

H₂O know-how

“An ounce of prevention is worth a pound of cure.”

– Benjamin Franklin

By Caitlin Cunningham

Investing in public outreach now to realize savings later

Nearly 300 years after Franklin made these words famous, their message rings true in various contexts, including in the realm of water/wastewater public outreach. Savvy utilities are investing time and money in developing a sense of water-consciousness in their communities. When residents are armed with water knowledge—where the resource comes from, how it is treated, the parties and equipment involved, etc.—they are more likely to act as water stewards.



Thanks to the Sonoma County Water Agency's Water Education Program, area schoolchildren participate in a variety of activities that combine classroom learning with field studies devoted to water awareness.

Here we examine the targeted outreach efforts of two public water authorities: a school education program in California and an anti-illegal dumping campaign in Texas. In these cases, proactive measures ranging from field trips to bench ads have saved the utilities countless pounds in the equipment, chemicals, trash cleanups and payroll dollars that comprise water quality cures.

Early Education

Since 1983, California's Sonoma County Water Agency (SCWA) has instilled in area schoolchildren an appreciation for and understanding of the value of water via its Water Education Program (WEP). In an effort to promote wise water use and a sustainable water future, the program connects its service area's teachers with student materials and programs. These engaging resources are provided free of charge; SCWA and local water providers cover the costs, with SCWA contributions funded primarily through retailers' water purchases.

During the 2009-2010 academic year, more than 4,700 students received direct instruction and 11,200-plus students curriculum materials through the WEP. All 220 public and private schools in the agency's service area are issued an annual program packet with presentation/materials request forms. A lottery system is used to determine which applicant classes will participate in special programs, including those outlined here.

Grade 3 classroom series. Tailored to meet California Science Standards, this series brings SCWA staff into a third-grade classroom for two 60-minute lessons. An instructor leads the class in discussion of and hands-on experiments demonstrating the water cycle and water conservation topics.

Grade 5 field study program. Following an

El Paso Water Utilities' campaign against illegal dumping in its storm water system used a variety of media channels to get its message across.

hour-long introductory classroom visit, SCWA staff members lead fifth-graders on a field trip to the Russian River and groundwater pumping facilities. Students explore their drinking water conveyance system, learn about fish that live in the local watershed and collect and study water samples. This program, too, supports California Science Standards.

High school video contest. In coordination with the Russian River Watershed Assn., SCWA invites area high school students to create water education videos to be posted on the agency's website and screened at local movie theaters. Each year a new theme is assigned. The top three entries are awarded cash prizes that are split between the student producer and his or her school.

ZunZun musical assembly program. ZunZun assemblies get students out of the classroom and onto a stage—singing, dancing and playing instruments with a professional performance group in the name of water awareness. Each assembly is 45 minutes long, with segments focusing on sustainability, water pollution, water recycling, watershed ecology, storm water runoff, sanitary sewer systems and water conservation.

Additional WEP offerings include:

- A lending library comprised of print materials, videos and interactive models;

- A poster contest for elementary school students;
- The *Hydro Herald*, a newsletter for teachers; and
- Teacher trainings and workshops.

“This is an award-winning program that is well received by the community,” said Cary Olin, SCWA's water education program specialist. “Over the last 10 years, direct instruction has been provided to over 32,000 students and 3,030 adult chaperones, and we have conducted 44 teacher workshops, with over 600 teachers attending—all focused on water, storm water pollution prevention, wetlands and sanitation.”

Teachers' evaluations of the WEP are consistently positive, according to SCWA. Based on pre- and post-program assessments, the agency has found that students answer 20% to 25% more water-related questions correctly after participating. It is SCWA's hope that these young people will carry their newfound knowledge home and into the future.

SCWA's advice for establishing or improving public water education efforts is twofold: design programs that will appeal to their target audience, and look to other successful operations for ideas and advice. “By networking with like programs, you can find out what has worked for them and what ideas they tried



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that didn't work," Olin said. "There is no reason to reinvent a program if there is an existing model that can be altered to meet your specific agenda."

For more information on SCWA's WEP, visit www.sonomacountywater.org.

Dumping Deterrent

From April to August 2010, Texas' El Paso Water Utilities (EPWU) carried out an extensive—and successful—campaign against illegal dumping in its storm water system.

This was not the utility's first public outreach rodeo: In 2009, EPWU and third-party support created and executed a comprehensive community engagement program to address user-fee protests. Using various communication vehicles, EPWU established itself as an important, transparent and accessible utility and won voter support.

This time around, EPWU set out to remedy its community's illegal dumping problem. Over the course of the 2009-2010 fiscal year, storm water workers hauled nearly 70,000 tons of trash and debris—including 4,300 tires—from the drains, channels, dams, ponds and culverts comprising El Paso's storm water system. These materials were overwhelming the storm water infrastructure, causing widespread flooding. Recognizing the correlation,

EPWU prioritized illegal dumping public outreach efforts and earmarked budget dollars.

"The campaign was designed not only to encourage people to report illegal dumping when they see it, but also to educate them on what our storm water system is and why it is crucial to keep it clear of debris to ensure public safety," said Christina Montoya, vice president of communications and marketing for EPWU.

Montoya's department devised a campaign that encourages El Pasoans to "get mad" about illegal dumping and to report instances via a designated hotline (800.ID.FLOWS). The utility reached out to residents through various channels:

- Newspaper, television, radio and movie theater public service announcements;
- Bench ads;
- Public transit placards;
- Billboards;
- A children's video; and
- Litter bags and pamphlet distribution at community meetings and local car washes.

"There are so many mediums you can take advantage of to get your message out today," Montoya said. "Those opportunities are out there; you just have to look for them."

By keeping the creative work in house and

negotiating directly with local media outlets, EPWU avoided incurring agency fees. Ultimately, it spent about \$39,000 on the illegal dumping campaign—an investment that has yielded significant results.

When comparing post-campaign numbers with those from one year prior, EPWU saw a 55% reduction in the number of tires dumped in its storm water system, a 19% decrease in the amount of debris removed and double the amount of calls to 800.ID.FLOWS.

"This campaign was successful in improving public safety and keeping costs down for the utility," said EPWU Vice President Nick Costanzo.

Illegal dumping has meant a reduction in the time and resources EPWU spends on reactive maintenance. With less trash and debris to remove, and alleviated flooding, storm water staff can spend more time on proactive maintenance and addressing other utility needs.

While the heart of the campaign has run through, EPWU continues to provide residents with illegal dumping education and resources via its website (www.epwu.org). **WWD**

Caitlin Cunningham is managing editor of *Water & Wastes Digest*. Cunningham can be reached at ccunningham@sgcmail.com or 847.391.1025.

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