



The Flow

Springfield Water & Sewer
Commission

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More Information

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HOW DOES YOUR WATER SYSTEM WORK?

When you turn on your faucet, water seems to magically appear. EPA, states, and water utilities work together to bring clean, safe water into homes and businesses every day. In the US, approximately 90% of the population gets drinking water from a public water system (PWS) that treats, stores, and distributes the water.

1. Water Sources - The source of the water flowing from your tap may be hundreds—even thousands—of miles away. Most PWS use surface water as their source of water—for example, a lake, river, or reservoir—while some public water systems use ground water sources, such as aquifers.

2. Water Treatment - The PWS treats the source water to make sure it's safe. The Safe Water Drinking Act requires EPA to establish and enforce the safety standards that all PWS must follow. Treatment methods include filtration and disinfection to remove debris and bacteria.

3. Water Storage and Distribution - After treatment, the PWS may store the water in holding tanks. Eventually, the water is pumped and distributed to communities through water mains—large, buried pipes—and water lines (smaller pipes that run from the main to a residence or business).

50 YEARS OF THE SAFE DRINKING ACT

On December 16, the U.S. Environmental Protection Agency marked the 50th anniversary of the Safe Drinking Water Act (SDWA), passed in 1974 to set federal standards for drinking-water quality. Since 1974, the EPA has worked with federal partners, states, tribes, and local officials, water systems, private companies, and the public to achieve the vision of the Safe Drinking Water Act, that people across America have clean and safe drinking water.



FOURTH GRADERS TOUR WATER PLANT

The 4th graders from Washington Co Elementary and North Washington each attended a plant tour of the Springfield Water Treatment Plant (WTP) in mid-December. The students were shown how the water gets to their house through a series of pipes and each house had its own line that goes from the main to their individual house. They were also told about how and why pressure, in the line, forces water to their house and what happens if that pressure gets too high.

The students then went into the WTP to see how the water enters the plant and the steps that it goes through in order for it to be cleaned with various chemicals and filtering processes to make it safe for all to drink.

Then on to the mock "water shed" exhibit showing how Willisburg Lake gets and maintains its water. The students were also informed how pollution finds its way into the lake and the harmful effects that it has on our water that we all drink every day.

The staff at the Water Plant or Wastewater Plant are more than happy to sponsor tours to any school, organization or just a group of individuals. If interested, please contact the water office and someone will assist you.

