

Romic Settlement Environmental Education Component Report

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Community Involvement

Groups involved and numbers of volunteers

The Youth Conservation Corps program lasted for eight weeks and employed eight local youth. Together, these youth contributed 2,157.5 hours of labor to the project. On the last day of the program, the crew held a barbecue and presented their accomplishments to an audience of 50 community members and Fish and Wildlife Service staff.



Crew Members presenting their work to the community at the end of season barbecue

On the Faber-Laumeister Tract, the youth mechanically and manually removed invasive mustard and constructed solarization tents to contain it; mechanically removed other invasive plants; constructed a salinization/irrigation system to deter non-native plants; collected seeds and cuttings and propagated native plants in a nursery; successfully transplanted 2,800 native plants; and constructed two benches for public use. The Youth Conservation Corps crew members also participated in environmental education activities, learning about local habitats, endangered species, and environmental issues.



Crew members transplanting native plants that they grew from seed.

Over three separate work days in October and November, 76 volunteers, many from the local community, contributed 175 hours and planted 800 plants on the site and sheet-mulched over approximately 500 square feet of invasive weeds. Refuge interns held additional work parties in December to make sure that all of the native plants are planted before the end of the season; they have been responsible for the planting of 300 more plants.



Volunteers from Eastside College Prep in East Palo Alto plant native plants.

Three more local volunteer groups have been scheduled to try to complete the planting in March 2011. There may also be opportunities in March to bring Refuge volunteers to continue the planting. Approximately 1,600 plants remain (as of February 2011).

Local Partnerships-Collective Roots

At the time of the Romic Settlement, the Refuge was conducting environmental education programs with the East Palo Alto Charter School. The original plan for this project was to work closely with the East Palo Alto Charter School and Collective Roots, a non-profit organization based at the school. However, priorities and personnel at both organizations changed and it was not possible to continue environmental education programs there. The Refuge still partnered with Collective Roots to host the Youth Conservation Corps crew. Through the Romic Settlement the Refuge (and the San Francisco Bay Wildlife Society) provided \$1,000 to Collective Roots and they allowed the Youth Conservation Corps crew to use their greenhouse and nursery facilities over the summer.

The changes at the East Palo Alto Charter School and Collective Roots were, initially, a major setback, but after a great deal of work, additional partners were located. The Youth Conservation Corps program was well received by local high schools such as Menlo-Atherton and Eastside College Prep. Staff from these schools helped recruit students for the Youth Conservation Corps Program and have brought students to volunteer with planting. Teachers from Menlo-Atherton are also planning class field trips to the Faber-Laumeister Tract for the 2011-12 school year.

After-school programs at local elementary schools and for high school students also supported this program. The James Flood after-school program has volunteered to help with planting; CollegeTrack and One East Palo Alto assisted with recruitment for the Youth Conservation Corps program; Build On will be bringing high school volunteers to help with planting in March; and the City Parks and Recreation After School Program is interested in bringing students to the Faber-Laumeister Tract for environmental education programs in the future.

Work Accomplished

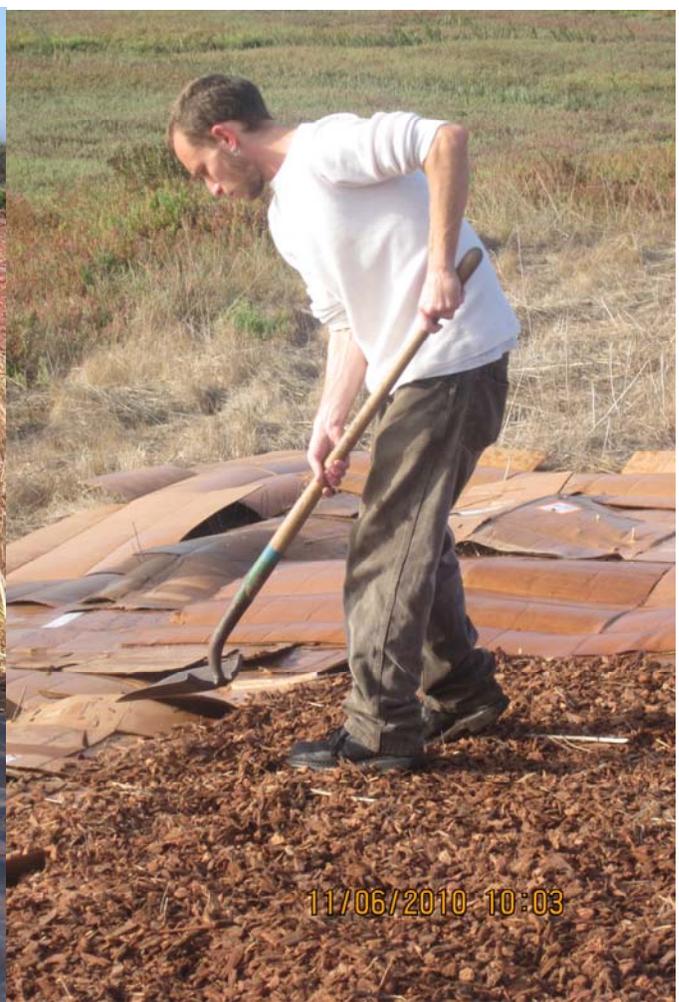
Summary of Acres restored with native plants (and numbers of plantings) and acres prepared for future plantings

