Homeowner's Guide to Onsite Sewage Systems

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What is on Onsite Sewage System (OSS)?

An OSS (also called a septic system) is designed to collect, treat, and disperse effluent (wastewater) from a home or business. A system usually has two or more parts connected by pipes. The conditions for each property, such as soil type and depth, lot size, and distance to water, determine which kind of system can be used.

Standard gravity OSS

This is the most common type of system. Gravity systems have two main parts: the septic tank and the drainfield. Sometimes, a pump tank is also used to transport the effluent to a drainfield above the septic tank. Gravity systems need to be inspected at least once every three years and pumped as needed.

Alternative OSS

This type of system is required in places where the soil or other conditions do not allow a standard gravity OSS to be used. In Kitsap County, alternative OSS need to have a yearly Monitoring and Maintenance Contract (see page 12). They must be inspected routinely by a professional.

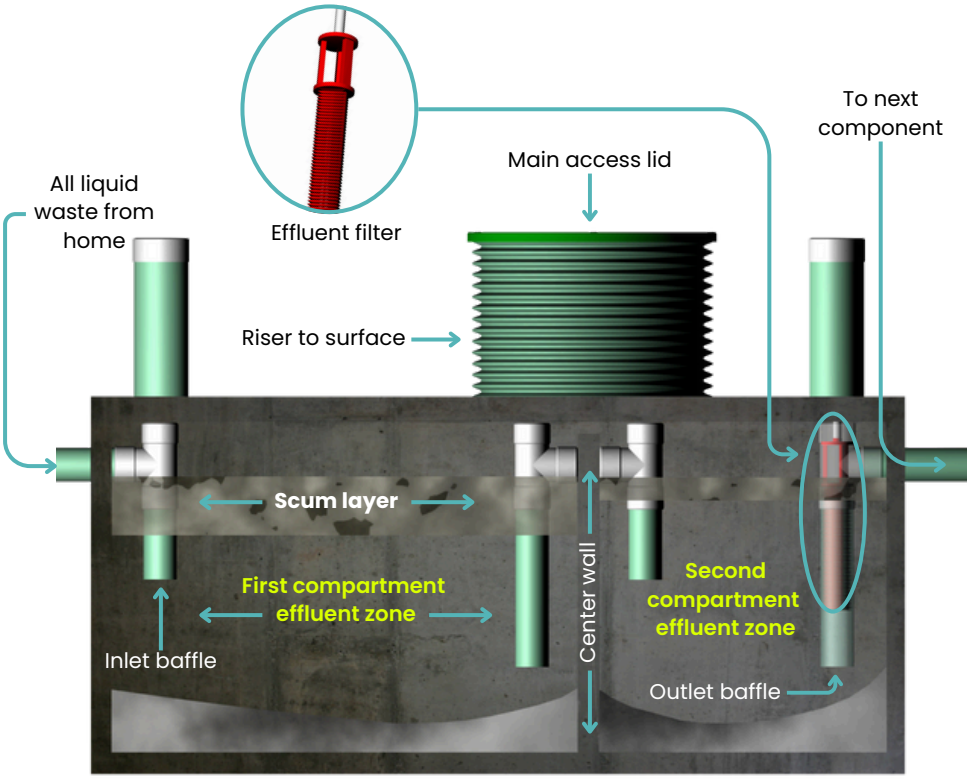
How do septic systems work?

Septic tanks

The septic tank is the main component of all septic systems. Septic tanks can be made of concrete, fiberglass, or plastic.

All sewage from a home or business is routed to the septic tank for settling and treatment. Heavy solids settle to the bottom of the tank and floating solids, such as grease, stay at the top of the tank.

Baffles at the entrance and exit of the tank prevent the floating solids from leaving the tank. Only the clear effluent from the middle of the tank can flow into the next component or the drainfield.