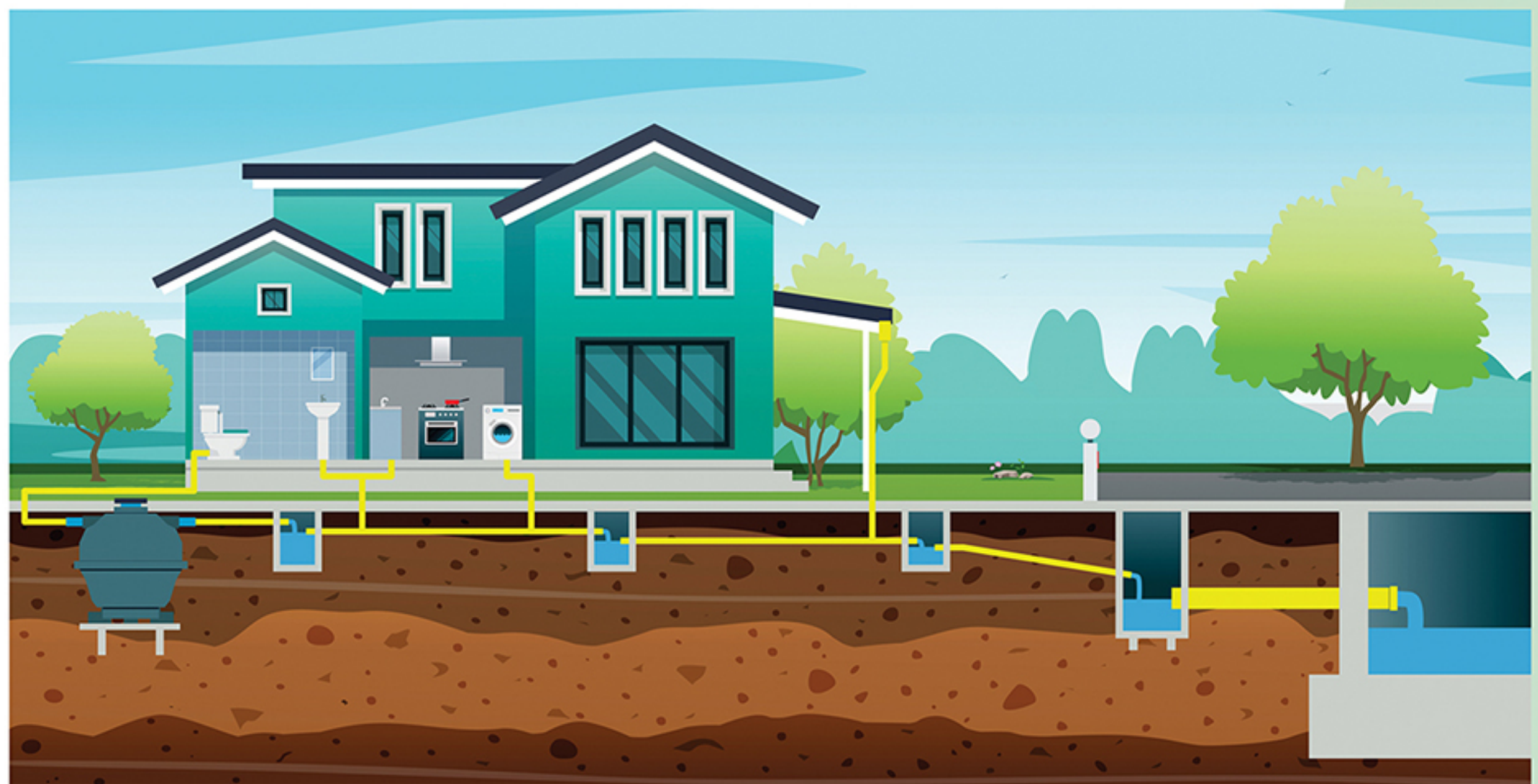
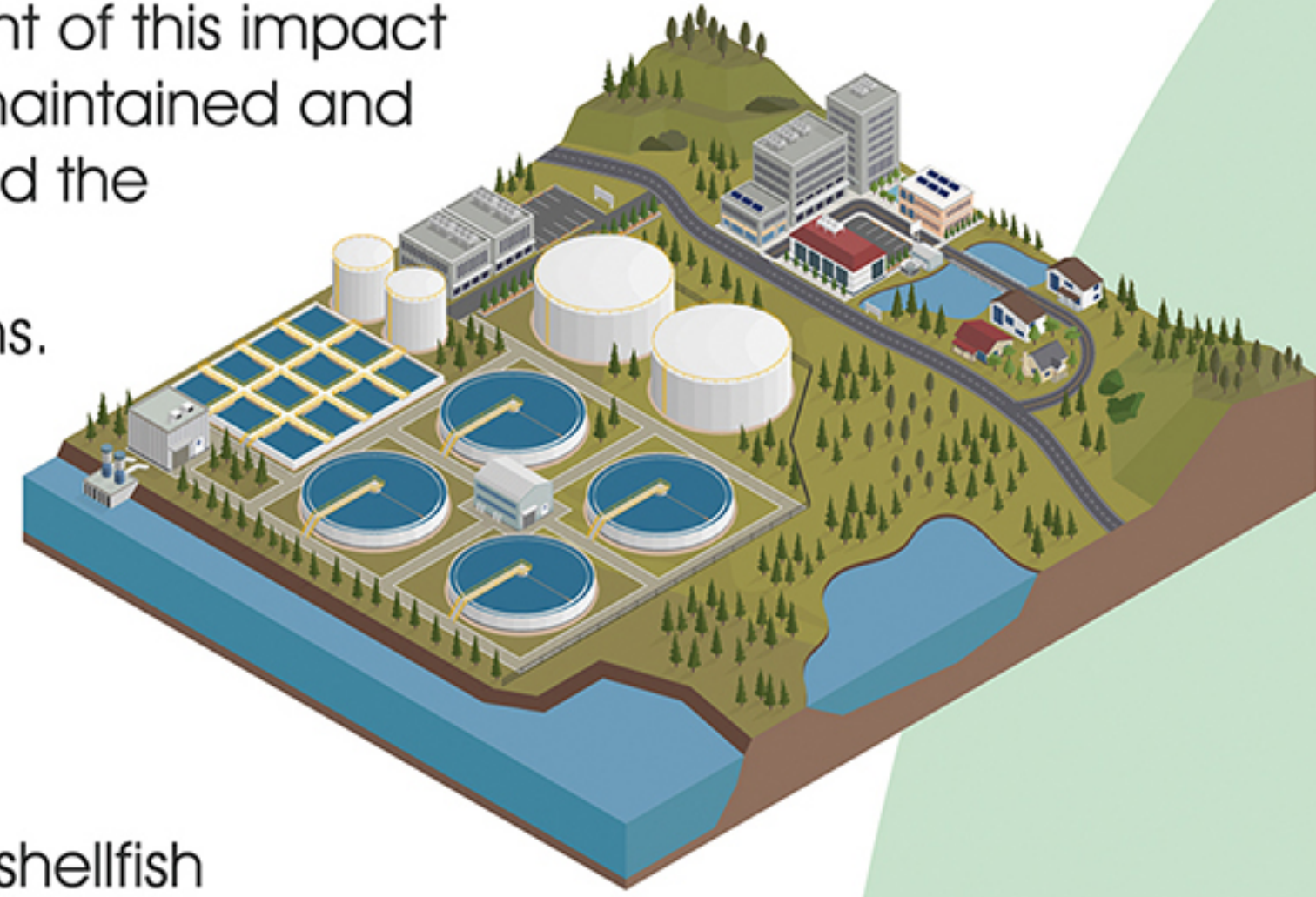


