



News Release

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World Water Monitoring Day

Honolulu Students Evaluate Qualities of Ala Wai Watershed

By Dino W. Buchanan, HED Public Affairs

More than 75 enthusiastic Honolulu-area students braved rainy conditions on October 15 to participate in the 2004 World Water Monitoring Day at four sites within the Manoa Valley and Ala Wai Watershed. During the five-hour event, 76 students in grades 7-12 created a water quality snapshot of the Ala Wai Watershed under the supervision and guidance of the U.S. Army Corps of Engineers Honolulu District and the State of Hawaii Department of Health, Clean Water Branch.

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2-2-2 WORLD WATER

“This was a fun and safe field investigation and a lift off point to taking action in a water quality improvement project, “ said Iwalani Sato, co-event coordinator who works at the U.S. Army Corps of Engineers Pacific Regional Visitor Center. “We (event organizers) recognize and applaud our local schools dedication and commitment to improve the Ala Wai Watershed through hands-on education. The most visible sign of event success are the students who are confident and empowered with valuable skills including data collection, critical thinking and action-taking. “

World Water Monitoring Day was initiated by America’s Clean Water Foundation (ACWF) in 2002 as a significant part of the events held in observance of the 30th anniversary of the United States Clean Water Act (1972).

Science teachers Carrie Bashaw from Kaimuki High School, Debbie Jensen from Washington Middle School, Karen Langdon and Katie King from Jarrett Middle School, Nakana Wong from Kula Kaiapuni O Anuenue School brought their students to the event “to learn more about ecosystem restoration, flood reduction, and water quality monitoring that includes data collection and problem-solving. “

Scientific experts from the City and County of Honolulu Department of Environmental Services, Hawaii Nature Center, Natural Resources Conservation Service, State of Hawaii Department of Land and Natural Resource Division of Aquatic Resources, State of Hawaii Department of Health, University of Hawaii Department of Oceanography , U.S. Geological Survey and the U.S. Army Corps of Engineers provided the technical and scientific information at the four monitoring sites in the Ala Wai Watershed - the Ala Wai Canal, Manoa Stream, Makiki Stream and Palolo Stream. The three streams flow directly into the canal. Field investigations and sampling began at Manoa Valley District Park.

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3-3-3 WORLD WATER

Preceding the water sampling, participating Federal, State and University of Hawaii representatives told the students why the Ala Wai Watershed and World Water Monitoring Day are important.

Derek Chow, Ala Wai Canal Project Manager for U.S. Army Corps of Engineers, told students their interest and participation in the event provides planners and decision makers with important data used in determining decisions and actions to improve watershed health.

“All of us working together today to monitor water in the Ala Wai Watershed clearly demonstrate our deep concern for the place we live in. As you test the water today, take notice of your surroundings and imagine how our actions result in the items found in the water,” said Chow at the Manoa site. “

Students participating in the hands-on field investigation collected and measured water samples using both field instruments and educational monitoring kits provided by the Corps of Engineers to determine how the parameters of pH, dissolved oxygen, temperature, turbidity and conductivity relate to each other. At the Manoa Valley District Park, students rotated through various sampling stations manned by the scientific experts on hand who provided information on ecosystem restoration, flood reduction, stream flow measurements, fish identification and ecology, resources assessment, storm water management, landscaping and conservation using native and drought proof plants and the ahupua`a concept.

“During the water sampling and evaluation process my students began to realize that water monitoring was indicative of the overall health of the watershed,” said Karen Langdon, a science teacher at Jarrett Middle School. “There was a keen awareness by my students that this monitoring impacts the quality of the watershed and what they do in their backyard affects everyone down to the ocean and beyond.”

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4-4-4 WORLD WATER

For the problem-solving component, students and teachers teamed up to devise actions to improve and restore the Ala Wai Watershed. This component links what they study in school to how they live. Data collected by the students will eventually be uploaded into usable global databases on the World Water Monitoring Day website (<http://www.worldwatermonitoringday.org/>).

Michael Wong, Hydrologic Engineer for the U.S. Army Corps of Engineers, said the students were seriously interested in the hands-on event.

“From the moment the students started doing the water sampling, they were totally involved,” Wong said. “They were asking the experts questions and carefully analyzing their water samples. Most of the environmentalists were amazed at the sophistication of their questions and interest in the event.”

In advance of World Water Monitoring Day, teachers were provided the Ala Wai Watershed Analysis to identify historic conditions and current watershed issues to study in the classroom. Additionally, they received a manual on water quality monitoring, the book “Hawaii’s Native & Exotic Freshwater Animals” by Mike Yamamoto and Annette Tagawa, information on stream flow from USGS, data sets from the University of Hawaii Oceanography Department, lesson plans on soils from NRCS, storm water management information from the City and County of Honolulu Department of Environmental Services and information on reservoir operations from the Army Corps of Engineers.

Hudson Minshew, State Water Quality Specialist from the U.S. Department of Agriculture - Natural Resources Conservation Service said this event was an excellent opportunity for students to learn more about the watershed and its importance to their day-to-day lives.

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5-5-5 WORLD WATER

“There is no better way for students to learn about the environment they live in than by letting them analyze it first-hand,” said Minshew. “Today these students were learning and evaluating cutting-edge data that will be used by state and federal environmentalists to evaluate the area where they live. Today, they were the environmentalists.”

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