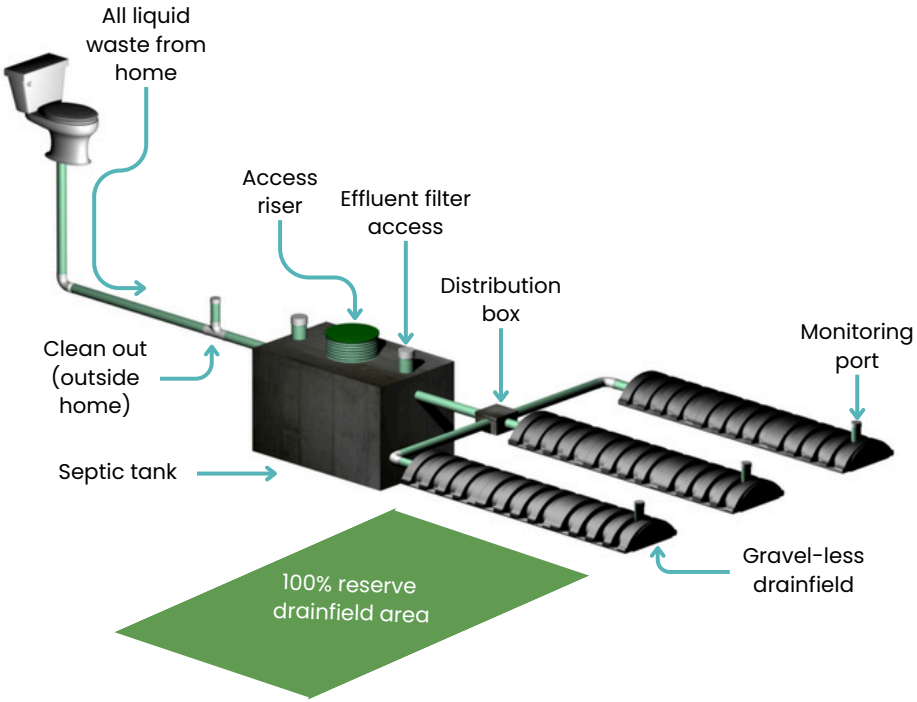


This is an example of a septic tank. Yours may look different.

Standard (gravity) systems

Gravity systems consist of a septic tank and drainfield. Effluent flows downhill from the septic tank to the drainfield. A pump tank can be included to help move the effluent to the drainfield. The drainfield is often built using pipes and gravel or plastic chambers. These systems:

- Need unsaturated (not too wet) and uncompacted soils to work correctly
- Have trenches or beds that are installed level
- Should have a backup replacement reserve area

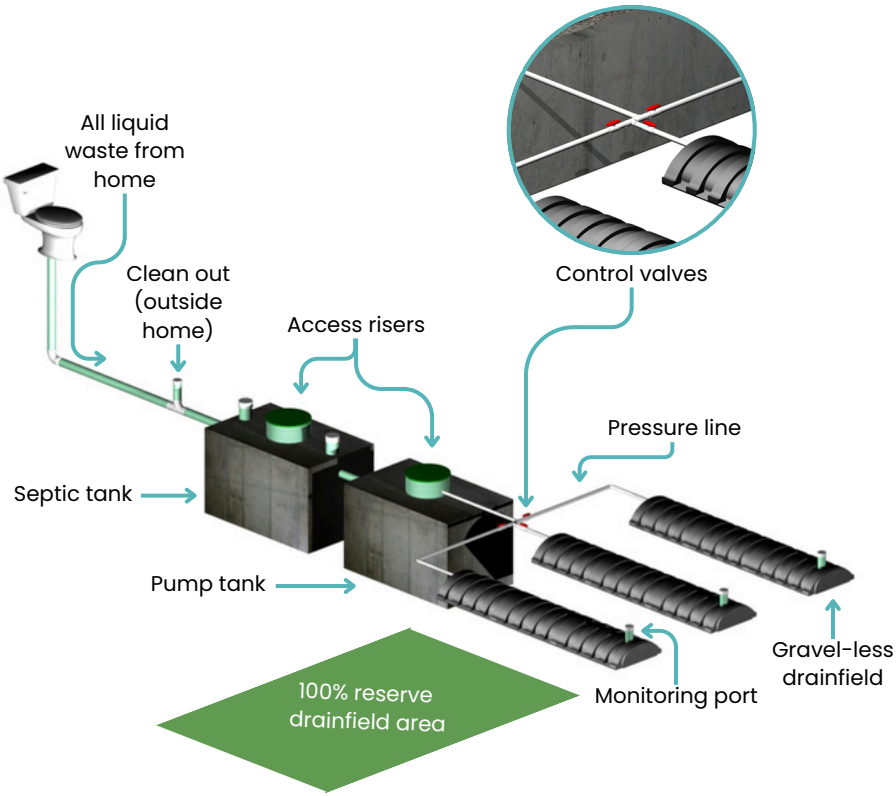


Alternative systems

Pressure systems

Pressure systems have a septic tank, pump tank, and a pressurized drainfield. The pump tank has a pump, floats to control the pump, and a high water alarm. These systems:

