



# WELCOME TO SEPTIC SENSE

The webinar will begin in a  
few minutes



**Clean Water Kitsap**  
*Partners in Stormwater Solutions*



Welcome. We'd like to start our webinar with a land acknowledgement.

We wish to recognize that Kitsap County is part of the homeland of Coast Salish and other indigenous people. We acknowledge the S'Klallam, Suquamish and other tribes have an extensive history and territory in the Pacific Northwest and we want to respect their history and territory. We know we cannot adequately share their story; however, we have an opportunity to pay respect to the aboriginal people of this land and as a part of that respect, we encourage you to learn about our local tribes and their history.

[www.pgst.nsn.us](http://www.pgst.nsn.us) | <https://suquamish.nsn.us/>



Today's webinar is hosted by Clean Water Kitsap. We are a multi-agency partnership created to reduce flooding, prevent pollution and restore fish habitat through stormwater management activities.

We are managed through Kitsap County Public Works and we fund partner programs within, Kitsap Public Health District, Kitsap Conservation District, Washington State University Kitsap Extension, and Kitsap Public Utility District.

## Getting Pumped for Septic Tank Pumping

Leslie Banigan  
Nolan Simmons  
Laura Westervelt

Kitsap Public Health  
District



Did you know that you can get more life out of a septic system by Inspecting the tank every 3 years and pumping when needed?

Hi folks, I'm Leslie Banigan  
With me are Nolan Simmons and Laura Westervelt

We're Environmental Health Specialists with Kitsap Public Health where we find and fix fecal pollution sources, so they don't make people sick. We also help people get the most life from their septic system investment. We're here today to help you get "pumped" about septic tank pumping.



## Contact Us!

Leslie Banigan

(360) 633-9019

Leslie.Banigan@  
kitsappublichealth.org

Laura Westervelt

(360) 509-9353

Laura.Westervelt@  
kitsappublichealth.org

Nolan Simmons

(360) 233-6045

Nolan.Simmons  
@kitsappublichealth.org



KITSAP PUBLIC HEALTH DISTRICT

Please contact us if you have any questions about your onsite sewage system and how to maintain it.



Leslie

Close your eyes and imagine you're hosting a backyard barbecue.

Everyone is having a great time...and the kitchen and bathroom are getting plenty of use.

Suddenly – sniff, sniff– you smell a lingering odor, and it's definitely not the delicious smell of searing meat on the barbecue.

You decide to sniff out the source.



And what do you find? Sewage bubbling up from your septic tank. Today we're going to share some tips to prevent this from happening to you.



[image fence built from junk – Bing](#)

We want you to get the most life possible from your septic system because it's a big investment. When we meet with people, we've noticed some common barriers, or reasons why maintenance is postponed. Many don't know how their system works and how to take care of it. Some are afraid of problems and costs.



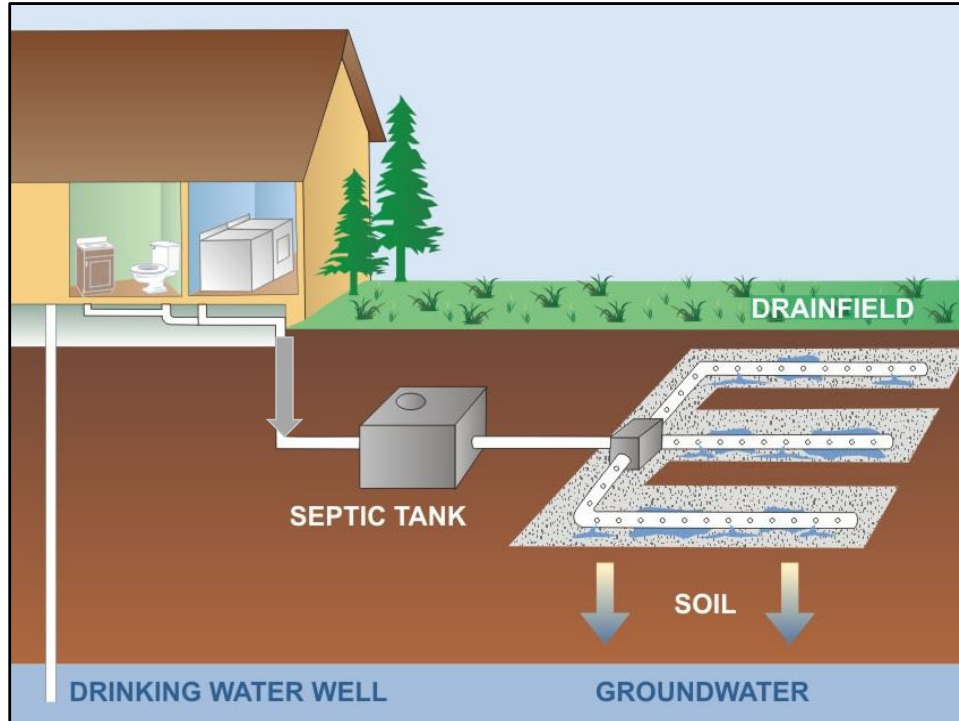


We struggle with these barriers too, and we want help you overcome them by sharing some simple steps and real-life stories, so you can get the most life possible from your septic system. The important things are to:

- Know how it works
- Know how to maintain it
- Avoid water overload
- Avoid strong waste
- Prevent Physical Damage

[images of stair steps to lawn - Bing](#)



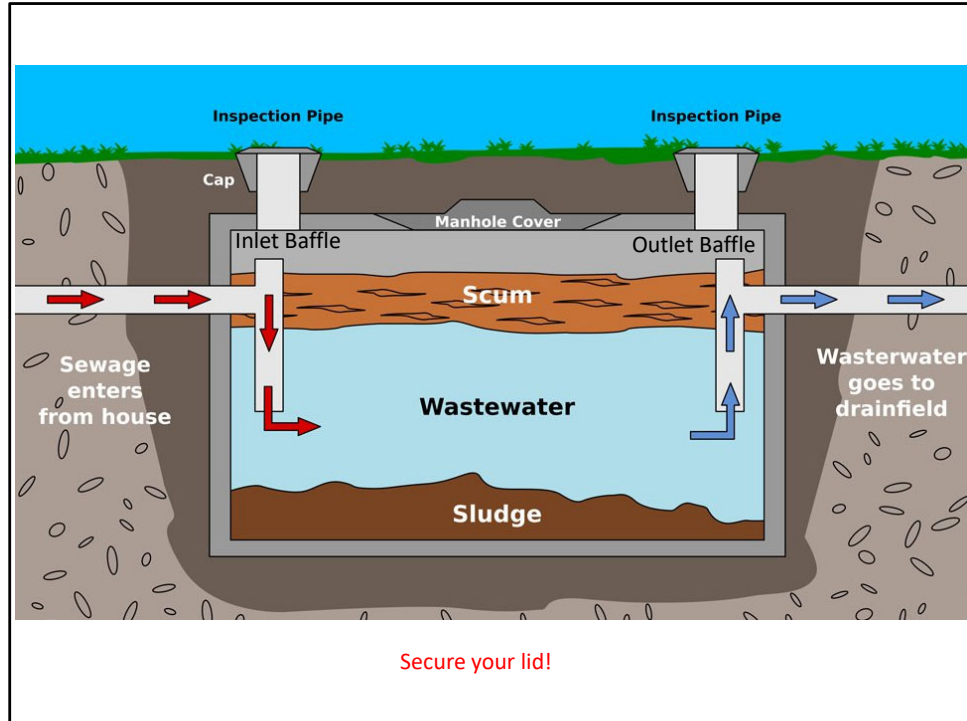


# NOLAN

Let's start with how a septic system works. Here is a standard gravity system. The basics are the same even if you have a more complicated system.

You can see how all the wastewater from the house flows through a septic tank and where solids settle, allowing clear wastewater to go through to the drainfield soils.

