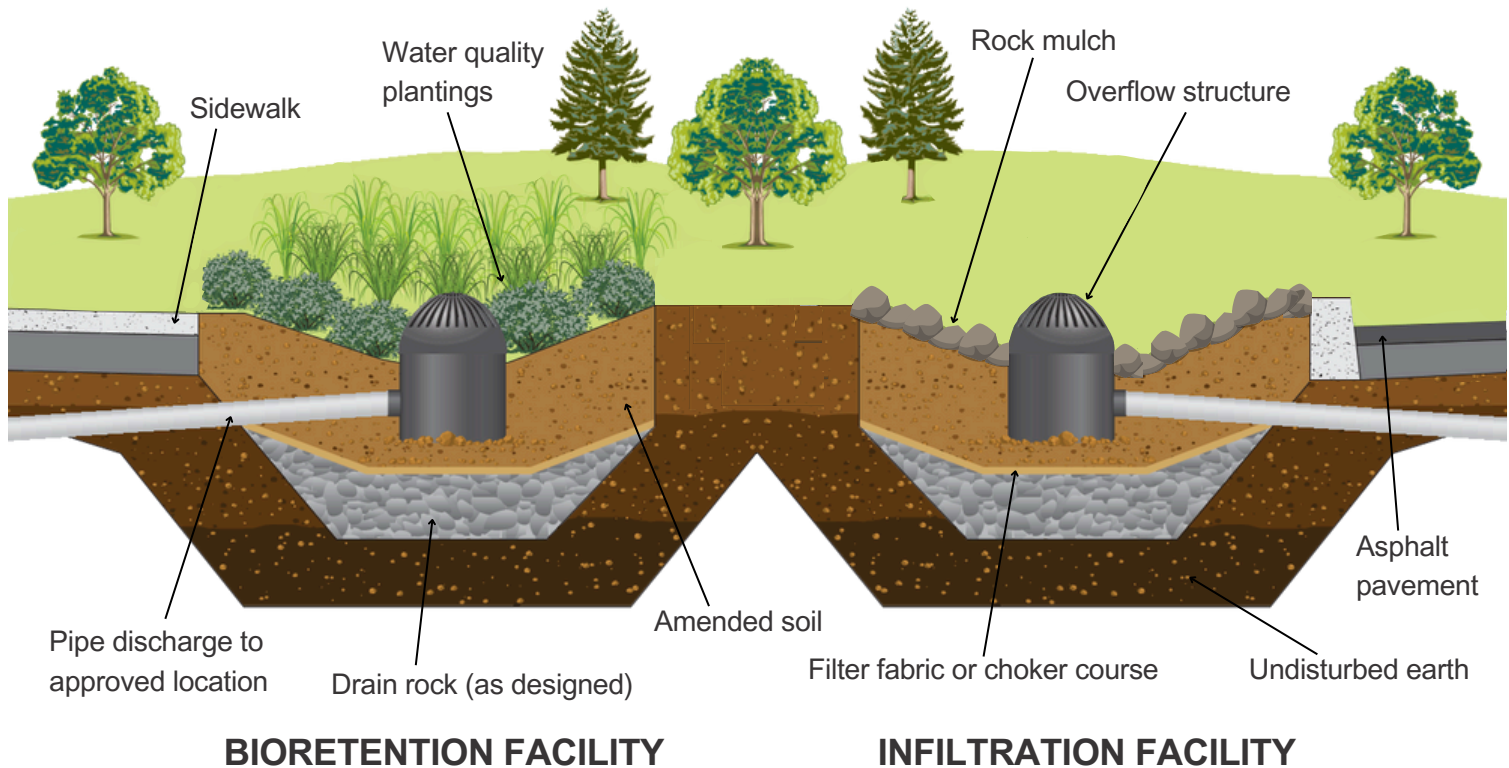




BIORETENTION/INFILTRATION Maintenance Guideline



What does your bioretention/infiltration facility do? Why is it important?

By design, bioretention/infiltration facilities capture and promote infiltration, allowing stormwater to sink into the soil like it would naturally. These facilities protect the environment by naturally removing pollutants such as phosphorus, nitrogen, and heavy metals. This process helps prevent pollutants from entering the Deschutes River and underground drinking water supplies.