The levee where the youth worked is approximately a half-mile long and averages 20 feet in width. No work was done in the intertidal area on the outer edges of the levee. The upland restoration site is approximately one acre.

The entire acre was weed-whacked by the Youth Conservation Corps crew in summer 2010. Weeds were placed in solarization tents to prevent viable seeds from dispersing. (In 2011 the Youth Conservation Corps Crew should be able to mulch the weeds from the solarization tent without reseeding them.) Approximately one tenth of the tract was intensively prepared by the crew for planting, through hand pulling of weeds and salinization. Volunteers sheet mulched an additional 500 square feet of levee that will be suitable for planting next season.



Crew members construct a solarization tent.



Volunteers spread mulch over non-native grasses.

The Youth Conservation Corps Crew collected seeds and cuttings and propagated 2,800 native plants for the site. The plants propagated were gumplant (*Grindelia stricta*), creeping wild rye (*Leymus triticoides*), California poppy (*Eschscholzia californica*), willow herb (*Epilobium brachycarpum*), California aster (*Aster chilensis*), and goldenrod (*Euthamia occidentalis*). It is difficult to calculate the area covered by these plants because they were not planted in one solid area. Ideally the Faber-Laumeister Tract will support a diverse community of native plants. The plants transplanted by volunteers were spaced to allow for future plantings and were dispersed based on their preferred elevation above the mean high tide. By the end of March, 2011, all 2,800 native plants should be installed in the restoration area.



Pedal powered irrigation system for salinization.

Summary of recreational use enhancements

Public use enhancements on the Faber-Laumeister Tract are a controversial issue. Because Refuge staff and other stakeholders disagree about the merits of public access on the Tract, public use enhancements were kept to a minimum. Crew members improved existing facilities by removing graffiti from signs, removing trash, and removing weeds that obstructed the view. The crew also built two benches along the Bay Trail that enhance wildlife viewing opportunities. For work variety, the crew painted a quarter mile of curbs at the Environmental Education Center, to improve parking lot safety.



Youth Conservation Corps Crew Members installing a bench along the Bay Trail in East Palo Alto

The enhancements at the Faber-Laumeister Tract were minimal but well received. Cyclists on the Bay Trail complimented the Fish and Wildlife Service on the improved visibility. Local residents, no longer threatened by what the weeds could conceal, ventured out onto the levee to find peace and quiet. Others now come to sit on the benches and watch wildlife on the mudflats. In the community, word is spreading about the value of the habitat. Uniformed Fish and Wildlife Staff have been thanked by gas station attendants and other community members who appreciate the improvements.

Summary of expenditures

Romic Settlement Funds: Total = \$27,600.00

Wildlife Society 15% Administrative Fee	\$4,140.00	Available to spend on project: \$23,460.00
Crew Leader Employment	\$19,480.00	
Partnership with Collective Roots	\$1,000.00	
Project Materials and Supplies	\$2,980.00	

Additional Funds: Youth Conservation Corps Total = \$24,000

Crew Member Employment	\$19,855.99
Clothing and Personal Protective Equipment	\$776.54
Project Materials and Supplies	\$2,427.47
Environmental Education	\$940.00

Future Plans

Recommended Maintenance and Monitoring of Restored areas.

