



*2009 CSREES National Water Conference; St. Louis, MO*

## **On-Site Sewage Education as a Component of Watershed Management**

Robert Broz\*

University of Missouri Ext

\* brozr@missouri.edu

### Abstract:

Approximately 93% of the acreage in Missouri is privately owned. Much of this property has established homes that have older on-site sewage systems that may be adding to the water quality concerns for drinking water and recreational water use. As a component of a watershed management plan, on-site sewage programs can help reduce nutrient and bacterial loading and improve human health and water quality. Two educational programs have promoted education concerning on-site sewage systems and how to protect water quality. The On-site Sewage Education for Real Estate Professionals provides real estate professionals with the basic knowledge to understand the workings and limitations of on-site sewage systems. Real estate professionals and appraisers receive 6 hours of continued education credit towards their license. With more than 600 professionals taking the course, 92% of those attending the class reported they would use the knowledge gained on a continuing basis while 97% stated they had learned something that would help them in their profession. A second on-site sewage education program is the general maintenance and educational class for the general public. These sessions, along with an available cost-share for septic tank pumpout in pilot areas of a watershed, provides the educational understanding of what needs to be done to minimize septic tank concerns and provides an incentive to have your septic tank pumped. Pre and post test for the class show a 20% increase in information gained with more than 80 families signing up to have their septic tanks pumped. The most common missed question on the pre-test is whether your system is working properly if you see no sewage effluent at the surface. This implementation component has a goal in one pilot area of 100,000 gallons pumped to help reduce pollution from on-site sewage.

### Impact Statement:

Outputs and outcomes. Through this project we have been able to raise awareness of the different types of on-site sewage systems in rural areas, improve the understanding of maintenance requirements for on-site sewage systems and affectively prompt homeowners in a pilot area to get their septic tanks pumped totaling over 100,000 gallons of septic tank effluent.

Partnerships were formed with County Health Department, the Lake of the Ozarks Watershed Alliance (LOWA) the Missouri Department of Natural Resources, the Southwest Missouri Realtors Association, the Missouri Department of Conservation, Ameren United Electric and several county Soil and Water Conservation Districts.

Leveraged Resources - Local businesses provided meeting space and refreshments for many of the meetings and Ameren UE provided \$45,000 in funds for bacteria testing.

Lessons Learned - Many people have moved to the country where they are experiencing for the first time and having to be responsible for an on-site sewage system. The need for education for private citizens and the need to provide training to real estate professionals trying to sell property is increasing. To compound the issue, watershed management plans in areas where an impaired water body or a source water protection area is located increases the need for this education programming.

Category: Watershed Assessment and Restoration

Type of Presentation: Oral Presentation