



PLANT SELECTION

Proper plant choice for landscaping in the vicinity of onsite wastewater systems is a concern for many property owners. The key is to select plants that will satisfy landscaping needs while not harming the function of the system. The following information is provided to assist in your selection.

The major risks regarding incorrect landscaping choices involve the following:

- Infiltration of a system by roots effectively blocking pipes, breaking tanks, and clogging gravel in leachfields
- The prevention of evapo-transpiration of water from and the transfer of oxygen to a system
- The addition of excess water via irrigation to fields designed to dispose of wastewater

A system may consist of the following units:

- Septic tank, sump tank, tightline, filters, diversion valves, leachfield(s), mound(s), and sub-drains

The septic and sump tank are designed to retain water for delivery into the treatment units. The infiltration of roots into these tanks can jeopardize the integrity of the tanks and allow either infiltration of groundwater or exfiltration of effluent directly into the surrounding soil.

Roots may interfere with the proper operation of any of these units. Roots from trees, large shrubs and ice plant have been seen to block 4" pipes and completely infiltrate the gravel of a disposal system, rendering the system useless.

Please use the following information as a guideline for protecting your onsite wastewater system from undue stress:

- Trees or large shrubs should *not* be planted directly on or near a sand filter, leachfield(s) or mound(s) of either a pressurized or gravity system. Trees and shrubs that are especially suspect include the following, which is a partial list:
Monterey Pine, Monterey Cypress, Eucalyptus, Willow, Bay, Pepper, Poplar, Alder, Aspen, Mayten, Birch, Juniper, and Echium.
- Ivy and ice plant retain too much water and restrict evapo-transpiration, and the roots clog pipes and gravel. It is recommended that these plants be avoided in landscaping in and around the tanks, sand filter, and leachfield.
- Do not cover either your sand filter or leachfield with plastic, as this effectively prevents the transfer of oxygen and water.
- Sod that requires frequent watering should be avoided because the excess water added to the sand filter or leachfield area might result in saturation.
- As a general rule, minimize activities on a sand filter or leachfield area to minimize soil compaction. Never drive across a sand filter or leachfield.
- Remember there is generally only about twelve inches (12") of cover soil between grade and gravel and pipes. Plants with roots that extend beyond twelve inches should be avoided in and around the tanks, sand filter, and leachfields. **Generally, drought-tolerant and non-invasive plants with shallow roots are preferred.**

The following is a list of plants recommended for mound or pressurized systems. Plants marked with an asterisk* are non-native:

Herbaceous Plants

1. *Achillea millefolium*, species Yarrow
2. *Artemisia schmidtiana*, "Silver Mound" Artemisia*
3. *Cosmos bipinnatus*, "Dazzler" Cosmos*
4. *Cosmos bipinnatus*, "Radiance" Cosmos*
5. *Cosmos sulphureus*, Yellow Cosmos*
6. *Dietes iridioides*, Fortnight Lily*
7. *Eschscholzia californica*, California Poppy
8. *Equisetum telmateia* var. *braunii*, Giant Horsetail
9. ***Festuca californica*, California Fescue
10. ***Festuca rubra*, Red Fescue
11. ***Festuca ovina glauca*, Blue Fescue
12. *Lantana montevidensis*, Trailing Lantana*
13. *Mimulus aurantiacus*, Sticky Monkey Flower
14. *Mimulus cardinalis*, Scarlet Monkey Flower
15. *Stachys byzantia*, Lamb's Ears*
16. *Tropaeolum majus*, Nasturtium
17. *Verbena lasiostachys*, Common Verbena
18. *Verbena lasiostachys* var. *scabrida*, Robust Verbena
19. *Zauschneria californica*, California Fuchsia

** Some fescue are invasive; be sure to limit their use to the species listed.

Bulbs

1. *Allium unifolium*, Meadow Onion
2. *Amaryllis belladonna*, Naked Lady*
3. *Iris douglasiana*, Douglas Iris
4. *Narcissus*, species Daffodil*
5. *Triteleia ixioides*, Prettyface
6. *Triteleia laxa* Ithuriel's Spear
7. *Tulipa*, species, Tulip*

Source: <http://grownatives.cnps.org/2010/04/02/seasonal-color-with-california-bulbs/>

Succulents and Herbs

There are many varieties to choose from, in particular, the native *Sedum spurium* 'Tricolor'. DO NOT plant ice plant (*Carpobrotus edulis*.)

Woody Groundcovers

1. *Arctostaphylos uva-ursi*, Bearberry
2. *Arctostaphylos densiflora*, Manzanita Emerald Carpet
3. *Baccharis pilularis*, Coyote Bush
4. *Ceanothus*, species various prostrate forms
5. *Juniperus californica*, California Juniper
6. *Mahonia repens*, Creeping Mahonia
7. *Rosemarinum officinalis*, Prostrate Rosemary*

This plant list was compiled in collaboration with the Marin Resource Conservation District.

References: Stinson Beach Water District
Sonoma County Permit & Resource Management Department

All County publications are available in alternative formats (Braille, Large Print, or CD), upon request. Requests for accommodations may be made by calling (415) 473-4381 (Voice) 473-3232 (TDD/TTY) or by e-mail at disabilityaccess@marincounty.org. Copies of documents are available in alternative formats, upon request.