RSHED EDUCATION AND TRAINING

A GRANT PROJECT COLLABORATION OF THE SACRAMENTO COUNTY DEPARTMENT OF WATER RESOURCES AND ORANGE GROVE ADULT SCHOOL

GRANT PURPOSES:

FEBRUARY-MAY 2010

- 1. Learn where the water goes that flows into campus storm drains, and stencil the storm drains on campus.
- 2. Conduct water quality experiments and visit local waterways.
- 3. Develop our courtyard and gardens with drought-tolerant plants.
- 4. Build a rain water catchment system.



Orange Grove Adult School, 4640 Orange Grove Avenue, Sacramento, CA

W.E.T. PROJECT 2010

WATERSHED EDUCATION AND TRAINING "W.E.T. PROJECT"

FINAL REPORT OF ORANGE GROVE ADULT SCHOOL To The Sacramento County Department of Water Resources, Sacramento County Stormwater Quality Program MAY 2010



What did the students accomplish from this project?

- Students participated in identifying storm drains on the Orange Grove campus.
- Students participated in stenciling some of the storm drains.
- Students and staff collaborated to create a W.E.T. Project storm drain educational flyer.
- Students participated in planting UCD Arboretum All Star California Native
 plants in our A-5 classroom interpretive courtyard and in the Orange Grove
 Nature Area. These plants were chosen because they benefit hummingbirds,
 butterflies and beneficial insects. These plants require little water and are
 adapted to our climate.

• Students participated in constructing a rainwater catchment system.



 Students participated in field studies of our local watershed: Arcade Creek, Nimbus Fish Hatchery, and William B. Pond Park.







• Students participated in water quality experiments with the Pasco Spark Science Learning Systems.





- Students enjoyed participating in the field trip to Will Rogers Middle School Earth Day Celebration.
- Students attended California Green Summit Expo.

What were the most significant accomplishments?

- Students became aware of and advocated for water conservation practices: protecting our waterways for fish, plants, and people
- Students developed their understanding and appreciation of nature and their surroundings and maintaining the local watershed.
- Students stenciled storm drains on campus.





Orange Grove students and staff thoroughly enjoyed participating in Will



Rogers Middle School's Earth Day Celebration, April 22nd.

 This was an opportunity for students and staff from both schools to share the learning process of watershed concepts and conservation. Both schools were recipients of grants from Sacramento County Department of

Water Resources. Consequently, they shared the excitement and opportunity to expand their knowledge via the tools and resources provided by the grant.

How did you assess and measure success of the project?

- Students were given a pre and post test regarding the following.
 - Water conservation practices
 - How to reduce storm water pollution
 - How to protect our local creeks, rivers, and wildlife
 - Best plants for water conservation
 - · Water cycle concepts
 - Making connections between storm water, drains, ditches, creeks, and rivers
 - Clean drinking water

Were you able to demonstrate the effectiveness?

 Students enjoyed participating in the stenciling process, as well as creating a video of the process.



Students enjoyed participating in the field trips to local waterways.







- Students eagerly participated in classroom discussions regarding the field trips.
- Post-test results indicated improved understanding and awareness of watershed and conservation concepts.
- Students were observed initiating discussions with other students about water conservation themes.

If you could repeat the project, what would you do differently?

 We would like to have further training to utilize the Spark Learning Systems fully.





• We would have listed the Elmo as the superb viewing tool it is, rather than call it a document camera. The Elmo was disallowed in the grant due to its title as a camera. The Orange Grove PTA purchased the Elmo for the project, and the class was able, then to view specimens and projects projected to the 4' x 5' SmartBoard. This was essential, as students with disabilities needed the larger viewing surface to understand and grasp the curriculum.

Did you meet your expectations?

- We met our expectations.
 - We helped students make connections about where the water goes that flows into our on-campus storm drains by launching a storm drain stenciling program.
 - We further developed our existing interpretive courtyards with natural habitats and demonstration gardens.





