CSREES National Water Quality Program

Title: What's the difference between a GWMA and an Iguana?

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Theme: Pollution Assessment and Prevention

Situation: Groundwater in the southern Willamette Valley of Oregon has elevated nitrate levels and Oregon Department of Environmental Quality (DEQ) is considering declaring a Groundwater Management Area (GWMA). A GWMA requires citizen involvement to develop a voluntary action plan for groundwater pollution prevention, so there is a need for an informed and motivated public. There is also the need to strengthen communication links among groundwater researchers, agency staff, elected officials, citizens groups, and other potential decision-makers. Beyond that, there was a specific research need for additional information about the sources and extent of nitrate contamination in the area. OSU Extension Service's Well Water Program was asked to coordinate a cohesive project to meet this suite of research and outreach goals.

Objectives: This project intends to produce: (1) An informed public prepared to make personal and community-wide decisions necessary to protect the groundwater resource of the Southern Willamette Valley; (2) a coordinated working partnership among the various agencies, governing bodies, and other stakeholder groups involved in issues related to groundwater management in the area of concern; and (3) a cohesive body of research-based information to support community decision-making regarding groundwater management.

Methods: If there is a theme to the methods employed by this project, it would be go where the people are and REACH OUT in every possible way you an think of. That means meetings, e-mails, press releases, classes, fair booths, mass mailings, knocking on doors, a web site, newsletter, phone calls and lots of all of it.

Partnerships: This project has spurred the development of a strong triad partnership between Oregon Department of Environmental Quality (DEQ), Lane County Council of Governments (LCOG), and the OSU Well Water Program. LCOG and OSU are funded through DEQ. Staff from all three organizations evaluates the goals and upcoming tasks for the project as a whole and then proceed after assessing who has the most appropriate expertise or resources. Through outreach efforts of this project, county commissioners and county staff are "part of the team". Scientists from several OSU departments and five different agencies are sharing data, equipment and cooperating on multiple research projects. GIS files and computing power are being shared among the three partnering organizations to produce more powerful maps for outreach AND as research tools. The partnerships, and spin-off associations from this project have resulted in several cooperative grant proposals that would have been inconceivable if the people hadn't met and shared idea through this project.

Research: This project is all about the integration! Research is presented as part of the outreach (see newsletters and web site). Researchers are DOING outreach--contacts with residents while gathering water samples and presentations by researchers at workshops. Extension education is preparing the team to help with outreach--Master Gardener classes and Well Water training sessions. And university students are participating in workshops, being trained to help with outreach, and presenting their research to hopefully prepare future scientist and engineers to participate in the Extension model. Through the communication channels created by this project, research needs perceived by elected officials, regulators and the general public are communicated back to researchers and ongoing research is shared with those who can use it.

Resources: This project is funded by a $125,000 319 Clean Water grant which supports a graduate student and a part of the coordinator's salary, so in part the creative approach of combining data gathering and outreach was able to bring these funds to Extension. The project has in turn been able to leverage considerable contribution of time by state and local agency staff, researchers, and volunteers, as well as laboratory analysis. The best description of how we have leveraged these contributions is the ball is rolling and all the players have just gotten sucked in and started rolling with us.

Results: Outputs of this project include: Web site at http://groundwater.orst.edu/willamette; SWiG Update newsletters; booth displays; a Groundwater Science Summit held on campus to facilitate networking among university and agency researchers; a full-day workshop attended by 65 people, including residents, farmers, agency staff, researchers, elected officials; a half-day workshop attended by 35 water utility professionals, such as public works employees, well drillers, water system managers and septic system installers; 12 sessions of Rural Living Basics: Wells and Septic Tanks--a class for rural residents; Groundwater Friendly Gardening training for new Master Gardeners (many who then volunteered to help with the Rural Living Classes); two sessions each year of "Pesticide Handling to Protect Water Quality" for applicators recertification credit; a two-day training for the Well Water Outreach Team of volunteers and professional; a booth and water testing at a county fair; and, over 100 home visits by a graduate student as he collects well water samples from private wells. Outcomes are measured in numbers of participants--65 people were motivated by radio and newspaper announcements to bring water samples to the fair, several hundred homeowners were committed enough to attend a rural living basics class, and all the other attendance numbers. The more meaningful outcome indicators are that groups, including county commissioners and watershed councils, have asked us to join them in work sessions to start making policy changes that are needed.