APCC
Association to Preserve Cape Cod
Preserving the Very Nature of Cape Cod

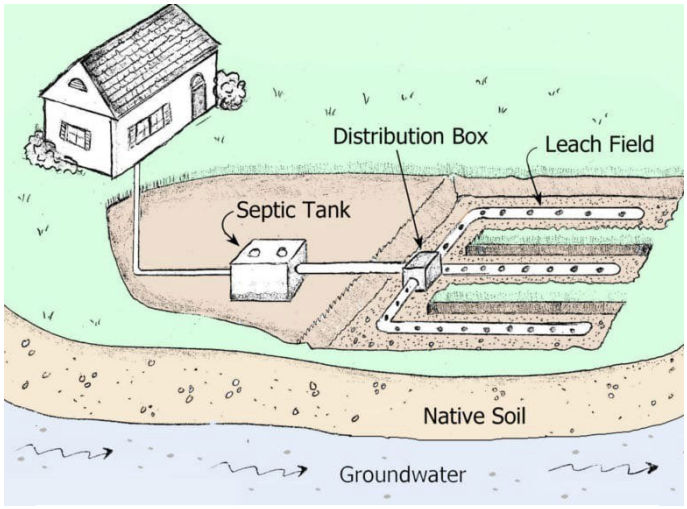
About Septic Systems ~ and advice on planting on or around the components

Most homes on the Cape have their own septic systems that consist of a septic tank and leach field. What you put down the drain first enters the septic tank, where grease and solids separate from the household wastewater. The solids settle to the bottom, grease floats to the top. As the tank fills, watery effluent leaves through an outlet to a distribution box that disperses the effluent to underground perforated pipes that spread the liquid throughout the leach field to slowly drain into the soil. In a properly functioning septic system, percolation through the soil removes harmful bacteria and viruses before they can reach the water table.

Conventional septic systems are not designed to reduce nitrogen and phosphorus, the nutrients found in our human waste. The nitrogen and phosphorus from septic systems are the "excess nutrients" that are contributing to poor water quality in our estuaries, lakes, and ponds. Because of the Cape's sandy soils and unique hydrogeology, nutrients from all of our septic systems contribute about 80% percent of the controllable nutrient load destroying our coastal embayments. The excess nitrogen stimulates algal blooms that disrupt the natural balance of the ecosystem.

Planting Considerations

Planting over a septic leach field is possible if it is done with care. If you have limited space on your property where you can garden, the leach field may be the only spot for landscaping. Although turf grass is the typical choice, there are native herbaceous perennials and groundcovers that can be planted, and we encourage you to do so.



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Planting over a leach field deserves special consideration because plant roots can clog the distribution box and associated pipes and potentially damage the drain field—an expensive problem to fix. Many herbaceous perennials are safe options because their roots will not grow deep enough to reach the pipes.

Drought tolerant species are preferred because they do not require much irrigation and their roots will not attempt to reach into the constantly saturated soil around the drainpipes.

Avoid water-loving plants that are apt to try to find additional moisture because their root systems may damage your leach field. Avoid placing trees or shrubs over or near the leach field. Woody plants have deeper and more fibrous roots that may clog drainpipes in relatively short order. Water-loving species such as willow, poplar, elm, red and silver maple, birch, and beech should be avoided.

If you do plant a tree, position it towards the end of the drainage line where there is less water to draw roots in the direction of the leach field. Try to consider how far the roots will spread as the tree matures. Roots will typically extend at least as far from the trunk as the tree is tall, but likely more.

Vegetable gardening over a leach field is not recommended. Although properly functioning septic systems won't contaminate the soil with harmful pathogens, there is no easy way to guarantee that the crops grown over a leach field will be safe to eat if your system is not functioning as designed. Unfortunately, placing raised beds over the drainage area isn't a good solution either. The added soil depth of the beds may make it harder to detect if your system has failed and that there is surface breakout of effluent.

Suggested Native Perennials

- Barren Strawberry, *Waldsteinia fragarioides*
- Beardtongue, *Penstemon digitalis*
- Black-eyed-Susan, *Rudbeckia hirta*
- Blazing Star, *Liatris spicata*
- Butterfly Milkweed, *Asclepias tuberosa*
- Golden Alexanders, *Zizea aurea*
- Wild Bergamot, *Monarda punctata*
- Spotted Bee Balm, *Monarda punctata*
- Little Bluestem grass, *Schizachyrium scoparium*
- Purple Lovegrass, *Eragrostis spectabilis*
- Wild Columbine, *Aquilegia canadensis*
- Wild Geranium, *Geranium maculata*
- Goldenrod, *Solidago* species
- Aster, species
- Tickseed, *Coreopsis* species
- Yarrow, *Achillea* species
- Purple Coneflower, *Echinacea purpurea*

Ferns

- Cinnamon Fern, *Osmundastrum cinnamomeum*
- Eastern Wood Fern, *Dryopteris marginalis*
- Lady Fern, *Athyrium filix-femina*
- Royal Fern, *Osmunda regalis*
- Christmas Fern, *Polystichum acrostichoides*

Groundcovers

- Wild Ginger, *Asarum canadensis*
- Wintergreen, *Gaultheria procumbens*
- Bearberry, *Arctostaphylos uva-ursi*
- Moss - preserve what is naturally occurring.

References: https://extension.unh.edu/blog/2019/12/it-okay-plant-garden-over-leach-field and https://www.epa.gov/septic/how-care-your-septic-system