

Glendon® BioFilter Landscaping and Plantings ¹

The Glendon® system has a septic tank and a pump tank like other systems and the septic tank effluent is pumped to one or more Glendon® BioFilter units. Concrete basins or membrane lined containment vessels receive the septic tank effluent for processing and take the place of the typical, in the ground, leach field. The basins or containment vessels have a rim above ground level and are covered with sand and not with soil. The sand above and outside the basin form the dispersal area which is the equivalent of the drain field of a conventional septic system. The shape and extent of the Glendon® units are critical to proper treatment and dispersal of the effluent and should be maintained in the “as built” configuration.

The “units” are the most conspicuous feature of this type of a system. Generally when installed they are covered over with a fibrous, biodegradable netting and often seeded with white clover. Owners or contractors are encouraged to discuss possible landscape options with the installer prior to the start of installation who, when authorized by the owner, can leave the units with the jute mat installed to provide stability for the cover sand at the completion of the installation. If this occurs, the owner accepts the responsibility for landscaping to assure long term stabilization of the cover sand, and can then landscape the Glendon units with plants of their choice. In time, the plant roots will cover sufficient area to maintain the shape and stability of the cover sand and the jute mat will eventually erode in the soil.

Topsoil, sod, and mulches such as “beauty bark” are not recommended on Glendon units as they tend to reduce oxygen transfer to the upper horizons of the cover sand.

Trees and Shrubs

Many homeowners block off the view of the Glendon area with hedge plantings or decorative fencing. Care should be taken that the plants chosen for a hedge should be kept about 4 feet away from the units to allow for maintenance of both the units and the hedge. The plants chosen should not have aggressive runners or roots. Avoid hedges of any of the native evergreen trees such as Western Red Cedar and Hemlock. The laurels should also be avoided. Use more “friendly” plants such as the California Wax myrtle (*Myrica californica*) or smaller, slower growing boxwoods. The wax myrtle will grow tall and will need to be pruned.

It is also desirable to plant the Glendon units with a ground cover type of plant to prevent erosion of the sand and to help them blend into the landscaping. There are many ground cover plants available in the nurseries and their tags will tell you which are suitable for sun or shade.

There is a group of plants marketed as "Stepables" - they are great options for Glendon units.

Here's the link: <http://www.stepables.com/1/Plants.html>

They are all good for Glendon units as long as they are not on the noxious weed lists for a particular state and/or they are tolerant of weather conditions, temperatures and sun/shade conditions for the state that has the Glendon units in their landscapes.

¹ Adapted August 18, 2011 from Septic Landscaping and Plantings, Undated and Septic Landscaping and Plantings – Glendon BioFilters, 2009, both by Ms. Fay Linger, WSU Kitsap County Master Gardener.

Basically any shallow rooted, non-invasive plant that will cover a lot of ground and shade out weeds is a good option. You would also not want to choose any plants that need fertilizing given the makeup of the Glendon units. That practice (very little fertilizer) is used in all leach field practices too.

Some bulbs are ok if they're a bulb that thrives in sandy soil with good drainage. Definitely not dahlias or any bulb/corm/rhizomes that require frequent watering in the summer time.

There are many ornamental shallow rooted grasses that will do well on a Glendon unit.

In other words many of the plants that work well in leach fields would work well on the Glendon units - as long as they are shallow rooted and low growing.

There are also a wide variety of sedums that would work well on Glendon units; as well as plants that thrive in sandy soil.

Perennial gardens:

In sunnier locations perennial gardens can be created with mixes of ornamental grasses of different heights and can be inter planted with ground covers, small bulbs, and sun loving perennials as well as smaller, shallow rooted shrubs.

In shadier locations ferns can be used in place of the grasses and the choice of bulbs, ground covers, perennials and shrubs made accordingly. The larger ferns such as the Sword fern and the Giant Chain fern should be avoided. There are many smaller hardy ferns available in the plant nurseries.

Grasses:

The larger grasses are known to harm septic fields such as Miscanthus, Pampas grass and any Bamboo. Make your selections from the many smaller varieties, evergreen or deciduous.

Sun loving perennials and bulbs:

daffodils,
narcissus,
tulips
daylilies,
crocosmia

lavenders
heathers
astilbes
meadow rue (*Thalictrum aquilegifolia*)

Shade tolerant perennials:

Solomon's seal (*Polygonatum biflorum*)
trillium (*Trillium sp.*)
Pachysandra (*Pachysandra terminalis*)
Wintergreen (*Gaultheria procumbens*)

Lily-of-the-valley (*Convallaria majalis*)
False lily-of-the-valley* (*Aaianthemum dilatatum*)
Fringe Cups (*Tellima grandiflora*)

Some plants that are suitable for a ground cover on the units:

Coastal strawberry * (*Fragaria chiloensis*)

Kinnikinnick* (*Arctostaphylos uva-ursi*)

Wintergreen (*Gaultheria procumbens*)

Creeping rubus (*Rubus pentalobus*)

Sweet Woodruff * (*Galium odoratum*)

Dwarf periwinkle (*Vinca minor*)

Also see the WSU Power Point presentation [Plants for Glendon® BioFilters Ground Covering Plants](#).²

Once your plants are in be prepared to weed the units until the plants fill in. Watering should only be needed for the first summer, of in case of extended absence in months with little or no rainfall.

* Northwest native plants

² Plants for Glendon® BioFilters Ground Covering Plants, Peg Tillery, WSU Extension Educator, March, 2011.