Let's work together to protect Geronimo and Alligator Creeks…

through proper septic system maintenance

According to the Texas Commission on Environmental Quality (TCEQ) water quality in almost half of the streams, rivers, and lakes in Texas is "impaired". An impaired waterbody has pollutant levels above established standards that limit important uses such as recreation and fishing, or that may be harmful to aquatic life. Unfortunately, two local waterbodies are impaired, Geronimo Creek and Alligator Creek. Both creeks have elevated concentrations of *E.coli* bacteria which create risks for any type of contact recreation that might result in ingestion of water, such as wading and swimming. Monitoring also has found elevated levels of a nutrient, nitrate-nitrogen, which can contribute to algal blooms and ultimately, to fish kills.

Fortunately, in 2009 a group of local citizens formed the Geronimo and Alligator Creeks Watershed Partnership. Working together and with state and federal agency support, the Partnership developed the Geronimo and Alligator Creeks Watershed Protection Plan (WPP). The plan identifies potential sources of pollution and provides a basic strategy to restore and protect water quality in Geronimo and Alligator Creeks. The plan and information about on-going activities in the watershed can be found on the Partnership's website at http://geronimocreek.org.

The next Partnership meeting is at 6pm, Tuesday, January 14th at the Guadalupe-Blanco River Authority (GBRA) River Annex at 905 Nolan Street in Seguin. We will discuss the latest implementation updates and begin planning activities for 2014. Also, the Partnership is producing monthly news articles where we inform the public about practices they can adopt to improve and protect water quality. With the Christmas season here and guests coming to visit, in this month's article we discuss the benefits of properly maintaining your septic system.

Proper operation and maintenance of your septic system is critical for its performance. Taking care of your system also protects the health of people living on and near your property, and helps safeguard your property values. Attention to system operation helps preserve the quality of groundwater and prevents your sewage from degrading nearby waterways.

Different types of septic systems require different maintenance procedures. Conventional systems are the most common and consist of a septic tank and a drain field. Aerobic systems are more complex will have two or more tanks, an air pump, a disinfection system, and spray heads. However, all systems need maintenance, and yours will not continue to function properly if you neglect it. The following are some general tips:

- Do not discard too much grease down the drain or use in-sink garbage disposals excessively. Both of these practices can increase the maintenance interval schedule.
- Do not use the toilet as a trash can. Do not dispose of paper towels, cigarette butts, diapers, or other trash in the toilet. Besides wasting water, these solids will not break down.

- Do not use swimming pool chlorine tablets in the disinfection system that is part of aerobic systems. They do not disinfect, can create a danger of explosion, and are not approved by EPA.
- Establish a regular schedule for having the tank cleaned out (pumped). This will prevent backups from occurring at the most inopportune times, such as when a system experiences an overload due to out-of-town guests.
- Protect the drain field of a conventional system and the spray heads and surrounding area of an aerobic system. Do not use the drain field or spray area as a parking area, basketball court, or place to build a storage shed or other structures. The extra weight can damage subsurface structures, as well as, prevent the system from functioning as it was designed.
- Chemical additives advertised to enhance system function are not necessary for a septic system. These products are literally money down the drain.
- Soaps, detergents, bleaches, drain cleaners, and other household cleaning chemicals used in moderation very seldom affect the operation of the system. However, excessive use of these chemicals may harm the beneficial microbes in the system.
- Excessive wastewater flows can overload the septic system, such as washing multiple loads of laundry in one day. Try to spread out the loads over several days. Avoid frequent draining of "garden tubs", hot tubs, and large whirlpool tubs that enter the septic system.
- Install water conserving appliances such as low flow shower heads that use less than 2.5 gallons per minute, 1.6 gallon or less per flush toilets, and faucet aerators that restrict water flow to no more than 2.2 gallons per minute. Don't use more water than needed for showering or bathing.
- Conserve your water resources. Whenever possible, operate the dishwasher with a full load, turn off the water when brushing teeth, and repair or replace leaking plumbing fixtures.

One major health concern that can be caused by septic system malfunction is bacteria in your private water well. The GBRA laboratory in Seguin can analyze your well water for bacteria for as little as $22/sample, in addition to many other types of water tests. Go to http://www.gbra.org/lab/privatewells.aspx for more information on how to test your well water.

Other visible signs of potential system malfunction may include water surfacing on the drain field, excessive odors around the septic system, or slow draining or backed up sinks, tubs, or toilets. Neglecting your system will potentially result in loss of system function, increased repair costs, increased health risks, and a greater impact to the environment. If you suspect you have a problem, contact a septic system service provider as soon as possible.

Homeowner Septic System Maintenance classes are scheduled for April 28th and 29th. The classes are free, but you need to register to reserve your spot. The class on the 28th is a 2 hour general class from 6-8 pm in Seguin and the class on the 29th is a 6 hour class focused on aerobic

systems from 8:30 am-3:30 pm in New Braunfels. For more information, contact Ward Ling at 979-845-6980 or wling@ag.tamu.edu or go to the project webpage www.geronimocreek.org