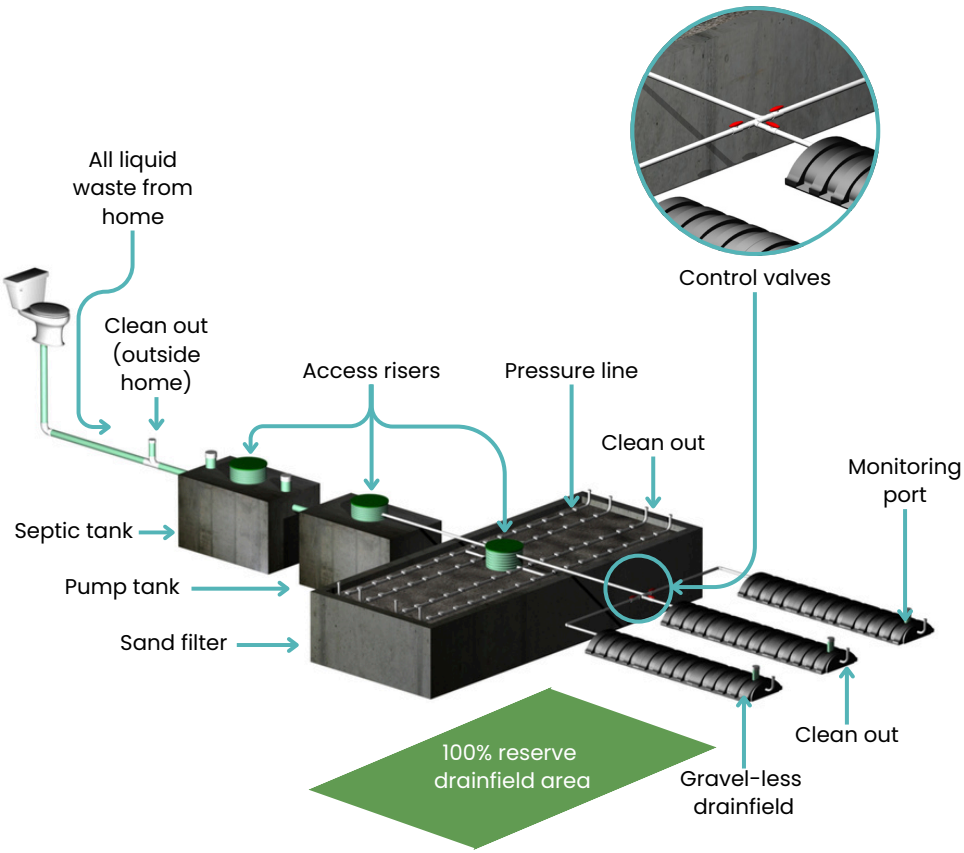
- Distribute the effluent evenly through pressurized lines across the entire drainfield
- Use a timer to protect the drainfield from overuse
- Need a yearly Monitoring and Maintenance Contract and at least one inspection a year



Sand filters

Sand filters have a septic tank, pump tank, sand filter, and drainfield. These systems are used to help protect nearby wells, surface waters, and groundwater. Sand filters:

