Watershed Education is Alive and Thriving

By Ann Thomas 2001

Watershed education is alive and thriving in Ross Valley classrooms!

Students are learning about their watershed through an impressive array of activities inside and outside their classrooms. In the process, they also gather data useful in broader scientific studies and help improve creek habitat through projects that entail weeding, planting and other creek friendly tasks.

Teachers planning watershed science education can call on a number of agencies for help. Several classes work with the STRAW (Students and Teachers Restoring A Watershed) program or with Friends of Corte Madera Creek Watershed, on outdoor activities such as planting native riparian plants along creek banks. The Marin County Stormwater Pollution Prevention Program has provided grants to some classes for planting materials and nursery stock. Student-collected data from creek surveys is collected by the Bay Model's North Bay Riparian Station



Drawing by students at Kent Middle School

(NBRS) on its web site. Friends and the NBRS also have held workshops to familiarize teachers with water sampling techniques and other helpful information.

Here's some of what's going on watershed-wise in local schools.

At **Cascade Canyon School** Blythe Shelly, who teaches 5th and 6th grades as well as serving as K-8 science specialist, foresees having a watershed component as part of the science curriculum at all grade levels. Cascade's 5th and 6th graders are pulling non-natives and planting native plants such as snowberry, ferns and native dogwood along the creek near their school. They have also learned about the damage that can result from erosion and sedimentation from Marin County creek naturalist Liz Lewis. Cascade's 7th and 8th grades will be participating in water quality monitoring along the creek and attended a training program on the subject.

At **San Domenico** 1st graders will be doing simple creek observation and measurements as part of their reading and science time. Second graders learn to identify non-native plants (broom and star thistle for example) and gather data on clouds and rainfall, as well as do rudimentary water testing. For 3rd graders, the main emphasis is on native species and they will help with a revegetation project (planting willow and black oak) on a section of San Anselmo Creek near the school. Fourth graders will monitor water quality, measuring such factors as pH, turbidity, dissolved oxygen and alkalinity.

At **Manor School**, 3rd and 4th graders in Laura Honda's class have taken on responsibility for keeping a section of their creek free of broom and other invasive non-natives, and held a creek workday February 6. In addition, every Tuesday students in the class test the water for several parameters including dissolved oxygen, water temperature and depth – information reported to the North Bay Riparian Station web site.

Ross School 4th grade teachers Alison Quoyeser and Diane Phipps include restoration projects as a regular part of their curriculum. Last year Ross 4th graders worked with Friends on a restoration

at Natalie Coffin Greene Park at Phoenix Lake, removing French broom and other exotics and planting native riparian species. This year the Ross students worked on restoring the creek where it flows through the Marin Art and Garden Center. Much of the work at MAGC, Alison said, involved pulling ivy and then planting native species. The classes will also do water quality testing later in the spring.

St. Anselm's 8th graders, guided by science teacher Anita Pisciotta, conduct regular testing of creek water from stations in downtown San Anselmo, providing data to the NBRS web site. Students at St. Anselm's also study creek plant and animal life.

At **Kent School** 5th grade science specialist Cassie Hettleman has four of Kent's 5th grade classes working on restoration of a portion of Creekside Park. The students spent a recent wintry day removing areas of an invasive non-native plant called *Spartina densiflora*, a grass that covers mudflats and which can adversely impact migratory shorebirds that feed on the mudflats. In mid-March she plans a 'Creek Day' during which students will conduct tests on the creek adjacent to their campus – for such characteristics as turbidity, coloform levels, oxygen and pH.

Cassie is also having her students prepare poetry for an annual national poetry contest for children's poetry about watersheds. The contest, which is entitled River of Words, is sponsored by International Rivers Network.

At **Sir Francis Drake High School**, watershed science is one part of an upper class (11th and 12 grade) elective program called Studies of the Environment Academy -- Drake Integrated Studies Curricula (SEA-DISC for short). Science Department Chair Sue Fox, working with Charles Kennard and John Walters of San Anselmo, board members of the Friends of Corte Madera Creek Watershed, coordinates the program, now in its 5th year. Funding for materials is provided by MCSTOPPP.

About 30 students are participating in SEA-DISC this year. In the fall students research plant life and interview experts on native vegetation in order to write individual plans for revegetation of a 200 meter stretch of Sleepy Hollow Creek, where it runs through the Drake campus. The class selects one plan as a working model and then works on actually doing the revegetation in one section. At year's end the class will analyze the creek's chemical, physical and biological condition, which includes study of aquatic insects, indicators of creek health.

Any use of text and photographs for other than personal purposes is prohibited without permission from Friends of Corte Madera Creek Watershed

All photographs © 2004 Charles Kennard unless otherwise credited

Website design by Karen Peterson, San Anselmo

Friends of Corte Madera Creek Watershed P.O. Box 415, Larkspur, California 94977 phone: (415) 457-6045 fax: (415) 457-6362 info@friendsofcortemaderacreek.org