

## Watershed Grant Final Report

Leo. A Palmiter School

By: Kevin Jordan – ROP Landscape Instructor

916-566-2094

[kjordan@scoe.net](mailto:kjordan@scoe.net)

I would first like to thank the Sacramento Stormwater Quality Partnership for the opportunity to build this garden project. With the grant money that we received, my students and I designed and built a “river friendly” garden on our campus that can be enjoyed by all.

The project first began with the removal of the old steel irrigation pipes. These steel pipes were cut into smaller sections and brought to a local recycling center. After the pipes were removed, the students began removing the old lawn using a sod cutting machine. We transported the thousands of pounds of lawn to a site on our campus where we have created our own on-site green waste area. Before any planting took place the students dug a series of trenches for our new irrigation pipes to be located. Students then constructed hundreds of feet of irrigation pipes and installed them into the landscape. Once the irrigation was complete we were able to begin planting our drought tolerant trees, shrubs, and plants. Students also moved large boulders that were collected from the California wilderness. Seemingly countless loads of wheelbarrows transported the decomposed granite for the creation of our pathways. As the plants began to fill the landscape, the students ran low-volume drip irrigation to each plant. Using small river rocks, the students constructed a dry creek bed in the garden. In addition, the students also installed a foot bridge to arch over their dry creek bed.

During the course of this project my students learned about the many benefits of river friendly gardening techniques. I believe the most significant accomplishment of this project was the ability of our group to work together to overcome the many difficulties that occurred during this project. Over time, I was able to observe a growth and maturity in many of the students that were involved. For example, as the project began to take shape, students began to appreciate what they were accomplishing and seemed thrilled to just be a part of it.

To assess the effectiveness of this project I first handed out diagnostic quizzes to find a baseline of their understanding of these topics. From these quizzes, it appeared that my students had very little knowledge of the benefits of river friendly gardening. Each class session we would discuss the principles of our eco friendly garden before going to work. While working outside, I would continue discussing the ecological importance of what we were doing. Towards the end of the project I gave the same worksheets to the students and the difference in their performance was incredible. Many of my students now show a much stronger understanding of river friendly landscape practices and some have even displayed a genuine passion for this topic. I have attached a few of the worksheets for your viewing.

If I could repeat this project again I would have liked to have made arrangements for a few guest speakers with professional backgrounds in horticulture to address my students on this specific topic. In addition, I would have also liked to plan for a special day where students could invite their parents and or guardians to come and work on the garden with us. Furthermore, if I could do this all over again I would have liked to have been able to bring my students to the UC Davis arboretum for a field trip to help widen their understanding of what we were trying to accomplish.

Throughout this project we encountered a continuous stream of problems. We encountered everything from arguments and fights to broken machinery and ever spreading weeds. For example, the first three sod cutting machines that we rented broke in the first five minutes of use to no fault of our own. Another major hurdle for us was the task of tunneling irrigation lines under the current cement pathways. To overcome this obstacle the students used a steel pipe and a hose to make a water drill. After many hours we were able to successfully tunnel under three different cement walkways. Another problem that we kept encountering was simply the weather. Weeks of potential workdays were lost due to a severely rainy spring.

Throughout this project there were many students who were involved. When the project first began, we had about 40 students helping with the project. As the project continued, an additional 20 plus students, who were not even officially enrolled in my class, were lending their hands to help. In addition, students who had earned reward activity time chose to spend their “fun time” out in the garden helping me. Furthermore,

we also had about 15 sixth graders make a field trip out to our campus for a day of gardening.

In conclusion, I feel that this project was a major success because we were able to pull together to overcome all the problems and hurdles that faced us. My students and I worked together as a team to solve these problems and we ultimately created a place of beauty and learning. I feel that we met, and to some degree, surpassed our own expectations for this project. Although this project is seemingly coming to an end, I know that this project will never truly be finished because there will always be ways in which we can work to improve upon its quality. If you have any questions about my report or this project please contact me. Thanks again.