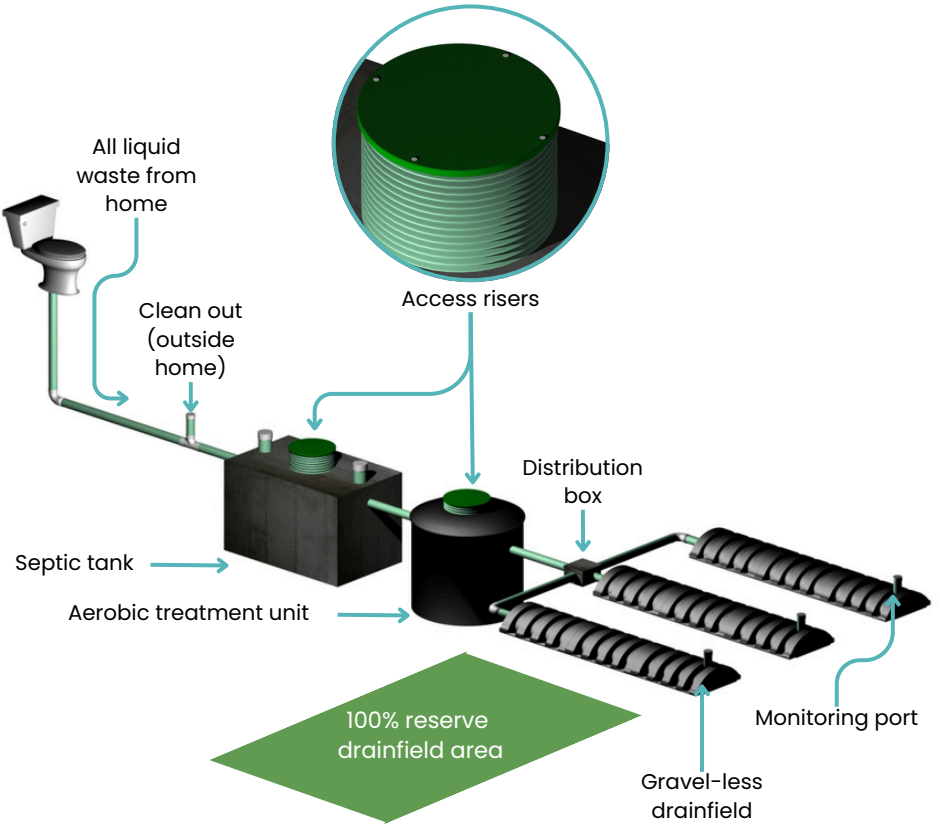
- Use sand to pre-treat effluent before the drainfield
- Can be built above or below the ground surface
- Need a yearly Monitoring and Maintenance Contract and at least one inspection a year



Aerobic treatment systems

Like sand filters, aerobic treatment systems pre-treat effluent before it goes to the drainfield. These systems are used when a property does not have a lot of soil. These systems:

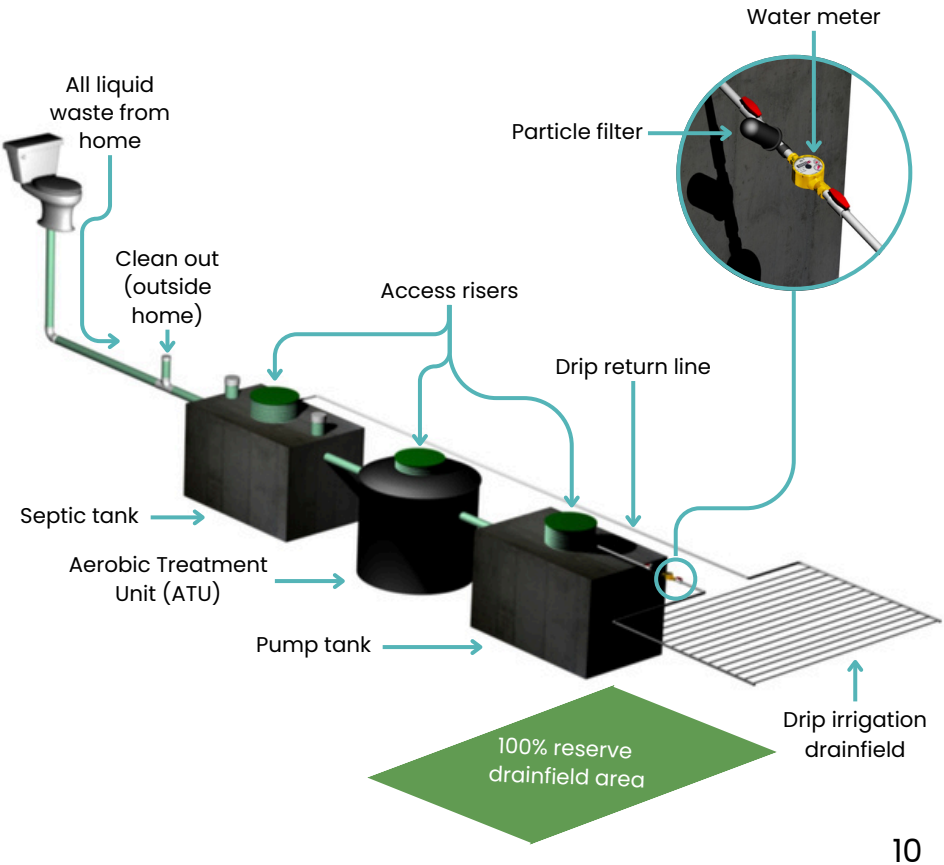
- Use air to speed up the treatment process
- Need a yearly Monitoring and Maintenance Contract and at least two inspections a year



