FLOODS
WELLS AND SEPTIC SYSTEMS AFTER A FLOOD
WHAT TO DO AFTER A FLOOD

As the floodwaters recede, residents of affected properties will be assessing the damages. Some property owners will be faced with wells and septic systems that have been impacted by the flooding. Northeast Tri County Health District offers the following recommendations and guidance for wells and septic systems after a flood.

Drinking Water Wells: Drinking water wells that have been impacted by flood waters are likely to be contaminated. This includes not only wells that were flooded over but also wells located close to the river, as subsurface movement of floodwaters into adjacent wells may have caused them to become contaminated. In some cases, this subsurface movement of water from the river into adjacent wells is so great that it results in water under pressure exiting out the top of the well.

Water from affected wells should not be consumed until the well has been disinfected and tested to be safe.

Disinfection and Testing of Wells

- Remove any debris that may have entered the well during flooding. Run the water until it becomes clear.

- Estimate the number of gallons in the well (a 6-inch diameter well casing has 1.5 gallons per foot of water, a 36-in diameter dug well casing has 50 gallons per foot of water), and use one half-cup bleach for every 30 gallons of water. To help in determining how much water is in the well casing, the "Water Well Report" may be helpful. If you don't have a report for your well, contact Northeast Tri County Health District for assistance.

  o Example: If you have a well with a 6-inch casing that is 150 feet deep, with a water static level of 90 feet (water level is 90 feet below the surface) you will have 60 feet of water. 60 (feet of water) X 1.5 (gallons per foot of casing) = 90 gallons. Pour 1 ½ cups of liquid household bleach (5.25% chlorine) into the well. This will produce 50 ppm of chlorine to treat your well.

  - Do not over-chlorinate and do not use bleach with additives such as “fresh scent.”

  - Pour the required quantity of bleach into the well. Connect a garden hose to the nearest outside faucet and circulate the water through the hose and back into the well. This will mix the chlorine with the water and the pump will draw the chlorine to the bottom of the well. After you start smelling the chlorine in the water coming out of the hose, work the hose around to rinse the upper portion of the well with the disinfectant. (NOTE: If you cannot reach the well with a hose, you can rinse the upper portion of the casing by pouring chlorinated water down the inside of the case using a bucket. Mix 1 cup chlorine bleach per bucket of water.)

  - Draw water at every water outlet connected to the system until a strong chlorine odor is perceptible, this includes showers, tubs, toilet tanks, and outside fixtures.

  - Allow the disinfectant to remain in the system overnight (24 hours is preferable). Do not use the water during this time.

  - Use one or more outside faucets to draw water out of the well to remove the chlorine. The well should be thoroughly and repeatedly flushed to remove the chlorine. All of the water lines should also be flushed.

  - After you have thoroughly pumped the well to remove the chlorine, use the water for 3-4 days and then have a water sample tested for safety. During this time, the water can be used for laundry and bathing, but it should not be used until a water sample shows it is safe from contamination.

  - A list of certified water testing laboratories can be obtained from Northeast Tri County Health District.

May 17, 2018
Septic System After the Flood
Once floodwaters have receded, there are several things homeowners should consider about their on-site sewage disposal systems:

- Do not pump your septic tank or pump chamber right after a flood. Pumping could cause the tank to float out of the ground and may damage the inlet and outlet pipes. If pumping is necessary, wait until groundwater levels return to normal.

- Do not put the sewage system back into normal use until flood waters have receded and an evaluation of the septic system is made.

- Evaluate the sewage system for damage. Signs of damage include settling or an inability to accept water. Most septic tanks are not damaged by flooding since they are below ground and completely covered. However, septic tanks and pump chambers can fill with silt and debris, and must be professionally cleaned by a certified pumper. If the drainfield is clogged with silt, a new permitted system may have to be installed.

- Contact Northeast Tri County Health District for a list of certified pumpers, and if needed, a list of certified installers. If a new system is needed, Health District staff can help you move quickly through the permitting process.

- If sewage has backed up into the basement, clean the area and disinfect the floor. Use a chlorine solution of a half cup of chlorine bleach to each gallon of water to disinfect the area thoroughly. Use appropriate caution when using chlorine bleach and read the manufacturer’s instructions.

- Do not compact the soil over the soil absorption field by driving or operating equipment in the area. Saturated soil is especially susceptible to compaction, which can reduce the soil absorption field’s ability to treat wastewater and lead to system failure.

- Examine all electrical connections for damage before restoring electricity. Contact a licensed electrician if electrical repair work is needed.

- Be sure the septic tanks manhole cover is secure and that inspection ports have not been blocked or damaged.

- Check the vegetation over your septic tank and soil absorption field. Repair erosion damage and sod or reseed areas as necessary to provide turf grass cover.

- Please contact Northeast Tri County Health District for advice and assistance if you don’t already know specifics about your septic system. Permit information is kept that identifies location of your septic tank and drainfield. Additionally, newer systems installed within flood prone areas have guidance, specific to the system, about maintenance and operation of the systems after a flood. You can request these records by contacting our office or by completing a “Sewage Record Search Request Form” found on our website www.netcd.org.