- <https://snohomishcountywa.gov/2591/LakeWise-Septic-Systems>
- <https://www.therooterguysplumbing.com/septic-tank-maintenance>

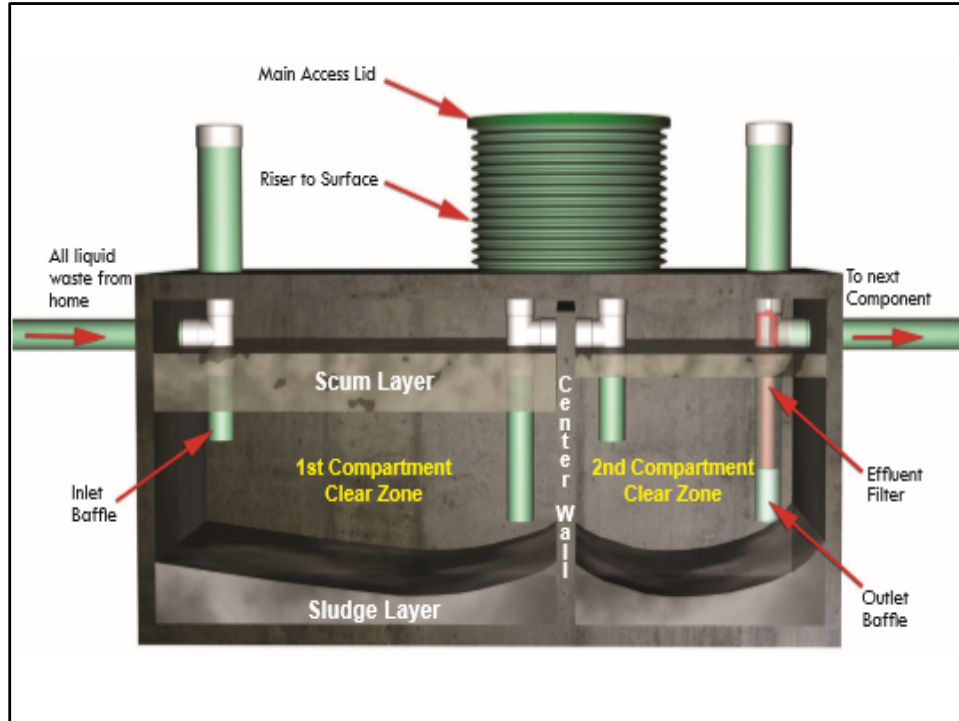


This is a side view of a 1-compartment septic tank. Sewage flows into the tank through the inlet baffle. The inlet baffle is a pipe that turns water 90 degrees, so the scum layer floats to the top and the sludge settles to the bottom.

Baffles keep the stronger scum and sludge in the tank, so they don't plug up pipes and drainfield soils. Only the wastewater in the middle of the tank, called effluent, flows to the drainfield.

Bacteria in your digested food waste helps break down the solids in the tank. If you want to do something nice for your septic system, eat a good meal and use the bathroom. The microbes from your body do all the treatment, so don't waste your money on septic system additives.

Reduce the use of strong chemicals and cleaning products because they can kill those good microbes in your tank and drainfield.

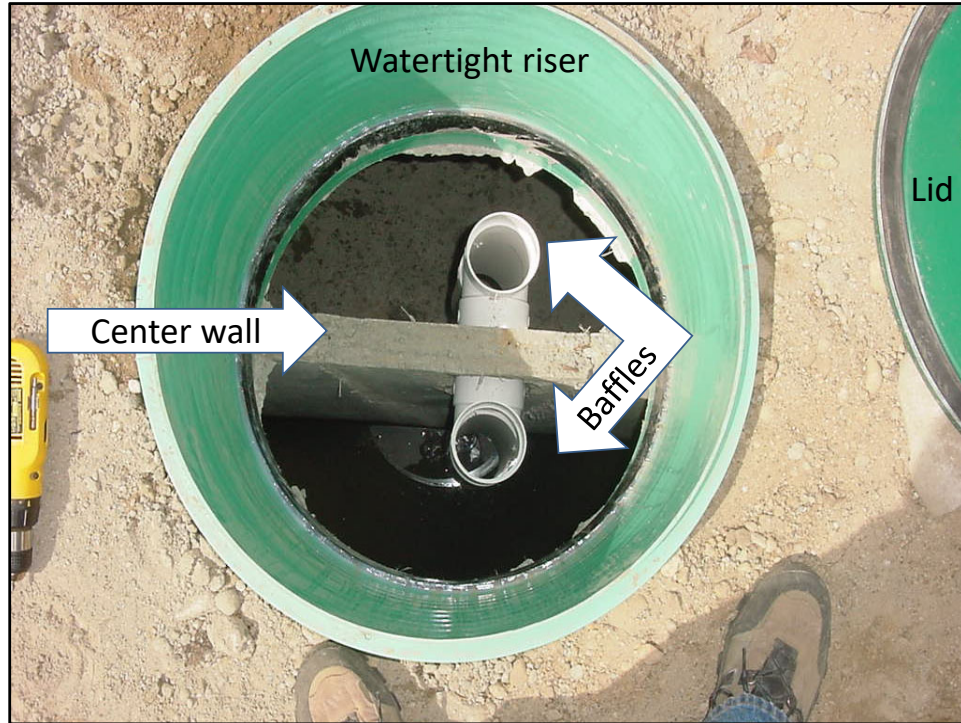


Here's a typical 2-compartment septic tank. The second compartment provides another layer of protection for your drainfield because it allows the scum and sludge to settle out more.

A filter is sometimes added in the outlet baffle of the septic tank to help prevent solids from reaching your drainfield. These need regular service to prevent sewage overflows in your home or yard. Please reach out to me, Laura, or Leslie if you have any questions about how to safely clean a baffle filter.

You can see the green, water-tight risers on the tank lid. These allow easy access, so you don't have to dig up your tank every time it needs servicing. However, it's very important to keep tank lids secure in order to prevent the tragedy of kids or pets from falling in.

It's important to inspect septic tanks and baffles every 3 years and pump when they are roughly 1/3 of solids to keep them from clogging your pipes and soils. More complicated systems require inspection annually.



Here is a close-up picture looking down at the center wall in a two-compartment tank. You can see the white baffle that straddles the two compartments.



The wastewater then leaves the tank, flowing through a watertight pipe into a distribution box. You can see that 2-inch pipe here.

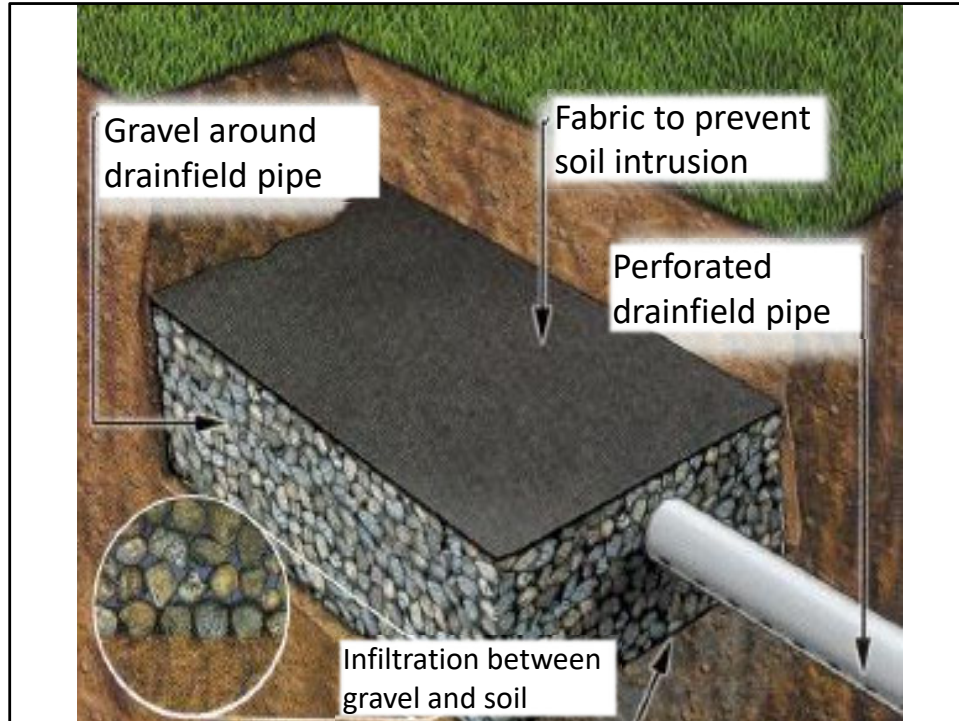
The four larger pipes flow to the drainfield legs. Inside each pipe, you can see round black levelers that help wastewater flow equally to the drainfield legs.