Drip irrigation systems

Drip irrigation systems use a series of pressurized drip lines, like those used for yard irrigation. These systems are located just below the ground surface. Like some of the other alternative systems, drip irrigation pre-treats effluent and uses a timer and pressure distribution to achieve high levels of treatment.
These systems:

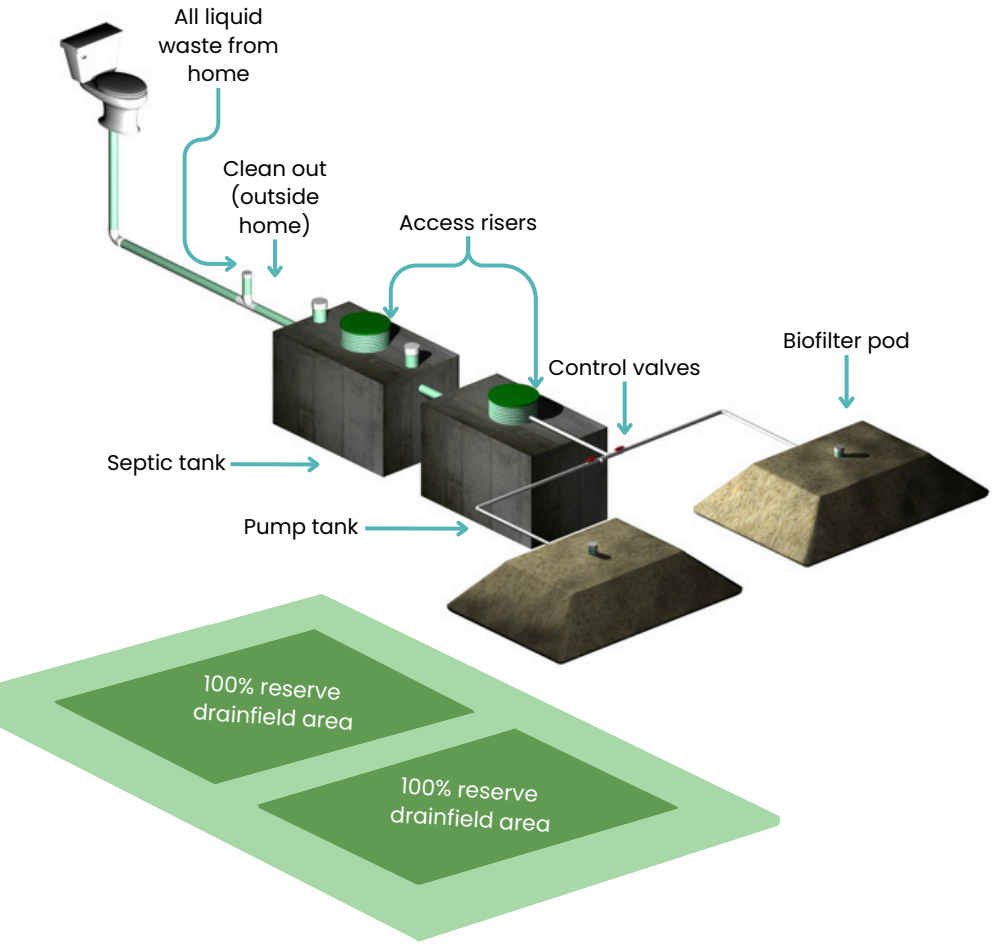
- Are best used with aerobic treatment or sand filters
- Can be used in shallow soils
- Need a yearly Monitoring & Maintenance Contract and at least two inspections a year



Biofilter

A biofilter has a septic tank, pump tank, and a mounded drainfield arranged in pods. This type of system uses a timer to send small amounts of effluent to the drainfield. A biofilter:

- Provides a high level of treatment
- Can be installed in shallow soils
- Needs a yearly Monitoring and Maintenance Contract and at least one inspection a year



How do I maintain my septic system?

Keeping your septic system maintained helps you get more years out of your system and prevents costly repairs.

