

How Drain Fields Function

A drain field is a series of relatively shallow (6 inches or more below the surface) underground, perforated pipes in gravel trenches that allow septic tank effluent (waste) to drain over a large area. As the effluent seeps into the ground, it is treated by the soil.

Plant cover helps your septic drain system to function at its best by removing moisture and nutrients from the soil.

Permanent vegetation cover is needed to minimize topsoil loss. Open sites are more susceptible to frost, heaving, and erosion.

Some experts advise using gloves when coming into contact with the soil because sewage effluent is distributed through the soil in the drain field area.



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Cowlitz County

Landscaping Septic Drain Fields

- Do's and Don'ts -



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Planning Landscapes with Drain Fields

When making your landscape plans don't forget to leave access to your septic tank and drain field for repairs and maintenance!

The use of plastic groundcover material to minimize weeds restricts oxygen transport and interferes with the treatment process.

Root barriers (geotextile saturated with long lasting herbicide that kills plant roots) can be used but can be expensive.

Even though there are restrictions to consider when landscaping over a drain field, there are many plant options available.

Characteristics of Desirable Plants for Drain Fields



Plants must have shallow roots on a drainfield, require little or no watering, and be low maintenance.

Shallow rooted plants help avoid clogging drain lines and causing damage. **Grasses are the most ideal** as they provide year-round cover, have high evapotranspiration rates, and have fibrous root systems that stabilize the soil and prevent erosion.

Meadow grasses & mixtures of turf grasses look good and are easy to maintain.

Small, shallow-rooted ornamental grasses and low-growing ground covers also look good. Very tall grasses are not appropriate because of their deep roots.



Vegetable Gardens

Vegetable gardens, especially root vegetables, are not recommended because they require heavy watering reducing the ability to treat the wastewater, rototilling can damage underground pipes; and human and animal traffic can cause soil compaction interfering with oxygen in the soil that needs to break down the waste in the drain field.

Leachate from drain fields may carry pathogens that can be harmful to humans, which might be consumed when using vegetables that have been grown on a septic drain field site.

Remember that the proper functioning of your septic system is the main objective!

Trees and Shrubs



When planting shrubs and trees remember that the larger the plant the more extensive the root system. A general rule of thumb is that the roots spread the same distance from a plant as is the height of the plant. For example, a 20' tree will have a 20' radius of roots around it.

Be sure you know what the full-grown height will be so that it will grow a safe distance from the drain field. Most trees should be planted 20' to 30' away. Use plants that do not like water or wet soils.



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Trees and Shrubs for landscaping on Drain Fields



Use plants that do not like water or wet soils. Trees known for seeking water, such as poplar, maple, willow, and elm, should be planted a minimum of 50' away or avoided altogether.

TREES

- English Hawthorn (*Crataegus laevigata*)
- European Filbert (*Corylus avellana*)
- Glossy Buckthorn (*Rhamnus frangula*)
- Japanese Flowering Crabapple (*Malus floribunda*)
- Nanking or Manchu Cherry (*Prunus tomentosa*)
- Sargent Crabapple (*Malus sargentii*)
- Siebold Viburnum (*Viburnum sieboldii*)
- Willowleaf Pear (*Pyrus salicifolia*)

All shrubs listed grow between 2' and 15' tall



All trees listed grow between 6' and 25' tall



Additional plants and grasses listed on other side



SHRUBS

- Buttercup Winterhazel (*Corylopsis platypetala*)
- Dwarf Currant (*Ribes alpinum*)
- Dwarf Flowering Almond (*Prunus glandulosa*)
- Japanese Flowering Quince (*Chaenomeles japonica*)
- Japanese Spirea (*Spiraea japonica*)
- Mock Orange (*Philadelphus hybrids*)
- Red Chokecherry (*Aronia arbutifolia*)
- Slender Deutzia (*Deutzia gracilis*)
- Wintercreeper Euonymus (*Euonymus fortune*)

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Shallow Rooted Plants for landscaping on Drain Fields

Ground Covers (all perennial)

- Bunchberry (*Cornus Canadensis*)
- Carpet Bugle (*Ajuga reptans*)
- Hens and Chicks (*Sempervivum tectorum*)
- Irish Moss or Scotch Moss (*Sagina subulata* syn. *Arenaria verna*)
- Kinnickinnik (*Arctosaphylos uva-ursi*)
- Pachysandra (*Pachysandra terminalis*)
- Stone Crop (*Sedum species*)
- Sword Fern (*Polystichum munitum*)
- Thyme (*Thymus species*)
- Vinca (*Vinca minor*)
- Wintergreen (*Gaultheria procumbens*)

Avoid over-active plants like
English Ivy (*Hedera helix*)

Herbaceous Perennials

- Armeria or Sea Thrift (*America maritime*)
- Astilbe (*Astilbe x arendsii*)
- Basket of Gold (*Aurinia saxatilis*) - can also be used as ground cover
- Campanula or Bellflower (*Campanula species*)
- Lavender (*Lavandula angustifolia*)
- Lily of the Valley (*Convallaria majalis*)
- Snow-in-Summer (*Cerastium tomentosum*)
- Sweet William (*Dianthus barbatus*)

Herbaceous Annuals

- Ageratum or Floss Flower (*Ageratum houstonianum*)
- Begonia-Wax (*Begonia semperflorens*)
- Coleus (*Coleus species*)
- Geranium (*Pelargonium x hortorum*)
- Lobelia (*Lobelia erinus*)
- Marigold (*Tagetes patula*)
- Petunia (*Petunia x hybrid*)
- Salvia (*Salvia species*)
- Sweet Alyssum (*Lobularia maritime*)
- Zinnia (*Zinnia elegans*)

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Grasses

- Sideoats Grama (*Bouteloua curtipendula*)
- Blue Fescue (*Festuca ovina 'Glauca'*)
- Blue Grama (*Bouteloua gracilis*)
- Little bluestem (*Schizachyrium scoparium*)
- Prairie Dropseed (*Sporobolus heterolepis*)
- Perennial Ryegrass (*Lolium perenne*)
- June Grass (*Koeleria macrantha*)

Avoid very tall grasses like
Stipa gigantean

Wildflowers

- Prairie Onion (*Allium stellatum*)
- Pussytoes (*Antennaria neglecta*)
- Blazing Star (*Liatris aspera*)
- Butterfly Weed (*Asclepias tuberosa*)
- Bigleaf Aster (*Aster macrophyllus*)
- Pennsylvania Sedge (*Carex pensylvanica*)
- Prairie Clover (*Dalea spp.*)
- Purple Coneflower (*Echinacea angustifolia*)
- Wild Geranium (*Geranium maculatum*)
- Wild Bergamont (*Monarda fistulosa*)
- Penstemon (*Penstemon spp.*)
- Pasqueflower (*Pulsatilla patens*)
- Violets (*Viola spp.*)
- Yarrow (*Achillea millefolium*)

TREES & SHRUBS LISTED ON OTHER SIDE

