plant choices

Landscaping Examples

Many types of plants are well suited for onsite stormwater management. You can design your site to fit in with any number of aesthetics and still provide stormwater management and other landscaping benefits.

Here are a few examples from around Portland, with photographs of each facility followed by a list of the plants included in each. Note the placement of plants listed here such as in the bottom, on the slopes of, and upland of a facility. Different plants will have a different tolerance to wet and dry conditions. Consider the constraints of each site; all plants pictured here will not be suitable for every situation. See the Portland Stormwater Management Manual for a more comprehensive list of appropriate plants.

Stormwater Facility Science

The surface area of a typical stormwater facility allows runoff to pond and evaporate while sediments settle into a layer of mulch. The organic mulch layer prevents soil bed erosion and retains moisture for plant roots. It also provides a medium for biological growth and the decomposition or decay of organic matter.

The soil stores water and nutrients to support plant life. Worms and other soil organisms are very good at degrading organic pollutants, like petroleum-based compounds. They also help mix organic material, increase aeration, and improve water infiltration and water holding capacity. Bacteria and other beneficial soil microbes process the majority of pollutants, including most of the nitrogen.

The stiff structure of plants such as rushes and sedges slows water passage and traps sediments within the surface area of the facility.
Stormwater Planters

Mississippi Commons

1. Grooved rush  
2. Red twig dogwood  
3. American cranberry bush  
4. Camas lily  
5. Yellow-eyed grass  
6. Sword fern  
7. Hardstem bulrush

(Not pictured)
Creeping Oregon grape  
Curly sedge

(NOT PICTURED)
Creeping Oregon grape  
Curly sedge

Stormwater Planters

The ReBuilding Center

1. Red twig dogwood  
2. Baltic rush  
3. Highbush cranberry  
4. Pacific ninebark  
5. Tufted hairgrass  
6. Slender rush  
7. Nootka rose  
8. Pacific crabapple  
9. Douglas spiraea or Hardhack

Not Pictured:
Common camas  
Yellow monkey flower  
Douglas iris  
Slough sedge

STORMWATER SOLUTIONS HANDBOOK  -  Environmental Services - City of Portland Oregon
**Infiltration Basins / Raingardens**
Buckman Heights Apartments

1. Tall Oregon grape  
   *Mahonia aquifolium*
2. Douglas spiraea or Hardhack  
   *Spiraea douglasii*
3. Siberian iris var.  
   *Iris sibirica*
4. David viburnum  
   *Viburnum davidii*
5. Daylily var.  
   *Hemerocallis sp. var.*
6. Littleleaf boxwood  
   *Buxus microphylla var.*

**Parking lot Swales**
Glencoe Elementary School

1. Creeping Oregon grape  
   *Mahonia repens*
2. Grooved rush  
   *Juncus patens*
3. Slough sedge  
   *Carex obnupta*
4. Salal  
   *Gaultheria shallon*
5. Spanish lavender  
   *Lavandula stoechas var.*
6. Blue arctic willow  
   *Salix purpurea nana*
7. Native wetland grass mix  
   *Acetabulum sempervirens*
8. Sugar Maple  
   *Acer Sacharrum*
9. Vine Maple  
   *Acer Circeinatum*

Not pictured:
- Dense sedge  
- Kinnikinnick  
- Tall blue oat grass  
- Carex densa  
- Arctostaphylos uva-ursi  
- Helictotrichon sempervirens
Ecoroof
Hamilton West Apartments
Plants include the following mix:
- Cascade stonecrop Sedum divergens
- Spanish stonecrop Sedum hispanicum var.
- White stonecrop Sedum album
- Biting stonecrop Sedum acre
- Reflexed stonecrop Sedum reflexum
- Tasteless stonecrop Sedum sexangular
- Iceplant Delosperma var.
- Autumn joy sedum Sedum telephium var.
- Blue fescue Festuca glauca
- Two-row stonecrop Sedum spurium var.
- Pink Dianthus sp. var.

Ecoroof
Multnomah County Building (deeper soil base)
Plants include the following mix:
- Corn poppy Papaver rhoeas
- English wallflower Chelianthus Cheiri
- Sweet William Dianthus barbatus
- Maiden pink Dianthus deltoides
- Spurred snapdragon Linaria maroccana
- Plains coreopsis Coreopsis tinctoria
- Missouri evening primrose Oenothera missouriensis
- Telephium sedum Sedum telephium var.