SEPTIC SYSTEMS AND FLOODS

Much of Washington County relies on subsurface sewage treatment systems, or septic systems, and also has many areas affected by flooding. This may seem like an undesirable combination, but easy steps can be taken to mitigate both the affect the flood waters has on a septic system and the affect the septic system may have on public health and the environment. This fact sheet will discuss recommendations for a homeowner before, during and after a flood event and also list what is required of septic systems located in a floodplain in Washington County.

FLOODING EVENTS

A homeowner can take these steps with a septic system to mitigate damage to the system and the dwelling before, during, and after a flood:

BEFORE A FLOOD

- Install a polyethylene sheet over any below grade drains, such as a floor drain, shower drain, etc. Place a sandbag over the poly sheet. This may prevent sewage from rising flood waters from backing up into the dwelling during the flood event.
- DO NOT pump the contents of the septic system. Pumping the tanks prior to a flood event could create the tanks to become buoyant with the rising groundwater and cause them to pop out of the ground.
- Locate and protect the soil treatment area (drainfield, mound, etc.) from compaction by keeping all traffic off the area.

DURING A FLOOD

- It is required to discontinue discharging wastewater to the system. All water use in the dwelling must cease during the flood.
- If the septic system has a pump tank, the circuit that controls the pump must be disconnected. Otherwise, the pump will run continuously during the flood or create an electrical hazard.

AFTER A FLOOD

- Conduct a visual inspection of the system to determine if any damage has occurred to the system. This could include physical damage to the system’s components (tanks, drop boxes, pumps, etc.) and damage to the vegetation over the septic tank and soil treatment area. Make sure to check the septic tank and pump tank’s manhole covers are secure and that inspection pipes have not been damaged or blocked.
• Check electrical connections for damage or wear before turning the electricity back on.
• Contact a licensed septic system Maintainer to have all septic tanks and pump tanks pumped to remove any silt and sand that may have entered the tanks. This should occur as soon as possible after the flood recedes and prior to resuming use of the system.
• Contact a licensed septic system installer to make any necessary repairs to the system that may have occurred during the flood.
• Repair erosion damage by sodding or reseeding as necessary to provide a good vegetative cover.

REQUIREMENTS

Section 18 of the Washington County Development Code, Chapter Four, Subsurface Sewage Treatment System Regulations (Washington County Ordinance #179) has the following design, installation, and maintenance requirements for systems located within a floodplain.

• Allowed use of systems in floodplains must be according to state and local floodplain requirements.
• An SSTS must not be located in a floodway and, whenever possible, placement within any part of the floodplain should be avoided. If no alternative exists, a system is allowed to be placed within the flood fringe if the requirements of this section are met.
• There must be no inspection pipe or other installed opening from the distribution media to the soil surface.
• An SSTS must be located on the highest feasible area of the lot and must have the location preference over all other improvements, except the water supply well. If the ten-year flood data are available, the bottom of the distribution media must be at least as high as the elevation of the ten-year flood.
• If a pump is used to distribute effluent to the soil treatment and dispersal system, provisions shall be made to prevent the pump from operating when inundated with floodwaters.
• When it is necessary to raise the elevation of the soil treatment system to meet the vertical separation distance requirements, a mound system is allowed to be used with the following additional requirements:
  ▪ The elevation of the bottom of the mound bed absorption area must be at least on-half foot above the ten-year flood elevation, if ten-year flood data are available.
  ▪ In no case shall the sand fill for the mound exceed 48 inches below the mound bed absorption area.
  ▪ Inspection pipes must not be installed unless the top of the mound is above the 100-year flood elevation.
  ▪ The placement of clean sand and other fill must be done according to any community adopted floodplain management ordinance.

• When the top of a sewage tank is inundated, the dwelling must cease discharging sewage into it.
• Backflow prevention of liquid into the building when the system is inundated must be provided.
• If a holding tank is used to serve a dwelling, the holding tank’s capacity must equal 100 gallons times the number of bedrooms times the number of days between the ten-year stage on the rising limb of the 100-year flood hydrograph and the ten-year stage on the falling limb of the hydrograph, of 1,000 gallons, whichever is greater. The holding tank must be accessible for removal of tank contents under flooded conditions.
• Whenever the water level has risen above the top of a sewage tank, the tank must be pumped to remove all solids and liquids after the flood has receded and before use of the system is resumed.

For more information call the Washington County Public Health and Environment Department at 651-430-6655.

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