bay Trail meets Cooley Landing, the entry area to a new city park that abuts the Ravenswood Open Space Preserve and the Don Edwards National Wildlife Refuge. The plants we installed were selected both for their biological and aesthetic value, including dozens of species of native grasses, flowers, and shrubs. In conjunction with our planting efforts, we performed a labor-intensive restoration technique of sheet mulching over a total of 6,500 square feet. This method helped to improve the soil while protecting our native plants from drought, invasive weed grow-back, and the harsh winds characteristic of the



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baylands. Installing and maintaining these landscape plants significantly improved the attractiveness of the trail, benefiting thousands of trail users annually including dog-walkers, bikers, joggers, and wildlife enthusiasts. At the same time, our efforts improved trailside shade and enhanced habitat value for the diverse wildlife of the baylands.

Removing invasive species

As a necessary complement to our planting efforts, we worked with hundreds of students and community volunteers to mechanically remove common and noxious invasive species including various thistles, grasses, and brassicas--8 species total. This activity improved trail usability and attractiveness while also improving biodiversity and ecosystem health.

Trash removal

We worked with volunteers to collect over 1,300 pounds of trash and recyclables from the trails, neighboring creeks, and wetlands. Trash removal provided the immediate benefit of making the trail more aesthetically appealing and safer, especially for bike riders. It also provided the long-term benefit of improving the local ecosystem health and the health of aquatic organisms by preventing ingestion of trash.

Community Collaboration

Over the three-year grant period, we hosted a total of 48 community workdays, significantly exceeding our target goal of 36. These events served hundreds of volunteers from the community at large as well as local schools, corporations, and organizations including:

- Averroes High School, Fremont Brentwood Academy, East Palo Alto Camp Kindness Counts, Fremont Citizen Schools/Cesar Chavez Academy, East Palo Alto
- Course Hero
- East Palo Alto Mormon Church
- East Palo Alto Phoenix Academy
- East Palo Alto Stanford Academy
- East Palo Alto Tennis and Tutoring Program
- Eastside College Prep, East Palo Alto
- Environmental Volunteers, Palo Alto/East Palo Alto
- Girl Scouts of Palo Alto
- Girls to Women, East Palo Alto
- Microsoft
- St. Francis of Assisi Youth Club, East Palo Alto
- Student Conservation Association
- Youth Leadership America, Bay Area Chapter

Student and community volunteers planted and cared for native plants, removed invasive species, sheet mulched, and picked up trash while learning about the importance of tidal wetlands. Many of these groups were served multiple times, helping the community develop a meaningful connection to the Bay Trail and surrounding bay ecosystem.

In addition to the abovementioned collaborations, Acterra had three major partnerships that enabled us to implement the project. Progress with each partnership is summarized below.



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Youth Community Service (YCS)

The NFWF grant enabled us to deepen our existing partnership with YCS in some significant ways. Each year over the three-year grant period, we increased the number of watershed education sessions we provided to YCS' participating high school and middle school students. For example, in 2015 we added three additional educational sessions with students that increased our involvement into new programs beyond their Summer of Service program, including school-year program sessions in which 100 high school students participated in giving their time to local non-profits during school hours. Additionally, this last year Acterra assisted in a training for YCS Freshmen Leadership Corps at Cooley Landing Creek. At this training, Acterra staff trained YCS youth in how to lead water quality monitoring activities, which students then taught to BioSite, a Children's Discovery Museum program focused on water quality.

East Palo Alto Charter School/Collective Roots

Acterra collaborated with East Palo Alto Charter Schools (EPACS) and the nonprofit Collective Roots to serve students participating in the school's Garden Club. Acterra staff augmented the Garden Club curriculum to include education on the flora and fauna of the baylands, ecosystem functions, nature appreciation, interpretive hikes, and age-appropriate environmental service activities such as watering native plants. Building on this partnership, this last year we worked with the EPACS Garden Club and the EPACS Mindfulness and Wellness Program to create a series of bilingual educational events focused on building community among students, their families, school administrators/teachers, and mental health professionals from the school. These events helped to create a diverse and inclusive environment in the outdoor field, providing more opportunities for students and their families to learn about ecology of the baylands. We currently have plans to install a weather station within the garden that records precipitation, cloud coverage, temperature, time-lapse photography, and more. This weather station will further link the Garden Club's garden-based education with education on the surrounding wildlands of San Francisco Bay.