Sometimes distribution boxes deteriorate or fill with sludge and roots. Protect your distribution box from plant and tree roots.





Here is a video of wastewater flowing into a distribution box from a septic tank.

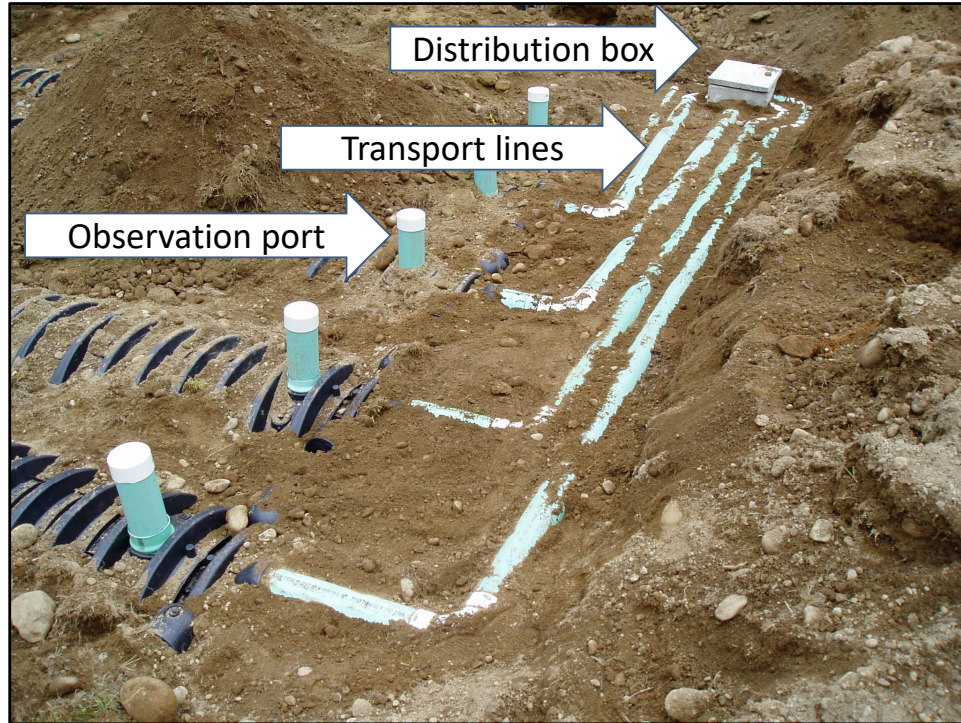


Here is a gravel and perforated pipe drainfield. Perforated pipe has holes in it to allowing wastewater effluent to move into the gravel and soils.

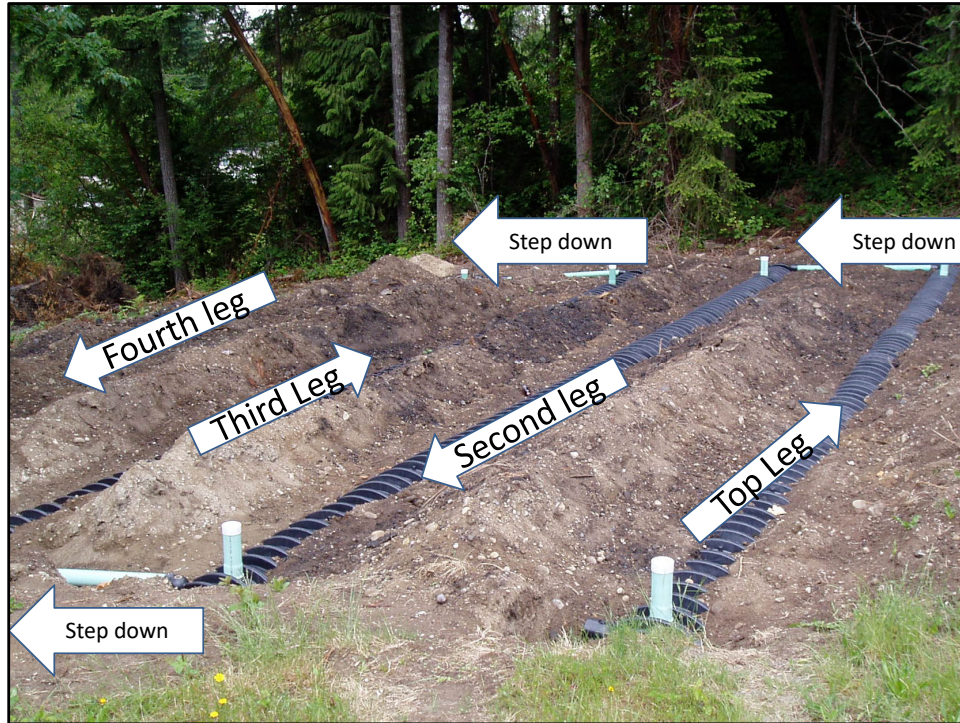


This is a rare look inside a gravelless drainfield. These chambers are used when clean gravel is hard to find or on sites where access is difficult.



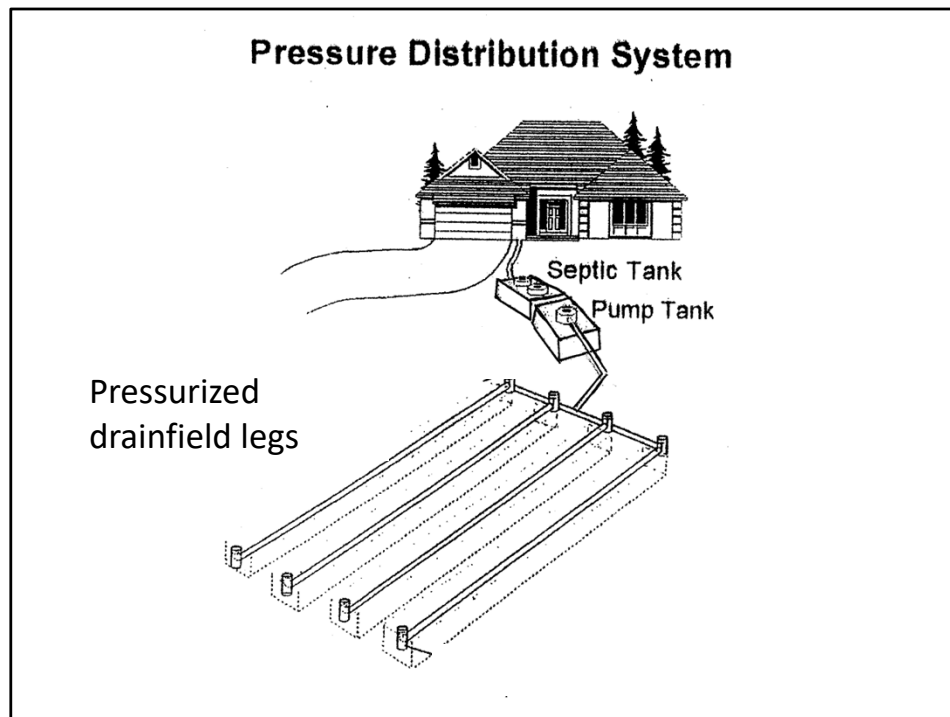


This photo shows a distribution box and transport lines for a gravity drainfield where wastewater is distributed equally to each drainfield leg. The observation ports allow you to see inside the drainfield from above the ground to find out if the system is working as intended.



