



infiltration  
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# INFILTRATION PLANTERS

Infiltration planters are structures or containers with open bottoms to allow stormwater to slowly infiltrate into the ground. They contain a layer of gravel, soil, and vegetation. Stormwater runoff temporarily pools on top of the soil, and then slowly infiltrates through the planter into the ground. Infiltration planters come in many sizes and shapes, and are made of stone, concrete, brick, plastic lumber, or wood. Infiltration planters are not recommended for soils that don't drain well. Use flow-through planters instead.



## Benefits

Infiltration planters are ideal for space-limited sites with good drainage. They reduce stormwater runoff flow rate, volume, temperature and pollutants, and recharge groundwater. Infiltration planters can be attractive, and are easily integrated into the overall landscape design. They can also provide energy benefits when sited near building walls.

## Vegetation

Infiltration planters can contain a variety of shrubs, small trees, and other plants appropriate for seasonally moist and dry soil conditions. Avoid permanent irrigation if possible. Planters are likely to need watering and weeding in the first one to three years.

## Maintenance

Inspect plants and structural components periodically. Remove sediment and clear debris from inlet pipes and curb cuts to maintain proper drainage.

## Cost

Costs vary depending on size and materials. For new development and redevelopment, infiltration planters are often less expensive than more conventional stormwater management facilities.

## Safety and Siting Requirements

- Infiltration planters located closer than ten feet from foundations need a variance from Bureau of Development Services (BDS).
- Locate planters at least five feet from any property line.
- Infiltration planters are only suitable for soil types that drain well.
- Place them flush to the ground or above it.
- An approved overflow to a proper destination/disposal point is required.
- Refer to Portland's Stormwater Management Manual for details on sizing, placement, and design.

## Permits

- Infiltration planters that require alteration of downspouts or other piping require a plumbing permit from BDS.
- Depending on the size of ground disturbance, in-ground systems may need a clearing and grading permit from BDS.
- The stormwater management portion of the facility must be reviewed by the Bureau of Environmental Services (BES).
- Stormwater systems on non-residential sites need commercial building permits.

## Examples

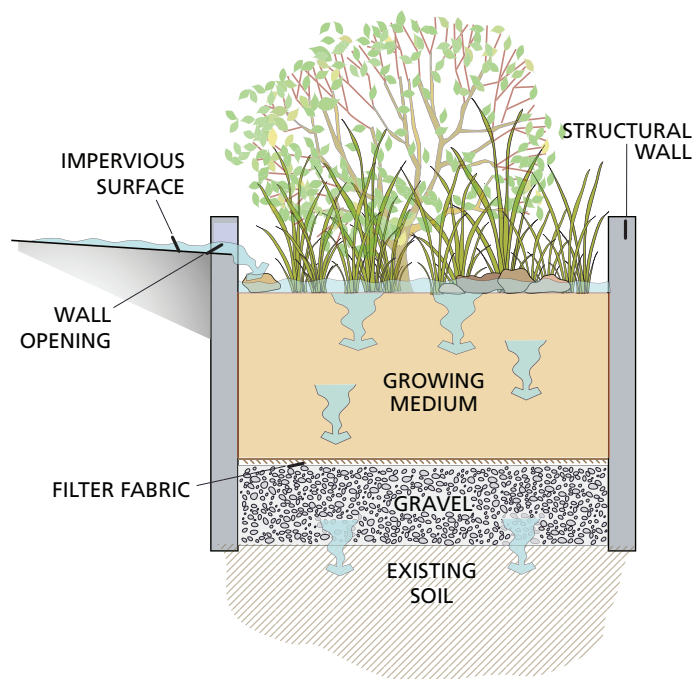
Liberty Centre Parking Garage,  
600 NE Holladay

Buckman Terrace Apartments,  
303 NE 16th Ave.

The ReBuilding Center of Our United Villages,  
3625 N. Mississippi Ave. (on Missouri Street)

PSU Green Street,  
SW 12th between Montgomery and Mill

Mississippi Commons  
3701 N Mississippi Avenue



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[www.cleanriverspdx.org](http://www.cleanriverspdx.org) or 503-823-7740

For Clean River Rewards information [www.CleanRiverRewards.com](http://www.CleanRiverRewards.com) or 503-823-1371

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