- We conducted field studies and water quality experiments by visiting Arcade Creek, William B. Pond Park, Nimbus Fish Hatchery, and Will Rogers Interpretive Center.
- We helped students build a rainwater catchment system.



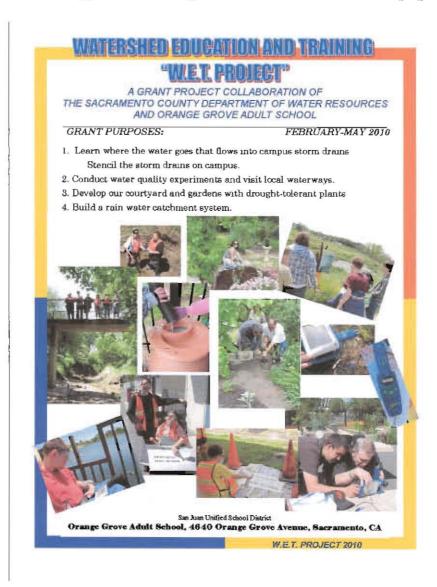


Did you encounter any challenges or problems during your project?

- We were not able to follow our timeline rigidly as we did not receive the grant funding immediately with the approval of the grant:
 - O Sacramento County experienced a delay in forwarding the funds.
 - O San Juan Unified School District office withheld the funding check until the school PTA agreed to monitor the funds.
 - O The delay in funding resulted in a delay in purchasing materials, supplies and science equipment. Some equipment was on back-order which created further delay.
- The wind and rain of this season caused us to delay or postpone project activities including the drain stenciling.
- One week was "lost" to collaboration and activities as one of the co-leaders of the grant was required to attend off campus layoff hearings with the school district.
- The spray paint supplied by the county for the stenciling was old and ineffective. This caused us to reduce the number of drain sites we could stencil.

How many people were involved or reached?

- Orange Grove Adult School serves approximately 210 students. Two fifth period classes were selected as key participants, resulting in 36 students participating in hands-on activities.
- The students will host an informational table about the W.E.T. Project at the annual Jazz Festival, slated for May 27th, 2010. Over 400 students, parents, community persons, educators, and neighbors will attend. On display will be the students' posters and flyers featuring the photos of the project, power point of Earth Day, the stenciling video as well as science equipment used.







• Will Rogers ILS class and W.E.T. Project students and staff collaborated on a William B. Pond field trip where a naturalist spoke to the students.

 The W.E.T. Project included two collaboration days at Will Rogers Middle School students and teachers from their science department and their

interpretive courtyard program.





- Orange Grove students and parents received the school weekly newspaper which included update articles and photos of the W.E.T. Project.
- The stenciling video will be shown on "Spike News," the school's television broadcast class production.

Final Comments:

This project has been a wonderful experience in learning for us and our students. We would like to thank the Sacramento County Department of Water Resources for making the grant available to us at Orange Grove Adult School. The students and their parents and teachers are thrilled that our school for adults with disabilities were entrusted with the grant. The Spark Learning Systems, the microscope, the plants, the stenciling project and the rainwater barrels were tangible endorsements to our students that they were bona fide contributing members of the W.E.T. Project and our local community. They were proud to learn about and share the concepts of storm water and watershed protection.

Naomi Harper and Carol Metz of Will Rogers Middle School were the most incredible cheer leaders and scouts on our journey. Thanks, also, to Janet Parris who believed in our unique school and saw our possibility and potential.

This grant came to us at a time when school funding has become strained. Students, Staff, Families, and the School site have all been severely stressed and negatively impacted. By providing funds for materials about a curriculum that I truly feel passionate about, this grant has inspired and motivated us to do what we do best: Teach!

Lois "Loie" Rhodes, MSH class Teacher Co-Leader of the W.E.T. Project Grant

Dan Gilmour, Garden, Green Team, Community Access Teacher Co-Leader of the W.E.T. Project Grant



Loie Rhodes and Dan Gilmour with Jeff Arrigotti of Pasco Scientific Systems