



Marin County Stormwater Pollution Prevention Program
www.mctoppp.org

Students and Teachers Restoring a Watershed
http://www.bay.org/watershed_education.htm

2007-2008 MCSTOPPP/STRAW Collaboration

In-Class presentations: MCSTOPPP and STRAW staff gave in-class presentations to approximately 17 classes on stormwater pollution prevention and riparian restoration. The presentations prepared 600 students for their restoration days and connected riparian restoration concepts to stormwater pollution prevention and to creek habitat protection. The MCSTOPPP presentation stresses the importance of maintaining a healthy and diverse riparian corridor. We also focus on helping students to understand that they all live in a watershed by teaching the anatomy of the watershed (headwaters, valley floor, estuary/wetland, and bay/ocean) and by pointing out the connection between rain water, storm drains, creeks, and pollutants. We try to help students understand the importance of preventing excessive erosion and we introduce the concept that sediment is one of the leading surface water quality pollutants and diminishes aquatic habitat.

07-08 MCSTOPPP-STRAW RESTORATIONS	TOTALS
Number of Major East Marin Watersheds	3
Number of Major West Marin Watersheds	1
Number of Restoration Sites	6
Number of Restoration Days	7
Number of Teachers	17
Number of Students	600
Number of Parents	62
Number of Volunteers	29
Square Feet (pulled and/or planted)	247,202
Width (Feet)	1062
Linear Feet	1205
Total Number Native Riparian Species Planted	425
Total Containers Planted (native plants)	255
Total cubic yards of non-native plants removes	26.5

2007-2008 Arroyo Corte Madera del Presidio Watershed

In the Arroyo Corte Madera del Presidio Watershed the MCSTOPPP/STRAW team participated in 2 restoration days, 1 in Old Mill Park at Old Mill Creek and 1 in Boyle Park at Warner Creek. The MCSTOPPP/STRAW team supervises and leads students in restoration activities including pulling invasive non-native plants, installing dri-water irrigation, and planting native plants.

At the Old Mill Park site students in 1st through 3rd grades shrugged off the light rain and to remove non-native invasive plants (mainly English Ivy), amended the soil, installed dri-water for temporary irrigation, and planted 33 native plants including coffeeberry, thimbleberry, snowberry, and elderberry.



Photo Right:
Planted natives to develop a riparian corridor

At the Boyle Park/Warner Creek restoration site students pulled invasive plants including Himalayan Blackberry, ivy and broom, and planted 3 different species of native plants (a total of 29 individual containers were planted including dogwood, coffeeberry, and snowberry).

Students remove invasive non-native blackberry and English Ivy and plant coffeeberry along the top of the creek bank.



Students remove Himalayan Blackberry from around dogwoods (red branches in foreground) planted by during previous STRAW/MCSTOPPP restorations.



Participating schools included Old Mill at the Old Mill Creek site and Park School at the Warner Creek site. Rick Misuraca with the Parks and Recreation Department of the City of Mill Valley participated by arranging to have city workers remove and dispose of the plant material removed by students.

2007-2008 Miller Creek Watershed

In Miller Creek we held student restorations at 2 sites: at Dixie School and in Marinwood Park adjacent Miller Creek Middle School (MCMS). The Dixie School District and the Marinwood Community Services District granted access so that students could maintain the MCSTOPPP/STRAW restoration sites. This was the 6th year of restoration at these sites.

At the Marinwood/MCMS site all of the 6th and 7th grade students from MCMS helped to remove 8 cubic yards of Cape and English ivy, spiderwort, purple nightshade, privet, and Himalayan blackberry and planted 153 native riparian plants. The species included box elder, California rose, snowberry, blue elderberry, California buckeye, and native California blackberry. Students also thinned stands of *Carex barbarae* and transplanted it along the creek banks in order to encourage the spread of this native sedge. The MCSTOPPP/STRAW team completed 2 days of student restorations at this site. Marla Lafer from the RWQCB, Robert Maccario from the Town of Ross and Marin County Flood Control and Engineering staff joined the students and helped with the restoration projects.

Marla Lafer (RWQCB) leads students in removing Himalayan blackberry and English ivy.



Bene' DaSilva (MCSTOPPP staff) leads a team of students carefully removing invasive Cape ivy.



There was also a 1-day restoration at the Dixie School site where 1st grade students from the Novato Charter School pulled 3 cubic yards of English ivy, Himalayan blackberry, and other non-native species. Students also planted 15 plants, including, coffeeberry, California buckeye, and blue elderberry.

Right: Students removed Himalayan blackberry from around these blue elderberry planted by students during previous STRAW/MCSTOPPP restorations.



Novato Creek Watershed

MCSTOPPP, STRAW, Rancho School 5th graders, and Hamilton Elementary 3rd graders continued restoration efforts for the Novato Creek Phase VIII Capital Improvement Project. Students planted a total of 94 native plants with deer cages on both banks within a short reach of the Phase VIII project. They included box elder, white alder, Oregon ash, coffeeberry, California rose, blue elderberry, snowberry, native California blackberry, and rushes. The county

contracted with Shelterbelt Builders to do maintenance and summer irrigation. This was a collaborative project between STRAW, MCSTOPPP, PRBO and the Marin County Flood Control and Water Conservation District.

STRAW and MCSTOPPP staff lead students in planting natives and installing deer cages in the continued riparian corridor restoration efforts for the Novato Creek Phase VIII Capital Improvement Project.



San Geronimo Creek Watershed

Fourth grade students from Manor School in Fairfax participated in a riparian restoration project on Woodacre Creek. MCSTOPPP assisted with planning of the project but this was a collaborative project with STRAW, County of Marin, Marin County Flood Control and Water Conservation District, and the Woodacre Community. The work was part of a Marin County Fish Passage Program project. Students removed non-native invasive species and planted 126 native plants including 5 box elder, 6 California Buckeye, 10 Coyote Bush, 10 toyon, 5 Valley Oak, 10 coffeeberry, 20 native blackberry, 30 tufted hair grass and 30 idaho fescue.