Why is it important to maintain your facility?

Without proper maintenance, bioretention facilities will be effective at removing pollutants and infiltrating stormwater. It is important to keep plants healthy, remove sediment, and pick up trash. In Bend, our stormwater facilities serve an important function and property owners are required to keep and maintain them per Bend Code Title 16. Just remember, a few things will go a long way in the effort to keep our waters clean and to prevent localized flooding.

What tools do you need?

All you need is a sturdy pair of gardening gloves, a pair of shears, a shovel, the attached checklist, pen, and a little bit of time. It also helps to have a copy of your site plan to verify location and design. This can typically be found in your maintenance agreement. If you do not have access to a copy of your site plan, please contact the City for assistance (see back).



Bad Example

Remove any debris, sediment, and/or vegetation that may be preventing the water from flowing into or out of the bioretention basin. Repair rip-rap if damaged.

Where erosion is present provide stabilization by adding mulch, vegetation, and/or geotextiles. Determine why erosion is occurring and see if it can be prevented by discouraging foot traffic or diverting water elsewhere/ evenly.

Lack of vegetation; replanting needed per design.

Remove pieces of trash.

Good Example

Proper Vegetation. Weeds and invasive plants have been pulled out by the roots to prevent them from returning. Shrubs have been trimmed as needed.

Sediment that has accumulated in the inlets, outlets, and bottom of the basin has been removed with a shovel or other appropriate tool.


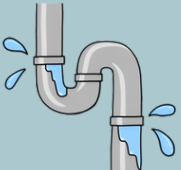






Bioretention/Infiltration Inspection and Maintenance Checklist

Property Address: _____ Property Owner/Responsible Party: _____

Facility Name/ID: _____ Date of Inspection: _____

Type of Inspection: ☐ Pre-rainy Season ☐ Monthly ☐ Quarterly ☐ Annual ☐ Re-inspection

Inspector(s): _____ Email: _____ Phone Number: _____

Defect	Conditions when maintenance is needed	Maintenance needed? Yes/No	Comments ¹	Results expected when maintenance is performed
 <p>Sediment</p>	Accumulated sediment in the facility inlet(s) or outlet(s)			Sediment removed and area reseeded if necessary to control erosion
 <p>Damaged pipes</p>	Any part of the piping that is crushed or deformed more than 20% or any other failure to the piping			Pipe repaired and/or replaced.
 <p>Vegetation</p>	Planted vegetation becomes excessively tall Presence of poisonous or nuisance vegetation or noxious weeds			Vegetation mowed per specifications or maintenance plan, so that flow is not impeded; vegetation should never be moved lower than the design flow depth; remove and dispose of clippings Management of poisonous or noxious vegetation
 <p>Erosion</p>	Eroded over 2 inches deep, where cause of damage is still present, or where there is potential for continued erosion			Cause of erosion is managed appropriately; areas remulched to fill in voids
 <p>Contaminants and pollution</p>	Any evidence of oil, gasoline, contaminants, or other pollutants.			Oil and contaminants removed and properly disposed; no contaminants or pollutants present.
 <p>Trash and debris</p>	Trash and debris accumulated in basin Visual evidence of dumping			Trash and debris cleared from site
 <p>Tree/brush growth and hazard trees</p>	Growth does not allow maintenance access or interferes with maintenance Dead, diseased, or dying trees			Trees do not hinder maintenance Remove hazard trees as approved by the City <i>Use a certified arborist to determine health of tree or removal requirements</i>
 <p>Mosquito vector breeding</p>	Suitable habitats exist for mosquito production (e.g., standing water for more than 72 hours in areas accessible to mosquitoes)			Standing water no longer exists or is inaccessible to mosquitoes.

¹Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done

Additional Resources

City of Bend
Stormwater Home Page



City of Bend
Standards and Specifications



CITY OF BEND
WATER SERVICES

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Bend, Oregon 97701

541-317-3000 Ext. 2
FAX: 541-317-3046



Accommodation Information for People with Disabilities

To obtain this information in an alternate format such as Braille, large print, electronic formats, etc., please contact the City of Bend Stormwater Program at stormwater@bendoregon.gov or 541-317-3000 ext. 2.