Gravity drainfields with serial distribution like this are typically used on slopes. Wastewater completely fills the top leg of the drainfield first. And only when the top leg is full does it steps-down or overflows into the next leg. You need to manage trees and shrubs near the step-downs to prevent root damage.



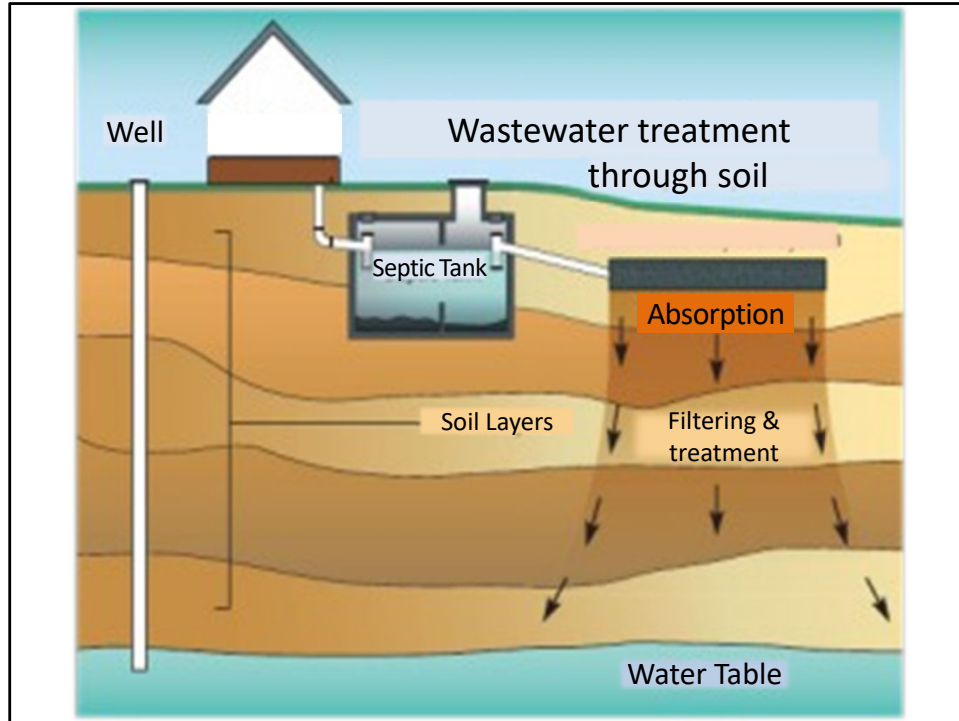


Pressure distribution systems equally divide wastewater into 6 or more doses per day. The doses are pumped to the drainfield through pressurized lines that distribute each dose throughout the entire drainfield.

This more complicated design is used where the soil isn't deep enough to effectively treat the wastewater through gravity distribution.

Pressure distribution systems require annual maintenance because they can easily become clogged without it.

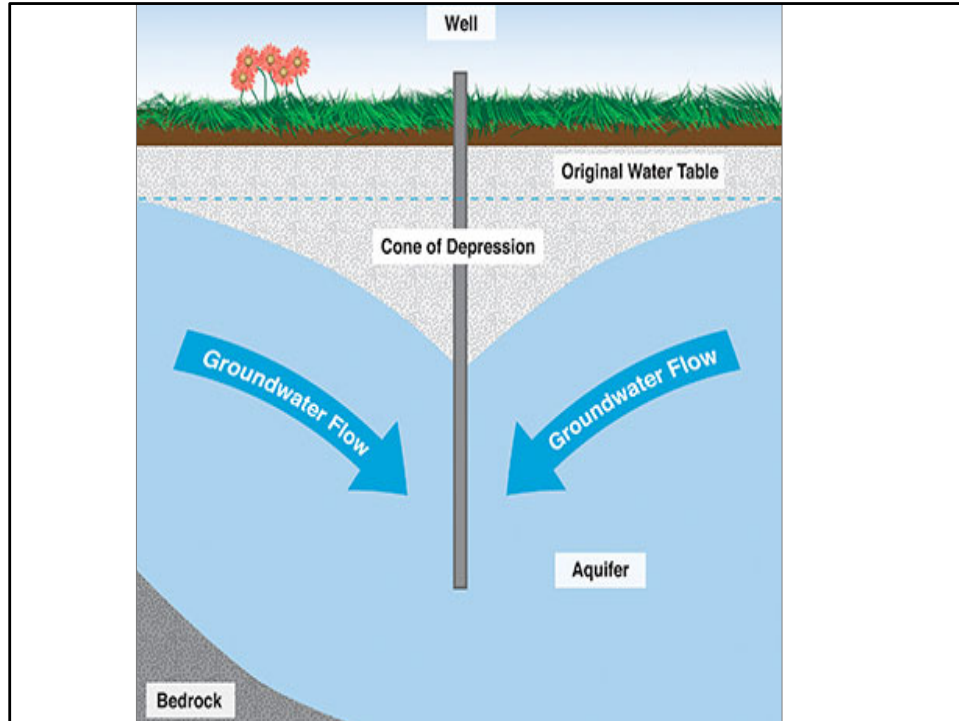
[pressure distribution septic system diagram - Bing images](#)



We've shown you how wastewater is collected and transported through the septic tank and distribution box into the drainfield. Now let's talk about wastewater treatment.

Soil can do an amazing job of filtering and treating wastewater. Soil microbes eat up waste particles, as the wastewater wicks through the unsaturated soils.

Septic systems are carefully designed and drainfields are specifically located to make sure there is enough soil to treat the wastewater. State and local laws permit the different systems depending on soil types, depth, and setbacks to wells and surface waters.



Most of us in Washington rely on groundwater as our drinking water source. That's why it's important to ensure wastewater is treated by the drainfield soils so that bacteria in sewage doesn't make us sick.

When you pump water from well it develops a cone of depression as it draws groundwater in from around it. That's why it's important that setbacks to wells and surface waters are met, and that your septic system is working well.



## **LAURA**

Now that you know how a septic system works, let's look at some septic system failures.

This one has the typical foul-smelling, slimy, blackish/grey water surfacing in the drainfield



This one also has standing water and soggy soils in the drainfield area.

Some other things to look for are:

- Wet spots in dry weather
- Greywater (laundry or sink water) discharging to the ground or surface waters
- Gurgling sounds, slow drainage or, back-ups in plumbing caused by slow drainfield





This tank is a hazard because it is open to the ground surface where people and pets can fall in, and flies can transport waste out.



See the stained area on the green septic tank riser and signs of moisture on the otherwise dry ground. These are signs of a septic tank overflow that has partially dried.





Here we confirmed that sewage was leaking into the lake by flushing red dye in the house toilet and seeing it come out in the lake.



We found high bacteria counts at this bulkhead drain and dye testing the house confirmed it was sewage leaking out on the beach.





Now that you know how a septic system works and what a failure looks like, here's how you find the records for your onsite sewage system.

Permit and maintenance records have important information about where your system parts are located, and your water budget – or how much water the system was designed to treat each day.

Go to [www.kitsappublichealth.org](http://www.kitsappublichealth.org)



Find the Wells & Septic section at the bottom of the page and you can search for:

- Property records
- Application & Permit status
- Septic Maintenance records

**APPLICATION FOR SEWAGE PERMIT**

*Revised*

Sewage Permit # 3790  
 Issue date 5/23/82  
 Single Family Res. \$ 150.00  
 Alteration Family Res. \$  
 Additional inspection \$  
 Plan Review & Permit \$  
 Other Systems: Hourly rate: \$/hr. \$/hr. \$  
 Memo # 1503

Name of installer BOUTEND EXCAV  
 Address 1651 PETER HANAN RD  
 Name of owner BOB JOSE PHEW  
 Address SEASIDE RD

Name on building site application and date approved  
Bottom of ARBETSON HILL  
 Location of Property: Street Address and Directions for locating

On New Building (Building permit # 4740) ☐ Existing (A construction plan is required)  
 Type of Occupancy: ☒ Residential ☐ Commercial ☐ Single Family ☐ Multi-Family  
 Number of Units 1 Number of Bedrooms per Unit 3

I hereby agree to comply with all the requirements of Bremerton Kilg Co. Board of Health relating to sewage disposal. (The applicant has the right to appeal decisions of the health department.)  
 Signature of owner or firm making application Bob Pheasant WITNESS SIGNATURE OF PROPERTY?

