

Infiltration Sumps

Help Protect Your Watershed

Stormwater infiltration sumps are below-ground structures used to collect storm runoff and pass it into the surrounding soil. Infiltration sumps are best used in areas where the underlying soils are moderately to highly permeable, and the water is well below the ground surface. They are generally more applicable in residential areas that are less than 50% impervious and for smaller feeder streets.

How it works:

The infiltration sumps collect runoff in standard storm water inlet structures at the ground surface, and route it to a manhole structure and an attached sump chamber. As the manhole chamber fills, flow reaches an overflow point and begins to fill the second chamber. Perforations in the second chamber allow the water to infiltrate the soil.

20 - 35 feet

The typical depth of sump chambers.

**\$2 - \$8
per
1,000 gallons**

The cost range per year.

Advantages of Infiltration Sumps

- Take up no additional space
- Provide volume reduction and promote groundwater recharge

Typical Design Parameters

- 4-foot diameter
- 30-foot depth
- Serves 1.5 acres

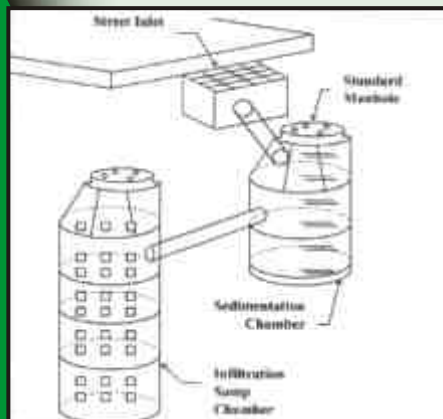
Case Study

Approximately 4,000 infiltration sumps have been installed in Portland, OR, between 1994 and 1998. Combined with other combined sewer overflow control programs, Portland estimates that the total CSO volume reduction will be 3 billion gallons per year, or half of the total CSO volume. The sumps cost between \$5,000 and \$10,000 per installation, including catch basins.

Maintenance

Sumps need to be cleaned every two to three years to remove sediments and debris.

If you would like more information, please check our web site at: www.mmsd.com or call 414-272-5100



In cooperation with the
2020 Facilities Plan

