

Education Around the Region

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Project WET - Educating Teachers and Students



University of Arizona Cooperative Extension agents teamed up with Arizona State Parks, the Lower Colorado River Resource Conservation and Development Office, Yuma Heritage Area, Yuma Area Ag Council, and others to hold Yuma's first *Project WET Water Festival* in the spring. Based on the event's success, a second festival was held in the fall.

The Festivals included:

- over 700 4th grade students and their teachers,
- hands-on demonstrations and activities to illustrate
 - the concept of "watershed"
 - the importance of melting snowpack on regional water supply
- a fun environment that encouraged exploration and learning.

The Water Festival is expected to become an annual event for the Yuma area with each year bringing a new audience.

In the works: Project WET facilitators in western Arizona are teaming up with their southern California counterparts to develop a pair of teacher workshops for this fall and next spring to show them how local agriculture is tied to the Colorado River.



Bringing Streams to Life

Students in American Samoa elementary schools are learning about their local water resources, thanks in part to researchers and educators at American Samoa Community College (ASCC).

Lab tours: ASCC water quality researchers have guided student groups through tours of their labs. These lab tours have:

- Reached approximately 300 students and their teachers (in 2005)
- Allowed students to see some of the microbiotic species that live in nearby streams.
- Provided an option to teachers to help bring to life lessons on ecology, biology, water resources, and environmental science for their students.

Stream Animals Poster: To reach students in their classrooms, ASCC has worked with American Samoa Power Authority, NRCS, and the Regional Water Program to develop a poster that is being distributed to all the elementary schools as part of a pollution prevention campaign. The poster uses a collage of pictures to give a visual representation of the local stream environment, animals found in the stream, and that local areas are tied to the world's oceans and environment.

In person visits by ASCC researchers and educators to present the poster at some of the schools and talk with the students about their views of pollution and local water resources are planned for early 2006.



With efforts focused on Animal Manure and Waste Management, Drinking Water and Human Health, and Watershed Management, the Southwest States and Pacific Islands Regional Water Program worked to educate students, farmers, and the general community on various aspects of water resources and water quality. Students learning how to assess stream health through identification of indicator species, pig farmers learning to adapt their practices to a dry litter system that eliminates discharges of pig waste into nearby waterbodies, and community members learning how to test, treat, and maintain their rainwater catchment systems to ensure clean and safe drinking water are just a few of the many programs supported throughout the region in 2005.

Safe Drinking Water An Awareness Campaign for Good Health

Land Grant Extension Researchers and Educators from Palau Community College have developed a workshop to provide technical assistance for community members to learn proper maintenance procedures for rainwater catchment systems – a common source of drinking water.

Each workshop participant:

- Engages in hands-on activities.
- Receives a step by step guide to take home with them.
- Leaves with a better understanding of how to keep their catchment water clean and safe.



Additional education activities have been developed for and implemented in Palauan elementary schools.

Students have learned:

- Basic concepts of water quality testing and treatment.
- How contaminated water can lead to illness.

A similar program of community instruction on water testing, treatment, and maintenance was also conducted by the Marshall Islands Water Quality Coordinator.

Videoconferencing for Rural Water Treatment Operator Training



The Cooperative Extension Water Quality Program at the University of Nevada is helping rural water treatment operators attain required training and continuing education units through classes offered via videoconferencing. Classes broadcast from the Reno campus can reach up to eight additional sites at the same time bringing rural operators within an hour's drive from their classroom. This network has provided service to over 2000 water treatment operators to date.

Guam Yard - Bringing Water Quality and Environmental Science into the Community and the Classroom

With grant funding from Guam EPA, Cooperative Extension Agents at the University of Guam are working on "Guam Yard," a project patterned after a similar successful program in Florida. The project is geared toward helping both homeowners and students understand basic conservation practices that can be applied to their own daily activities. Participants in the program gain credit, in terms of inches, for knowledge gained and complete the program when a "yard" worth of credit has been accumulated.

In addition to establishing demonstration projects at community centers, the program is developing and providing curriculum and workbooks for elementary, middle, and high schools to engage students in environmental issues such as water quality, conservation, and recycling.



Tumon Bay Marine Preserve Area

After implementation in Guam schools later this year, the materials developed through this project will be evaluated for their applicability to schools in other parts of the region.

The project will encourage community members and students of all ages to:

- Understand the environmental issues facing their island.
- Realize that actions in their own yard can make a difference in the greater community.
- Participate in community projects that put conservation practices to work.

Other project partners include
 Natural Resource Conservation Service
 Guam Department of Agriculture
 Chamorro Land Trust Commission
 Sanctuary Inc.

Marianas Dry Litter Waste Management System

Cooperative Extension agents from Northern Marinas College and the University of Hawaii have held workshops, visited farms, spoken at conferences, participated in education fairs, and produced a video to spread the word of an alternate waste management system to those raising pigs in the Pacific Islands. While farmers who raise pigs have been the primary target audience, efforts have also been made to raise awareness in schoolchildren, regulators, and the general community.

The dry litter system has received praise from farmers who have adopted it and from water quality regulators who have seen the difference it can make compared to the traditional "spray out" method of waste management.

For more information on the Marianas Dry Litter System, please see the poster: *An Alternative Waste Management System to Swine Operations in the American Pacific*.