INSTALLATION PLAN/FIELD DRAWING

House  
 Tank  
 Distribution box  
 Drainfield legs

Installation approved by: Bob Pheasant Date: 5/23/82

The sewage permit is your guide to the size and location of your system.

This one is sized for three bedrooms at 360 gallons per day.

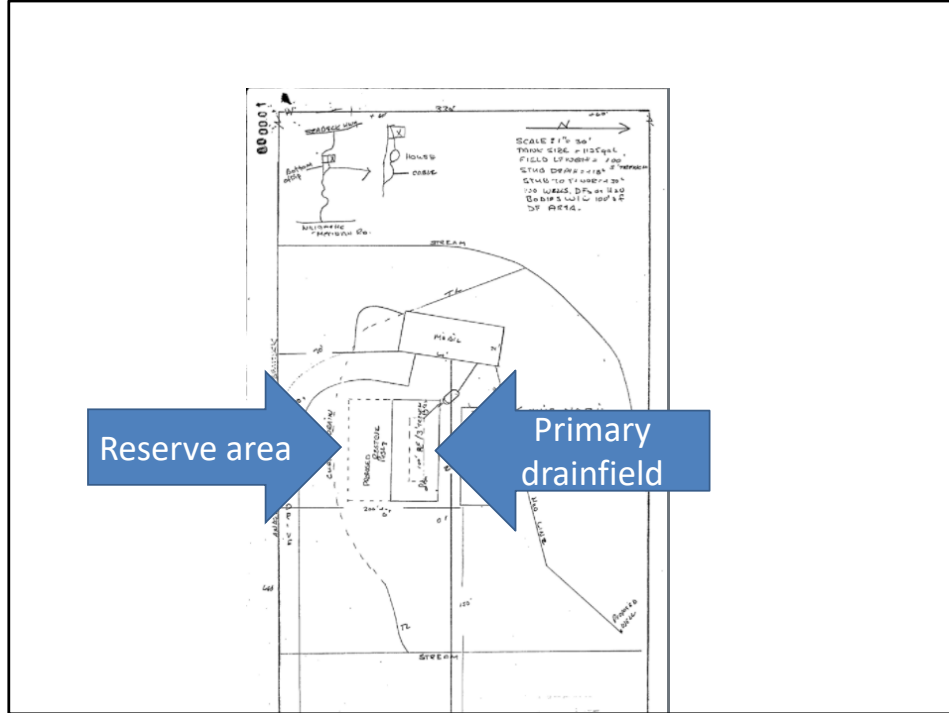
The As-built drawing shows the approximate location and size of the onsite sewage system.

This one shows the house, septic tank, distribution box and three 60' drainfield legs.

360 gallon wastewater budget

32





The Building Site Application includes a plot plan showing the proposed layout of the system. Modern Building Site Applications dedicate a reserve area for system replacement when needed. If you have trouble finding your septic records or your water budget, please reach out to me.



Next, I'll share a few stories to highlight the importance of regular maintenance and some simple fixes to get a system back in order.

Leaky toilets can fail septic systems. My family had an old basement toilet that we didn't use. One day, my husband used it and forgot to jiggle the handle. We were lucky that our pump alarm let us know about the leak before sewage came up in the backyard.



Here is another way to protect your system from water overload.

See the arrow on the right? This is directing rainwater from the roof right to the septic tank and can wash surface water and sediment into the tank and drainfield. You need to make sure roof water is routed at least ten feet away on the downhill side from your tanks and drainfield. That way your onsite sewage system can do the important job of treating your dirty water.



When we met the owner of this rental property, he was proud that the tank hadn't been pumped in nearly 20 years. He didn't even pump his own septic tank until it backed up and made a big mess inside his house. After talking with us, he pumped both tanks. The rental property tank was almost totally full of solids. This is living in the danger zone – you wouldn't wait for problems to change the oil in your car, and you shouldn't wait for problems to pump your septic tank. One important way to reduce stress on your system (and you) is to have your tank inspected every three years and



pumped when it's one-third full of solids.



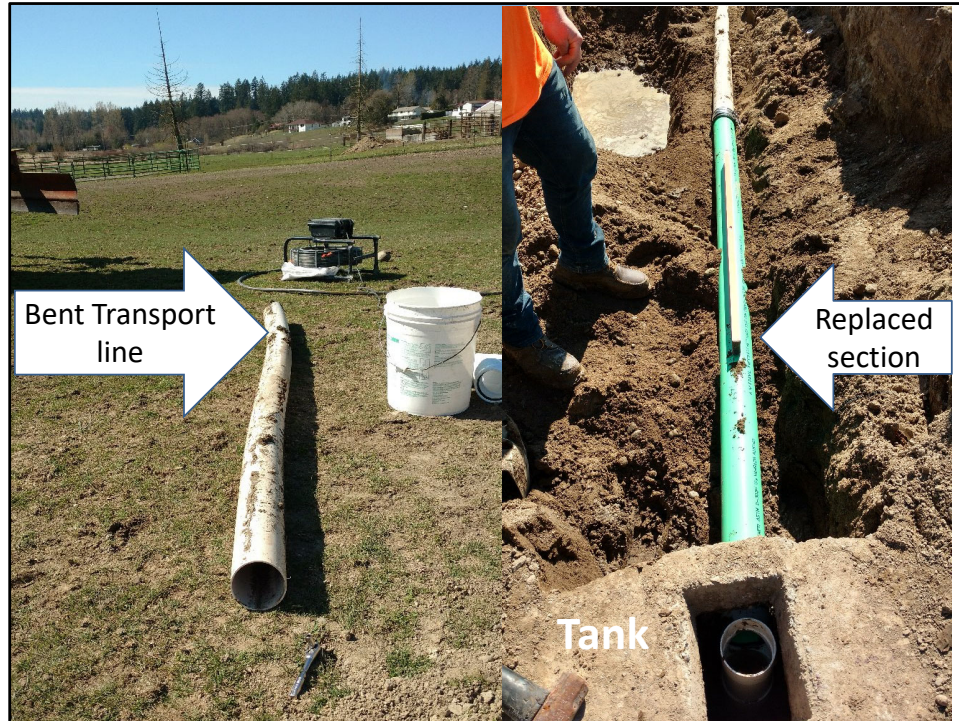
Even with regular operation and maintenance, alternative systems can still get thick scum and sludge. One of our colleagues had high scum and sludge in one compartment. The pumper didn't empty it during two prior visits because they didn't want to remove internal parts. During the next checkup, it was still 80-90% full of solids – yikes – that's not good! If you have an alternative system like this, check with the pumper to see if your maintenance person needs to be on hand during pumping.

No matter what type of system you have, you can prevent excessive scum and sludge buildup. Always do scheduled maintenance, keep food scraps from going down the drain, and don't use garbage disposals. Be sure to spread out your laundry loads so the fibers from your clothes can settle out in the tank. Avoid using strong chemicals like bleach, ammonia, liquid drain-openers, and harsh cleaners, because they can slow or stop normal processes by killing the good microbes in your tank and drainfield.



We helped this system owner overcome her fear of unknown costs. She was worried, but led us to the wet spot in her yard. She put on her boots and gloves and slogged through the sewagey mess to find the outlet baffle access to her septic tank. She used a metal fence post to pry off the cap and fished out the filter. The filter hadn't been cleaned in 7 years! She was one of the lucky ones. A clean filter and septic tank pumping was all it took to get this system back on track.





