



Infiltration Trenches

Controlling Stormwater Runoff

Lake friendly living
means using lakeshore
BEST MANAGEMENT
PRACTICES

BMP

Infiltration Trenches: Acceptable best management practice for addressing stormwater runoff from impervious surface under the Shoreland Protection Act (Chapter 49A of Title 10, § 1441 et seq.).

LAKE BENEFITS

Infiltration trenches manage runoff from paved areas, rooftops, and other impervious surfaces. Their function is to provide ground water recharge and prevent stormwater discharge from entering the lake.

MATERIALS


Crushed stone can be purchased at your local gravel pit. Other geotextiles, including landscaping weed barrier, can be substituted for smaller projects. These landscaping materials are typically available at garden centers.

Description: An infiltration trench is a rock-filled trench with no outlet that receives stormwater runoff. Runoff is stored in the void space between the stones and infiltrates through the bottom and into the soil matrix. The primary stormwater removal mechanism of this practice is filtering through the soil.

Purpose: Infiltration trenches collect and infiltrate runoff from paved driveways, rooftops and other areas. Infiltration trenches work best in well-drained soils like sands and gravels. Infiltration trenches are typically used to treat stormwater runoff from rooftops and walkways and are not well suited for areas that generate large amounts of sediment as they will fill-in quickly (e.g., gravel driveways).

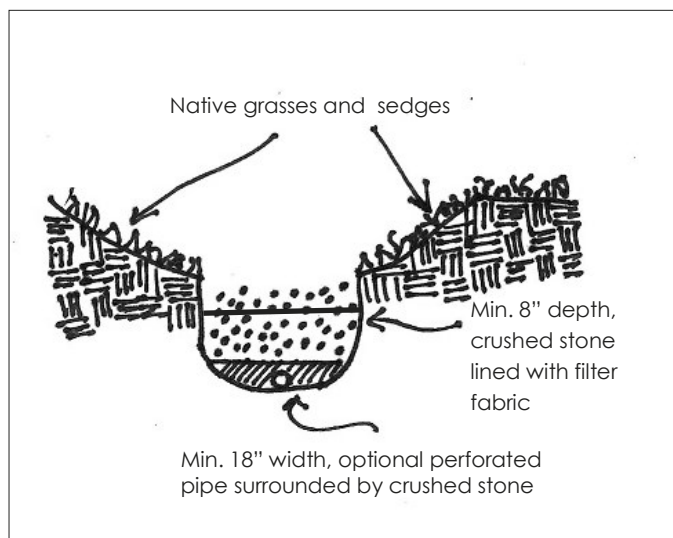
How to:

1. Locate an area below a rooftop or beside a paved drive- or walk-way that receives runoff during rain events and is **set back at least 50 feet from your septic system.**
2. Dig a trench that is a minimum of 18" wide and 8" deep. Make sure to dispose of the soil in a flat area where it cannot be washed into the lake.
3. The front and sides of the trench may be edged with stone/lumber to hold the stones in place and planted with native grasses and sedges. Extend the life of the infiltration trench by lining the sides with non-woven geotextile fabric.
4. Fill to within 3" of the ground level with ½" to 1½" crushed stone.
5. Fold a flap of non-woven geotextile fabric over the top of the trench and top off with additional stone.

Maintenance:  To maintain these structures, periodically remove accumulated debris and weeds from the surface. Non-woven geotextile fabric will extend the life of these structures, however, they will eventually clog over time and the stone will need to be removed and washed.



Source: Maine DEP



Source: Vermont Low Impact Development Guide for Residential and Small Sites

