Taking Care of Your Ground Water Resources
A Homeowner’s Guide to Well and Septic Systems

January 2010

Well and septic systems have a direct connection to ground water and homeowners play a critical role in protecting those resources. This audience is widespread and growing throughout the Northern Plains and Mountains (NPM) region. Often, visual media is a useful tool for reaching this audience and an effective way to show the connection of well and septic systems to the water cycle. An educational DVD was developed to illustrate the connection between private water systems and ground water, and to show homeowners the steps they can take to help protect ground water resources.

In 2007, Montana State University initiated a multi state web-base survey to assess interest and need for a video on well operation and septic system function and maintenance. The responses from fifty-five Extension and water resource professionals from nine states guided the video production process. The survey provided guidance for appropriate length and critical content for the main video as well as identifying topics for additional DVD chapters on specific issues.

The NPM Regional Water Program collaborated with the MSU School of Film and Photography to produce the film. This partnership connected the project to innovative equipment, expertise, and a motivated master’s of film student to collaborate on production. The result was very modest video production costs on a project that provided a film student with an opportunity to learn and gain experience in filmmaking, while becoming exposed to numerous issues related to water quality protection and management. Simultaneously, a student from the MSU School of Architecture was hired to create a 3-D computer model of a household water system and to produce 3-D animations demonstrating the structure, function, and connection of these systems to ground water.

The main section of Taking Care of Your Ground Water: A homeowner’s guide to well and septic systems is approximately 17 minutes long and illustrates the connection a homeowner has to the water cycle, both as a user dependent on ground water for domestic water and as one who relies on components of the hydrologic cycle for domestic, on-site waste disposal. The DVD also illustrates how homeowners can help protect ground water resources. In addition, supplemental chapters range in length from six to 11 minutes and cover individual topics in more detail. Supplemental chapters include Protecting the Wellhead, Septic System Function and Maintenance, Water System Considerations for Buying or Building a New Home, Sampling for Well Water Quality, Interpreting Water Quality Results, Chlorinating a Well and Water System, and Water Treatment Basics.
The goal of the Northern Plains and Mountains Regional Water Program is to protect and improve the quality of water resources by facilitating development, delivery, and implementation of new and existing practices throughout the region.

For further information, please visit: www.region8water.org