When the owner of this system had his septic tank pumped, the water level was too high. Sometimes this happens when components have settled or are damaged, and sometimes it happens when a drainfield isn't taking water at the designed rate. He used his contractor experience and tools to find and fix the problem and was delighted to find it was only a bent transport line instead of a drainfield problem. Protect your system from damage caused by parking, driving, burning, or pasturing large animals because septic systems are often buried shallowly.





Use “green” cleaning  
alternatives



#### LESLIE

We'll be randomly selecting three lucky webinar attendees today to receive free Green Cleaning Kits.

Are you concerned about the health effects of home cleaning products – on your onsite sewage system and your family?

Cleaning products can:

- irritate your eyes and throat
- cause headaches
- release dangerous chemicals For example, never mix products containing bleach with those containing ammonia. The gases created from this combination can lead to chronic breathing problems and death.
- Contribute to chronic respiratory problems and allergic reactions

They can also:

- Kill or sicken septic system good bacteria

Be aware that Green, natural, eco, and bio are all unregulated marketing terms. Commercial green cleaning products are not required to list all ingredients on the label and may contain harmful ingredients.

Cleaning products labeled **Caution or warning** are a mild hazard – these include many laundry and automatic dishwasher detergents, disinfectants and all- purpose cleaners. The “product **not likely to cause permanent damage as a result of accidental exposure if appropriate first aid is given.**

You need to be more careful with Cleaning products labeled **Danger**. These are specialty products intended for tough jobs, like oven cleaners or drain openers. It means that – **accidental exposure of the eye or skin or swallowing the undiluted product could cause long-term damage.** Some of these products **could ignite if exposed to open flame.**



Instead, you can use “Greener” cleaning alternatives like vinegar (acetic acid), baking soda (sodium bicarbonate), oxygenated cleaner, and castile soap.

These are still chemicals – but they are safer for your family and your onsite sewage system.

You can also save a lot of money by using fewer harsh cleaning products.

For safety, it’s important to label all cleaning products you make and not reuse cleaning product bottles.



We recommend physical cleaning tools that work by “Elbow Grease”

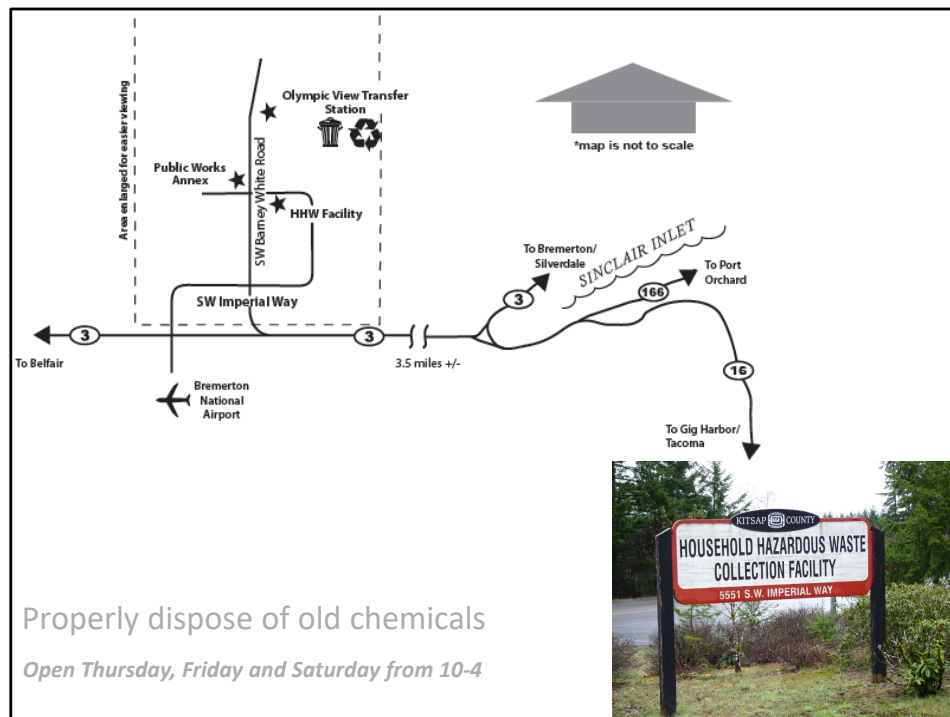
Microfiber cloths are very absorbent and clean smooth surfaces dry or with water

Squeegees prevent shower scum

Drain cleaning tools, made of flexible plastic with barbed edges, remove hair and soap from drains.

You can use a Pumice stone for toilet stains, and a drain snake for clogs.





Get rid of your old chemicals at the Household Hazardous Waste Collection Facility

You can drop off chemicals that you don't need anymore to the "free to a good home" part of the facility.



To summarize:

Protect your septic system investment:

Know how to maintain it

Avoid water overload

Avoid strong waste

Prevent physical damage

## Contact Us!

|  |  |
|--|--|
| <b>Leslie Banigan</b><br>(360) 633-9019<br>Leslie.Banigan@<br>kitsappublichealth.org | <b>Laura Westervelt</b><br>(360) 509-9353<br>Laura.Westervelt@<br>kitsappublichealth.org |
| <b>Nolan Simmons</b><br>(360) 233-6045<br>Nolan.Simmons<br>@kitsappublichealth.org   |  |

  
KITSAP PUBLIC HEALTH DISTRICT

Thank you Leslie, Laura and Nolan. As a reminder, we are holding our Q&A session s till the end, but please feel free to drop your questions in the Q&A and our presenters will answer them when all the presentations are done.

I'd now like to introduce you to Paul Kusche. Paul has been a Master Gardener with WSU Extension, Kitsap County for 9 years.

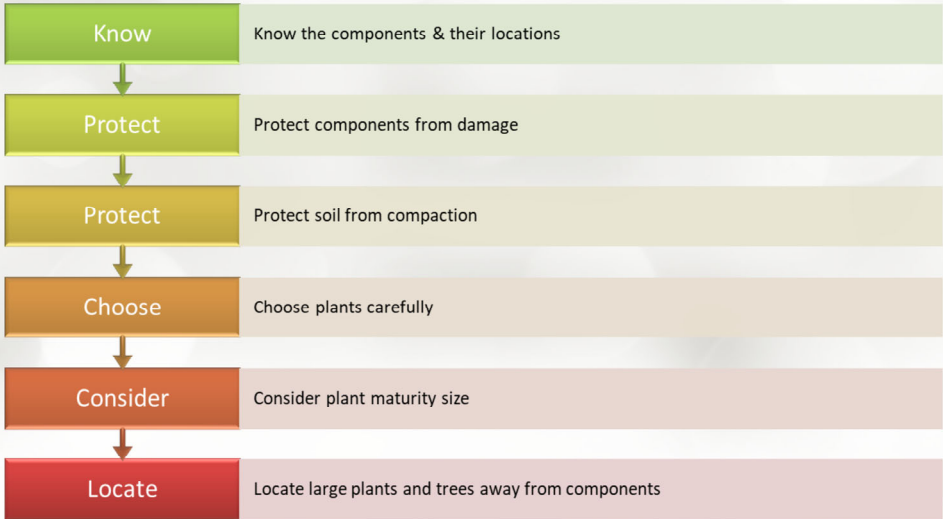
# Landscaping Over/Around Septic Systems

Paul Kusche  
WSU Kitsap Master Gardener

O' ^ 1 A Z I S Z a I S E a ' ' a S 1/2 I S E z 1 ° Z a S a ^ T a ^ 1 S Z a U ^ 1 ÷ 1 % a S Y ' E a 1 ; a ^ E S Z 1 ; a M ' 1/2 ÷ u a V Z N ÷ ' C N I



# Septic System Landscape Planning

[illegible]



## Plants with Aggressive Roots

### Landscaping your Drainfield publication

[http://www.lenzyme.com/Root\\_Control/imag003.jpg](http://www.lenzyme.com/Root_Control/imag003.jpg)