Gravity system maintenance

If you have a gravity system, you must have the septic tank inspected every three years. Make sure the tank is accessible for regular maintenance. Risers are required on new systems and installed for easy access.

Alternative system maintenance

If you have an alternative septic system, you are required to have a Monitoring & Maintenance Contract with a certified maintenance provider.

What is a Monitoring and Maintenance Contract?

This program is required by the state and the Health District to keep your alternative OSS working properly and protect the surrounding environment. This benefits OSS owners by:

- Protecting your OSS from early failure
- Protecting your family, environment and community from sewage
- Providing you assurance that your system is working

The program requires regular maintenance of alternative septic systems and helps you get involved in protecting your system. Talk to your maintenance provider about being on site for the inspection.

Protecting your septic system

Use water wisely

Conserve water by:

- Using low-flow toilets, showerheads and sink faucets
- Doing smaller loads of laundry throughout the week
- Taking short showers
- Fixing leaks as soon as possible

Protect the drainfield

- **DON'T** pasture livestock, build structures, or burn over the drainfield or reserve area.
- **DON'T** cover the drainfield soil with landscaping materials or plants with deep roots.
- **DON'T** level, drive across, fill, or cut the drainfield.
- **DO** keep drain water from hot tubs, pools, roofs, and driveways away from your drainfield.
- **DO** inspect your system and keep detailed records of any repairs or inspections. You can use the last page of this booklet to keep a log.

Watch what goes down the drain

- **DON'T** let grease, hair, or food go down the drain.
- **DON'T** flush diapers, plastics, paper towels, wipes, cigarettes, hygiene products or cat litter down the toilet.
- **DO** limit your use of the garbage disposal.
- **DON'T** use strong chemicals like bleach or drain cleaners.
- **DO** use dryer sheets instead of liquid fabric softeners.
- **DON'T** use powdered detergents.
- **DON'T** use automatic toilet bowl cleaners or deodorizers.
- **DON'T** allow water softener backwash into the septic tank.
- **NEVER** pour hazardous products down the drain. Find out how to dispose of these products by visiting recycle.kitsap.gov or calling 360-337-5777.

Know your septic system

- Find out where all parts of your septic system are located so that you avoid driving, digging, or parking on it. Find your septic system records online at kitsappublichealth.org/irecordsearch
- Pass along all septic information to new owners or tenants.
- Educate your family, guests or renters about your system.
- Save money for future septic maintenance costs.

Additives

Commercial septic system additives are not recommended and can harm your septic system.

- No additive can reduce solids to make pumping unnecessary.
- Household effluent contains all the bacteria your septic system needs to keep working naturally.
- Additives can cause problems with the drainfield.

If you use an additive, visit doh.wa.gov/wastewater to make sure it's on the Washington State Department of Health's list of approved additives.

Warning signs of a failing septic system

- Sewage on the ground or in surface waters.
- A foul-smelling, slimy, black, or gray liquid in the drainfield area, or coming out of nearby pipes.
- Water or soggy soils in the drainfield or tank area.
- Greywater (laundry or sink water) flowing onto the ground or surface waters.
- Sewage backups into the building.

Tips for repairing a septic system

- Free technical assistance from the Health District is available to help you determine the best solution for your situation.
- Repairs require Health District review or permit.
- A licensed septic designer, installer or maintenance provider can determine what caused the failure.
- Do not assume that a total septic system replacement will be needed.
- Pumping a failing system is only a temporary solution. While it may be necessary to have the tank pumped during the repair process, pumping the tank will not correct a failing septic system.

Resources

Onsite Sewage | Kitsap Public Health
kitsappublichealth.org/septic

Pollution, Identification, and Correction | Kitsap Public Health
kitsappublichealth.org/pic

Wastewater Management | WA Department of Health
doh.wa.gov/wastewater

Onsite Sewage | Environmental Protection Agency
epa.gov/septic

Kitsap County | WSU Extension
extension.wsu.edu/kitsap

Septic Financing Program | Craft3
craft3.org/homeowner-loans/clean-water

Septic system records

Site address:
Tax Parcel Number:
System type:
System designer:
System installer:
Date installed:

Service history

Date	Contractor name & work done

Other notes

KITSAP PUBLIC
HEALTH DISTRICT

345 6th Street, Suite 300
Bremerton, WA 98337
360-728-2235