EFFICIENT & HIGH QUALITY WATER SUPPLY

SEPTIC SYSTEM IMPACTS ON WATER SOURCES

Septic systems may impact local surface water bodies. The extent of this impact depends on how well your septic system is designed, installed, maintained and if it is used properly. Systems that are sited in densities that exceed the treatment capacity of regional soils and systems that are poorly designed, installed, operated or maintained can cause problems.

The most serious documented problems involve contamination of surface waters and ground water with disease-causing pathogens and nitrates. Other problems include excessive nitrogen discharges to sensitive coastal waters and phosphorus pollution of inland surface waters, which increases algal growth and lowers dissolved oxygen levels. Contamination of important shellfish beds and swimming beaches by pathogens is a concern in some coastal regions.



HOW A TYPICAL CONVENTIONAL SEPTIC SYSTEM WORKS:

1. All water runs out of your house from one main drainage pipe into a septic tank.
2. The septic tank is a buried, water-tight container usually made long enough to allow solids to settle down to the bottom forming sludge, while the oil and grease floats to the top as scum. Compartments and a T-shaped outlet prevent the sludge and scum from leaving the tank and traveling into the drainfield area.
3. The liquid wastewater (effluent) then exits the tank into the drainfield.
4. The drainfield is a shallow, covered, excavation made in unsaturated soil. Pretreated wastewater is discharged through piping onto porous surfaces that allow wastewater to filter through the soil. The soil accepts, treats, and disperses wastewater as it percolates through the soil, ultimately discharging to groundwater. If the drainfield is overloaded with too much liquid, it can flood, causing sewage to flow to the ground surface or create backups in toilets and sinks.
5. Finally, the wastewater percolates into the soil, naturally removing harmful coliform bacteria, viruses and nutrients. Coliform bacteria predominantly inhabits the intestines of humans or other warm-blooded animals. It is an indicator of human fecal contamination.

Reprinted from EPA Website

Serving the cities of Springfield, Mackville, Willisburg and surrounding communities since 1951.