<http://septic-tank-problems.com/wp-content/uploads/2014/09/roots-septic-line.jpg>

[http://www.crewsenvironmental.com/wp-content/uploads/2015/12/iStock\\_000014458292\\_Small.jpg](http://www.crewsenvironmental.com/wp-content/uploads/2015/12/iStock_000014458292_Small.jpg)

### Avoid:

- Planting shrubs and trees within 30' of components
- Plants with aggressive or woody roots known to seek out water (willows, birch, some maples) (Intruding into tanks, lines, and pipes to reach water & nutrients; clogging or breaking pipes)
- Plants that like wet conditions (too much irrigation creates saturated soils that do not have enough oxygen to support the beneficial soil organisms that break down septic effluent)
- Plants that obstruct access (big, impenetrable, thorny)

## Plants with Aggressive Roots



@ 'Y' E2 1-â 0E' 'âEâM' E2lâ" ÷: â! 5 5 L-MMW-âBâ-Nâ 'E2BZâNâN-'E âEâ' ^u' â' â; â! 'Nâ **Let me repeat that NEVER**

## Plants with Aggressive Roots

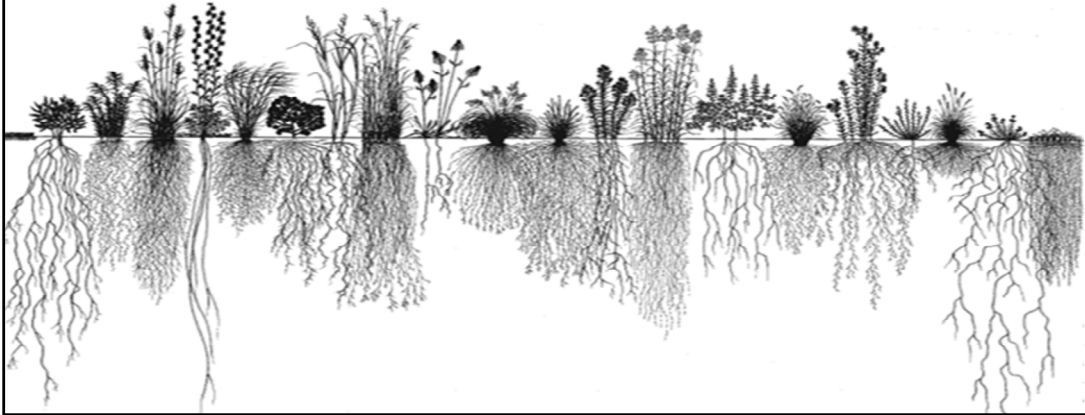


**Your tank and drain lines can get plugged just like this perforated line.**



# Planting over Septic Systems

- **Choose** shallow rooted plants
- **Avoid** woody plants; woody plants have strong, woody roots



Planting over Septic Systems

**Only choose shallow rooted plants**

**Always AVOID woody plants**

**= Strong – Woody Roots**

**Like Willows and Cedars with large root systems**

## Lawns are Best

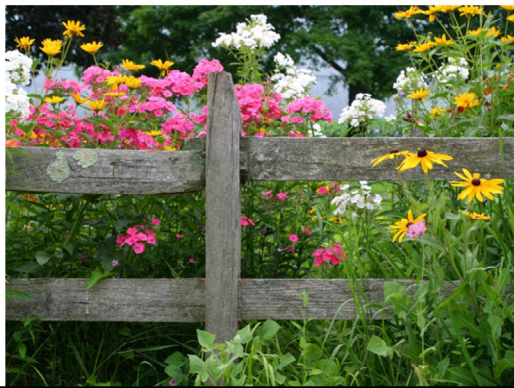


Lawns are Best

**I know, I hate mowing too, but Lawn's are the BEST.**

**Shallow root systems, drain well and are easy to replace**

## Lawn Substitutes



- May not take foot traffic or pet wear
- Take longer to recover from system repair
- Can be taller than lawns
- Can be patchy
- Must be spaced to fill in quickly
- Need regular weeding
- Need proper irrigation
- Must be chosen carefully (hardiness, exposure, etc.)
- Weeds can outcompete
- Wildflower meadows need reseeding
- <https://www.sheknows.com/home-and-gardening/articles/965457/new-options-for-your-lawn-alternatives-to-grass/> (clover)
- <https://www.diynetwork.com/how-to/outdoors/landscaping/tired-of-mowing-try-these-plants-and-groundcovers-instead-pictures> (thyme)
- [https://hgtvhome.sndimg.com/content/dam/images/hgtv/fullset/2016/1/26/1/iStock\\_00004217951\\_Perennial\\_Garden-With-Fence.jpg.rend.hgtvcom.231.174.suffix/1453855543814.jpeg](https://hgtvhome.sndimg.com/content/dam/images/hgtv/fullset/2016/1/26/1/iStock_00004217951_Perennial_Garden-With-Fence.jpg.rend.hgtvcom.231.174.suffix/1453855543814.jpeg) (wildflowers)
- <https://encrypted->

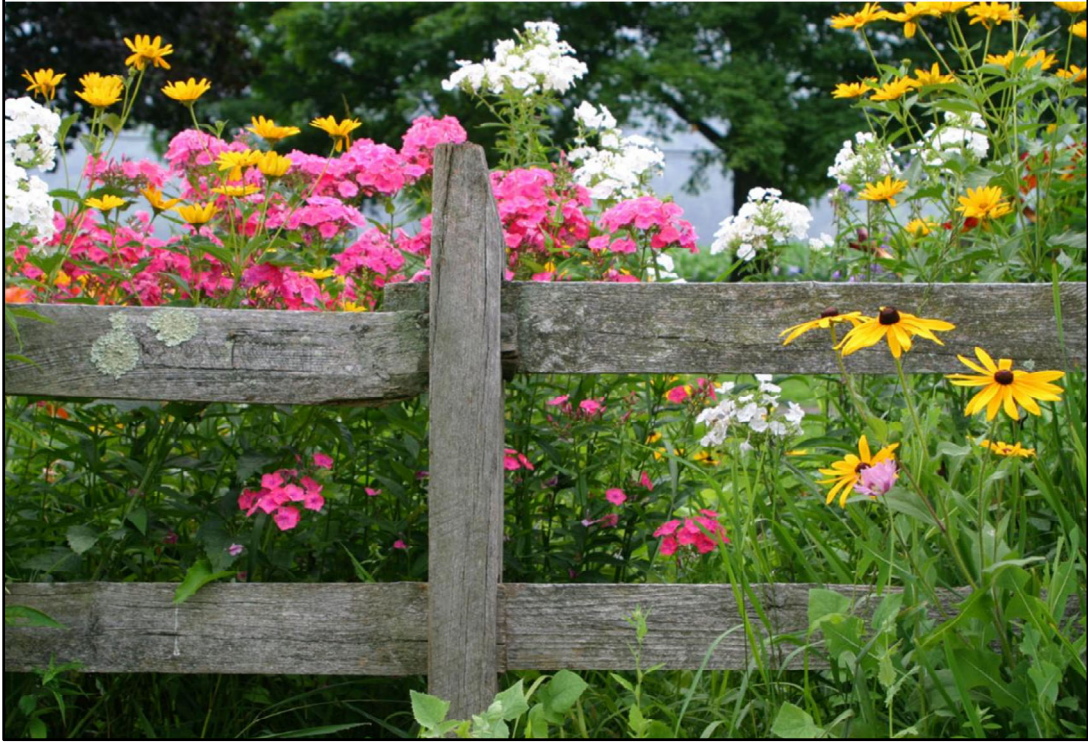
tbn0.gstatic.com/images?q=tbn:ANd9GcS\_rxhlg4swa3nYkQLQeMvU0PEYVqE3ZKzSxt\_jK  
NX0KBVBooyV



## A close-up photograph of a person's bare feet standing on a thick, lush carpet of green clover. The person is wearing a light blue or white garment, visible at the top left. The feet are positioned side-by-side, with the toes slightly spread. The clover leaves are small, round, and vibrant green, creating a textured surface under the feet. The lighting is bright and even, highlighting the natural skin tone and the freshness of the vegetation.