Save the Bay

The NFWF grant enabled us to develop a new collaboration with another premiere Bay Area restoration nonprofit, Save the Bay. Save the Bay's nursery provided us with hundreds of native plants to install in baylands areas that are subject to saltwater inundation. These species are specifically adapted to tidal influences and San Francisco Bay wildlife, thus providing the ideal complement to the uplands plants grown by our own native plant nursery. By sourcing plants from both nurseries, we significantly increased biodiversity and ecosystem resiliency while using a locally appropriate plant palette. Another aspect of our collaboration with Save the Bay was the co-leading of volunteer workdays in our adjacent restoration areas. These joint workdays boosted volunteer involvement in Bay Trail beautification and increased environmental awareness of participants. Not only did these workdays increase public participation in the project, they also gave staff from our organizations opportunities for cross-pollination and knowledge exchange. For example, in December 2013 Acterra and Save the Bay staff worked together to provide Collective Roots' garden education staff with a four-hour training on native plant restoration to help them integrate more wildlands education into their curriculum.

As noted in previous reports, there was a modification to one of our project partnerships. In our original proposal, the NFWF grant was to support Acterra's collaboration with the Collective Roots school garden program to work with children at East Palo Alto Charter School on Bay Trail beautification. In year 2 of the project, Collective Roots had a reduced capacity to support the grant project and ultimately ended up closing its doors and ceasing to



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run the garden program at East Palo Alto Charter School. As a result, Acterra had to contribute additional staff time to meet our grant goals. The following year, East Palo Alto Charter School hired an in-house Garden Manager to resume the activities formerly conducted by Collective Roots staff. Per Acterra's request, NFWF approved the reallocation of funds budgeted for Collective Roots in the third year of the project to East Palo Alto Charter School to continue our grant collaboration and serve students at the school. Thus, though there was a change in the partnership structure, all proposed activities were still carried out in full per our contract.

Benefits

By installing and maintaining native plants, removing invasive species, and clearing garbage from the landscape, the project significantly improved the attractiveness and safety of the Bay Trail in East Palo Alto. This benefited thousands of community members who use the trail each year including dog-walkers, bikers, joggers, and wildlife enthusiasts.

Another major benefit was the engagement of over 1,000 volunteers and students in environmental service activities along the trail. As described earlier in this report, we hosted a total of 48 community workdays over the grant period, reaching hundreds of volunteers from the community at large as well as local schools, corporations, and organizations. Many of these groups were served multiple times, helping the community develop a meaningful connection to the Bay Trail and surrounding bay ecosystem. We also were able to deepen our partnerships with grant partners like YCS beyond what we promised in our grant proposal. This enabled us to serve more youth at the Bay Trail (see YCS section above for details).

3. The Future

This generous multi-year grant enabled us to fully launch the project and go on to attract the support of other reputable funders such as the Coastal Conservancy, Franklin & Catherine Johnson Foundation, and the ClifBar Family Foundation. We will continue to leverage all of this support to continue the project and build upon the successes of the past three years. Moving forward, the project will focus on working with the City of East Palo Alto to increase restoration and education at Cooley Landing, which includes natural lands and an education center and has lots of potential for project expansion.

4. Lessons Learned

We were pleased to learn that the East Palo Alto community is very eager to get involved in volunteering and education at the Bay Trail - especially underserved schools and youth programs that are hard-pressed to find free, accessible nature-based education for their students. We were also pleased to attract the participation of many types of volunteers including faith-based groups, local businesses, and universities. This was an even more diverse set of volunteers than anticipated.

In terms of landscaping, over the three-year project period we learned which species did best in the high winds and extreme conditions of the baylands and made adjustments to our plant list each year. This ensured that we were planting the optimal species that would survive and thrive for many years to come, and make the trail a more beautiful and welcoming place for trail users. We also learned about the complexity of working in the project area, as it involves many different jurisdictions including the City of East Palo Alto, the City of Palo Alto, the



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Don Edwards National Wildlife Refuge, Mid-Peninsula Open Space District, and the San Francisquito Joint Powers Authority. Thus, we had to coordinate and communicate our activities with many different parties to ensure the successful implementation of the project.

5. Project Documents

Project-related images are included below.

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Image 1: Community workday with corporate group Course Hero. Volunteers helped with sheet mulching, trash removal, and watering native plants.



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Image 2: Youth volunteers planted native species on the Bay Trail near East Palo Alto Charter School.



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Image 3: Volunteers planted marsh baccharis and California asters along the Bay Trail in East Palo Alto.



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Image 4: Volunteers from East Palo Alto, Palo Alto, and Redwood City gather for a group photo after a workday on the Bay Trail.



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Image 5: Trash collected at Coastal Cleanup Day at the East Palo Alto Bay Trail.



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Image 6: PHOTO BEFORE PROJECT. East Palo Alto Bay Trail focus area #1 before sheet mulching and planting



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Image 7: PHOTO AFTER PROJECT. East Palo Alto Bay Trail focus area #1 after sheet mulching and planting.