



TARGET SUMMARY: Environmental Solutions Forum II

A day was spent at Half Moon Bay, where sea creatures and birds roam all day. The fishes relax. Hermit Crabs are small and tickle your palm, but careful don't let them fall. The sea stars look beautiful like a flower in bloom, but rough on top like bristles on a broom. The sea grass grows and makes the world beneath an underwater garden. The animals make the garden unique. Nothing can take away the animals that live in Half Moon Bay.

Jessica Banuelos, 6th Grade
Kennedy Middle School

Winter 2007 Designing Innovative School Programs

Plan Summary

In September 2006 Environmental Solutions Forum II (ESF II) launched its three-year initiative to build a framework providing a six year continuum of environmental experiences, centered on the Bay area ecosystem and its interconnections, to underserved youth in Redwood City and East Palo Alto. Center for Venture Philanthropy staff have begun to partner and collaborate with teachers and principals from three Redwood City Schools —Hoover Elementary (focusing on 6th-8th grade), Kennedy Middle and Sequoia High schools—along with two agencies, Redwood City Department of Parks and Recreation, four environmental education nonprofits and two county offices of outdoor education to design and deliver ESF II's coordinated experiences in and out of the classroom. Upshot is underserved youth begin to connect with their surrounding environment and explore environmental recreation and stewardship opportunities.

Hoover Elementary School

Eighth Grade Language Arts Teacher - Jane LaPaglia - designed a year-long progression with Save The Bay linking watershed education to California content standards for 8th grade language arts. The school year kicked-off with sixty-six 8th graders paddling canoes in the Palo Alto Baylands with Save The Bay to learn about the watershed, its local ecosystem and experience nature first-hand. Back in the classroom, students logged their experiences with nature and knowledge of the Bay in a watershed journal. Later, students created posters and wrote stories to depict a rain drop's path to the Bay using metaphors of its past (rivers), present (Bay) and future (ocean). Save The Bay continues to work with the teacher and students to prepare for an end of the year trip back to the Palo Alto Baylands to participate in watershed restoration work.



Sequoia High School Academy students see their first stink bug!



7th Grade student having fun pulling invasive plants to restore Stulsaft Park.

Kennedy Middle School

Kennedy Middle School's science coordinator and 7th grade science teacher, Pat Nugent, along with Acterra, an environmental nonprofit, designed a creek restoration program that ties to 7th grade science standards. Using a local creek site that is within five minutes walking distance from the school, teachers took students on class field trips without the need of substitutes or buses - costs that usually prohibit out-of-class experiences. Students visited the creek site several times per semester to familiarize themselves with the creek surroundings, identify plant species and participate in creek restoration. Students applied in-school learning to hands-on work, and in the process, helped better their community. City of Redwood City Department of Parks and Recreation partnered with the school and Acterra to provide free work supplies, garden space, training and the opportunity for summer internships.

Sequoia High School

Sequoia High School's Academy Program Director, Mike Kuliga, designed a year-long Leadership Class that provides backpacking, kayaking, snow shoeing and rafting trips to "at-risk" 10th to 12th graders. These students gained leadership, mentoring and personal growth opportunities while exploring the outdoors. Leadership Class participants applied their skills and training to serve as Cabin Leaders for San Mateo County Office of Outdoor Education's five-day residential camp for 5th graders at Jones Gulch. Cabin Leaders received prior 2-day training and became role models to 5th grade students from their own communities.

The Academy program also partnered with ESF II nonprofits (Acterra, Marine Science Institute, Save the Bay and San Mateo and Santa Clara County Departments of Outdoor Education) to provide its students with content standard curriculum around environmental and social issues affecting their communities. Students then took action to address those issues in their communities with the assistance of the nonprofits. For example, students surveyed fish and plant species at a local creek site with Acterra and eventually designed, recruited fellow students and led a community creek restoration project.

Things to Come

At the end of the school year, teachers and principals from Hoover Elementary, Kennedy Middle and Sequoia High schools plan to meet, along with ESF II nonprofits and agencies, and share each others ESF II curriculum and programs. They will discuss how to improve programs, co-create and co-refine curriculum, and then discuss how to link each schools' watershed curriculum with one another. This would be the first time the teachers, nonprofits and agencies collaborated to co-create and to link curriculum, around a Bay watershed theme, across their three schools.

*Cutting plants and leaves
All the kids are at Stulsaft
They are having fun*

*Big trees are growing
Living off of the big sun
The leaves are bright green*

A haiku by Ofamooni, 7th Grade
Kennedy Middle School



Students doing restoration work at Stulsaft Park.



Sequoia High School LEP Class learning about soil density and sifting for sea life.



Sequoia High School Leadership Class students on a multi-day backpacking trip.