O' 'E'ã'E'ãâZEL'Êã,ã^,Eh^÷Y'Ñããã™1Ñã^÷ãZãã%÷ãu1Ñ';Ei  
-uãã™1Ñã'EãZã^YãE÷'ããã÷'1%ã'÷'Êã^1ãã^'ã;ã,ã^÷^1ã-ãÑ'ã^Ñ'Ñãã^3';ããã^÷'ãZãããEÑã  
^1;ã-ã'ãÑã';Zu'ãZããããã™1%1

## Lawn Substitutes



Lawn Substitute

**Wild Flowers are a common drain field planting.**

**Low maintenance, Nice to look at, Easy to reseed.**

## Lawn Substitutes



Lawn Substitute

**Here is a picture of shallow root low maintenance perennials**



## Hiding System Components



**Lids and ports can be unattractive**

Minimize the appearance of components without hindering access and function

<https://i.pinimg.com/474x/0c/98/8e/0c988ed9bfeb65db718ea118d4de5e36--backyard-landscaping-landscaping-ideas.jpg> (bird bath)

<http://www.jardindecamille.com/archives/2014/08/14/30400668.html> (turtle)

<https://i.pinimg.com/474x/a8/af/87/a8af8771865bf2c7bcf3ade5c29842ee--septic-tank-covers-covering-septic-tank.jpg> (fake rock)



## Hiding System Components



7-āñā<sup>™</sup> ^Zñā<sup>™</sup>uu'½÷^l<sup>™</sup>āñā<sup>™</sup> 'āñā<sup>™</sup> ^÷Y'ā<sup>™</sup> ; ā<sup>™</sup> ; 'āñā<sup>™</sup>āñā<sup>™</sup> ½ñā<sup>™</sup> 'l-ñā<sup>™</sup>ñā<sup>™</sup> āñā<sup>™</sup> ,āñā<sup>™</sup>āñā<sup>™</sup> 'āñā<sup>™</sup> āñā<sup>™</sup> āñā<sup>™</sup> ; āñā<sup>™</sup> āñā<sup>™</sup> ; āñā<sup>™</sup> ; āñā<sup>™</sup> 'u÷ñā<sup>™</sup>āñā<sup>™</sup>ñā<sup>™</sup>ñā<sup>™</sup> 'āñā<sup>™</sup> ^÷Y' āñā<sup>™</sup>

## Hiding System Components



Even a simple decorative pot on the lid in the lawn can remove the eye sore.

## Hiding System Components



**Lids and ports can be unattractive**

Minimize the appearance of components without hindering access and function

<https://i.pinimg.com/474x/0c/98/8e/0c988ed9bfeb65db718ea118d4de5e36--backyard-landscaping-landscaping-ideas.jpg> (bird bath)

<http://www.jardindecamille.com/archives/2014/08/14/30400668.html> (turtle)

<https://i.pinimg.com/474x/a8/af/87/a8af8771865bf2c7bcf3ade5c29842ee--septic-tank-covers-covering-septic-tank.jpg> (fake rock)



## Hiding System Components



-Ý'1âùÈ'^÷1%ââŦ ^ââ^È; '1ãĚšž1;ãã°;ãŦ^uu'½÷^1^'â W 706 806 -â\*B LL-\*Oâ>!@OMí



## Hiding System Components



**Or painting or creating a mosaic on the lids can change the appearance**

# Hiding System Components

Don't:

- Hide too well
- Cover with heavy or permanent objects
- Cover with things like concrete or plastic sheeting (systems & soils need "to breathe")



) ž-â B @ Å

6 °; 'âššā™ ' aa

\*šŸ'ēā °: â ' ^Ÿžāšēā' ēē ^1'1-āšl-u-āññ

\*šŸ'ēā °: ā šlue' ÷' |w ^ñ÷uāñ' '' ÷1% |w '' ; ā š÷' ā -uī

O' 'ñ' ā ē' ā Ÿ1% |ā ē' ^ ÷' 1% āžñ÷' ē Ñā 1; ā '' ; āšā ' āš½'1āšā' ' ā 1Ÿ ēšlē '1÷

- Keep easy access for emergencies
- Avoid plants that root deeply or invasively
- Kitsap County – Hard Surface – 10' away from tank



Access to your system

**Maintain easy access at all times.**

**You don't want to have to tear up your garden any more than you have to.**

**You should be pumping every 3 years.**

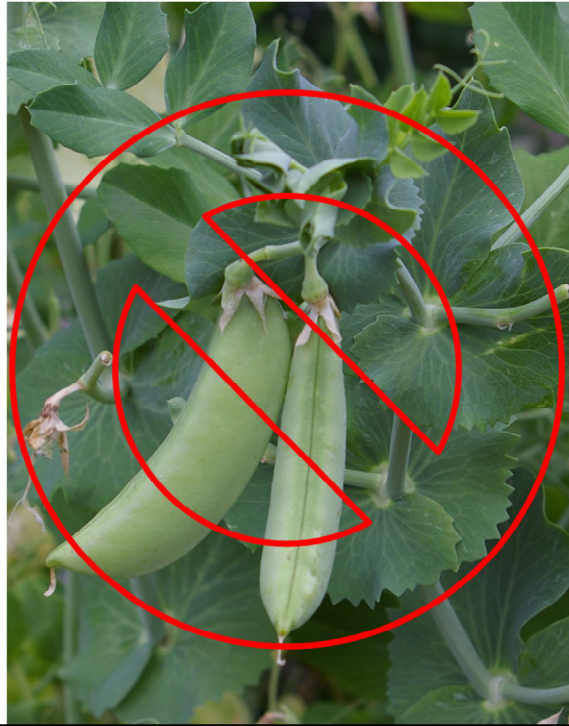
**Kitsap County – Hard Surface requirement is 10' away from tank**

**No concrete patios over you tanks – You will regret it later.**

## Non - Septic Friendly Plants

### Vegetable Gardens

- Need frequent/heavy watering
- Rototilling or Double Digging could cause damage
- Need regular access-could lead to soil compaction
- Seasonal replanting, digging can damage components
- Septic effluent contain human pathogens
- System malfunction could release raw sewage onto soil surface



### Vegetable Gardens

**I always get the question about Vegetable Gardens.**

**Vegetable Gardens should NEVER be planted on top of a drain field**

**Remember this is a living breathing Ecosystem for processing your household effluent**

**Gardens Need Frequent Watering**

**Overwatering will destroy a drain field**

**Rototilling and Turning soil disrupts the surface**

**Regular access creates compaction**

**Seasonal planting and replanting could damage the components**

**But Most of all !!!!**

**Septic Effluent contains human pathogens**

**System failures could put raw sewage into the soil**

**So just plant a Lawn and save yourself a lot of potential trouble in the future.**

MS&ZÑ-â½¹-â&^™ 1â½; ã^Ý' ä½žžëñ' a,â½s-â½,â½s÷' 1÷^â½žž1 a' â½â' 'â½ž-žè' í



Contact  
the  
Master  
Gardeners

<https://extension.wsu.edu/kitsap/gardening/>

[mastergardenerkitsap@gmail.com](mailto:mastergardenerkitsap@gmail.com)

360-228-7320

What TP is best for septic systems?

[https://youtu.be/HNtN6\\_0KLA8](https://youtu.be/HNtN6_0KLA8)



At this time, we have one last part of our presentation. We often get asked about toilet paper and what is the best kind for TP.

We've had some technical issues with our sound, so we'll try to make this work. If it does not, we will send a link afterwards.

## **RAFFLE TIME!**

---



You can protect your septic system and save money by using fewer harsh cleaning products. Instead, you can use “greener” options like vinegar, baking soda, oxygenated cleaner, and castile soap.

Make your own Green Cleaning kit with the link you will find in the resource list.

Please remember:

Do not reuse cleaning product bottles and label all cleaning products that you make