Refuge staff are developing a comprehensive habitat enhancement plan and are for the Faber-Laumeister Tract and are partnering with Save The Bay to implement the plan. In the future, the Refuge will seek funding to increase management activities at the site.

The habitat enhancement plan that is being developed should include ongoing, intensive weed management; seeding of native plant species; hand planting of select natives; summer watering for the first few years; improvements to the trail, which would require a Section 7 Assessment; strengthening our presence in the area through improved community outreach, education programs, and law enforcement; and monitoring the success of these activities and their impacts on endangered species, especially the California Clapper Rail. With additional funding, the project could also explore possibilities such as creating refugia islands in the Faber Tract; creating refugia on the “stub levee” that extends into the Faber Tract from the south side; increasing predator control; intensive spartina removal; and enhancing public use through signs and a viewing platform.

By partnering with Save The Bay, the Refuge hopes to implement the management activities described above. At a minimum, however, the Faber-Laumeister Tract requires weeds to be mowed each year and hand pulled in the area that has already been planted with natives. To some extent, this can be done by a Youth Conservation Corps Crew in the summer-- but to be effective, the Refuge should also utilize staff to cut the weeds in the spring, before they go to seed. In 2011, the Youth Conservation Corps will be physically removing weeds from the levee, and testing a salinization system to help control some non-natives chemically. The native plants planted in 2010 also need to be watered. Very few native plants can survive without being watered through their first summer, and the success rate increases with additional watering. The 2011 Youth Conservation Corps will be responsible for watering the plants from the previous year through the summer. The plants should also be watered in summer of 2012, but no plan is in place for this yet.

Additionally, the Youth Conservation Corps and community volunteers could take on projects such as mulching around the native plants, sheet-mulching large areas of weeds, and removing trash from the levee. The Visitor Services division for the Refuge hopes to pilot a citizen science program involving local college students in monitoring and evaluation. These tasks are not essential, but they are feasible and entail few drawbacks, and they will help to maintain the accomplishments of 2010 (in habitat enhancement and in building community support through involvement). The Refuge is planning to implement them until they are supplanted by other management activities.

Activities which will be facilitated by the Romic project

The greatest, lasting success of the Romic Settlement Environmental Education project will be the impact on the community. Community members are recognizing the value of the natural resources around them. The Refuge hopes to build on the relationships established through the Romic Settlement Environmental Education project to further develop community stewardship of the Faber-Laumeister Tract and other natural resources. Additional volunteer work days and school field trips are being planned for 2011, and the Refuge hopes that community participation in conservation continues well into the future.

The 2010 Youth Conservation Corps and community involvement program was successful in enhancing habitat, as well, and the Refuge would like to continue the program in 2011. However, this will be difficult without a habitat enhancement plan and additional funding. The greatest limitation on the Youth Conservation Corps Crew and community involvement program will be the lack of a full time staff person to coordinate habitat enhancement efforts. It is likely that the 2011 Youth Conservation Corps and community involvement will be a scaled down version of the 2010 program. Because of the materials and supplies acquired using the Romic Settlement funds, and the groundwork laid by the 2010 Crew Leader and YCC Coordinator, youth crew members and community volunteers will be able to perform required maintenance such as whacking weeds, hand pulling weeds in select areas and containing them in solarization tents, and using a pedal powered pump to salinize weeds and water existing native plants. With the tools and materials currently available, youth crew members and community volunteers will also be able to assist with mulching, limited propagation and planting of natives, trash removal, and monitoring and evaluation.

Finally, the Refuge hopes that the progress made by the Romic Settlement Environmental Education project will precipitate further improvements. Before this project, there were no immediate plans to conduct restoration work at the Faber-Laumeister Tract, and the Tracts had been underutilized by the local community. The accomplishments made by the Youth Conservation Corps and community volunteers have given the Tracts an improved visibility that will stimulate additional habitat improvements. Refuge management and community organizations are now looking for ways to continue the habitat enhancement work and community stewardship building that has started there. The need for a comprehensive habitat enhancement program has been documented in the Comprehensive Conservation Plan; the Refuge has worked with Cooley Landing to secure funding to remove riprap from the Laumeister Tract; and managers are partnering with Save The Bay to implement a comprehensive habitat enhancement plan. Without the Romic Settlement, none of this would have been set in motion.