

Safeguarding Your Well & Septic System Against Flooding Hazards



[What is happening?

More intense and frequent storms are causing **increased flooding events** due to a warming climate. These floods **threaten the safety and function** of private wells and septic systems.



Potential Risks

- Contamination of groundwater with pollutants and pathogens leading to **health hazards**
- **Sewage backups** into home
- Damage to infrastructure leading to **costly repairs**

Did you know?

20%

of Virginians rely on **private water sources**



Important!

Homeowners are responsible for maintaining and testing private wells and septic systems. It is important to test your private well water annually AND after a flood.



BE PREPARED!

Private Well Maintenance:

- Ensure casing extends at least a foot above ground and you have a **sanitary, sealed well cap** (drilled well) **or sealed concrete cover** (bored well)
- Ensure there is **no route for water to get into the well** by installing backflow preventers, sealing electrical conduits, and checking the condition of the casing
- **Test for bacteria** annually and other contaminants every few years

Before Impending Storm / Flood:

- Consider installing a **generator** to power well pump
- **Disconnect water treatment** equipment and plug any plumbing opening; turn off breaker
- Store enough **bottled water** for three days–1 gallon per day per person and pet
- Fill bathtub, buckets or coolers with non-drinking **water for washing and flushing toilet**

After Storm / Flood:

- Follow all **emergency services** recommendations
- Once safe, **inspect well** and electrical for damage
- **Do not use water** if flooding has occurred near wellhead
- Have well drilling contractor **flush and shock chlorinate** if well has been flooded
- **Have well water tested** for bacteria before usage

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What is a septic system?

An onsite system which **treats wastewater** from homes that aren't connected to municipal sewer systems. Septic tanks are typically buried in the ground.



BE PREPARED!

Septic System Maintenance:

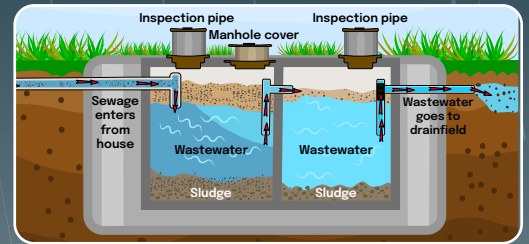
- Keep **trees and plants away from septic system components**—roots can cause damage
- Check manholes and inspection ports to ensure they are **properly secured**
- Check **electrical components** are properly buried or off of the ground
- Look for **eroded areas or wet spots** above septic system
- Follow **recommended maintenance** for your system; contact VDH Environmental Health for more information

Before Impending Storm / Flood:

- **Check vents, caps, lids, etc.** are secured
- **Avoid having tank pumped immediately before** potential flooding because empty tanks will float
- Have **septic system manuals, maintenance logs, warranties and copies of permits** in a safe place
- Understand your system and **know its components**
- Consider a **generator** if system requires electricity—have an electrician connect

After Storm / Flood:

- **Do not drink or cook** with well water until it has been tested due to potential contamination from the septic system
- **Reduce water usage** as much as possible until water table drops enough for septic system to begin operating correctly
- Have your system **professionally inspected** and serviced if you suspect it has been damaged



Septic System Tips

- Only put **flushable items** down drains or toilets in the home
- Have your system **pumped out every 3-5 years** to remove sludge and prevent contamination of drainlines

Did you know?

1.1 million
homes in Virginia use
septic systems



More Information

- **Septic system best management practices**, visit: <https://www.pubs.ext.vt.edu/SPES/spes-380/spes-380.html>
- **What happens if my septic system fails**, visit: https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/SPES/spes-379/spes-379.html
- **VDH onsite wastewater**, visit: <https://www.vdh.virginia.gov/environmental-health/onsite-sewage-water-services/>