Fact Sheet

Identifying an Underground Injection Control

State of Oregon
Department of
Environmental
Quality

Operations Division
Underground Injection Control Program

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Background

An underground injection control is a type of stormwater management system that is used to infiltrate stormwater runoff into subsurface soils. However, not all stormwater management systems that infiltrate runoff are UICs. Because most UICs must be authorized by DEQ, it is necessary to determine whether a stormwater management system is a UIC.

What is a UIC?

According to Oregon Administrative Rule 340-044, a stormwater management system is a UIC if one or more of the following are true:

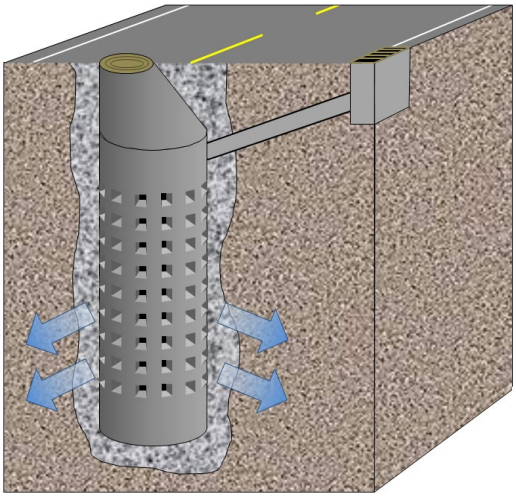
- The system is a well, assemblage of perforated pipes, or drain tiles constructed with the intent of infiltrating surface runoff into the subsurface
- The system infiltrates surface runoff into the subsurface, and is deeper than its largest surface dimension

Based on these definitions, stormwater management systems that qualify as UICs include:

- Drywells and drillholes, which are wells completed so that the bottom and sides are typically dry except when receiving fluids
- Systems that use perforated pipes to infiltrate stormwater without first allowing the stormwater to infiltrate through soils

Stormwater management systems that are not UICs include:

- Systems that use perforated pipe that collects stormwater that has infiltrated through soils (i.e., trench drains, foundation drains, and tile drains)
- Detention devices that detain stormwater before directing the water to another area (note: infiltration from detention devices must be negligible; infiltration is negligible if the device is installed in a clay)
- Swales, ponds, porous pavers, and porous concrete that do not use a pipe to emplace fluids beneath the surface



Schematic of a vertical drywell. Arrows represent infiltrating stormwater.

Figures 1 through 3 on the following pages show stormwater management systems with and without design elements that define the system as a UIC.

UICs That Do Not Require DEQ Authorization

Some stormwater management systems are UICs, but do not need formal authorization from DEQ because they are automatically rule authorized by the Safe Drinking Water Act. For example, UICs that inject roof-only runoff from single family residential home do not require authorization by DEQ.

For more information please contact:

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UIC website:
www.oregon.gov/deq/wq/wqpermits/Pages/UIC.aspx

Alternative Formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.oregon.gov.

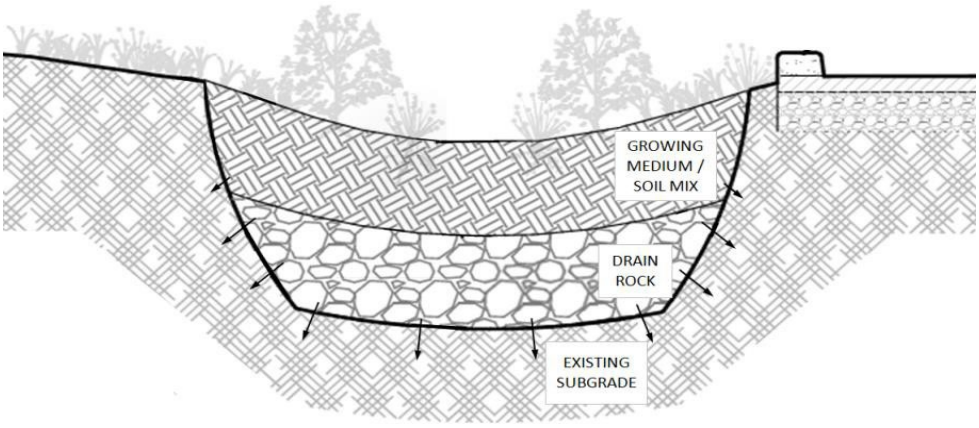

Figure 1. Use of drain rock storage area in green infrastructure is not a UIC.

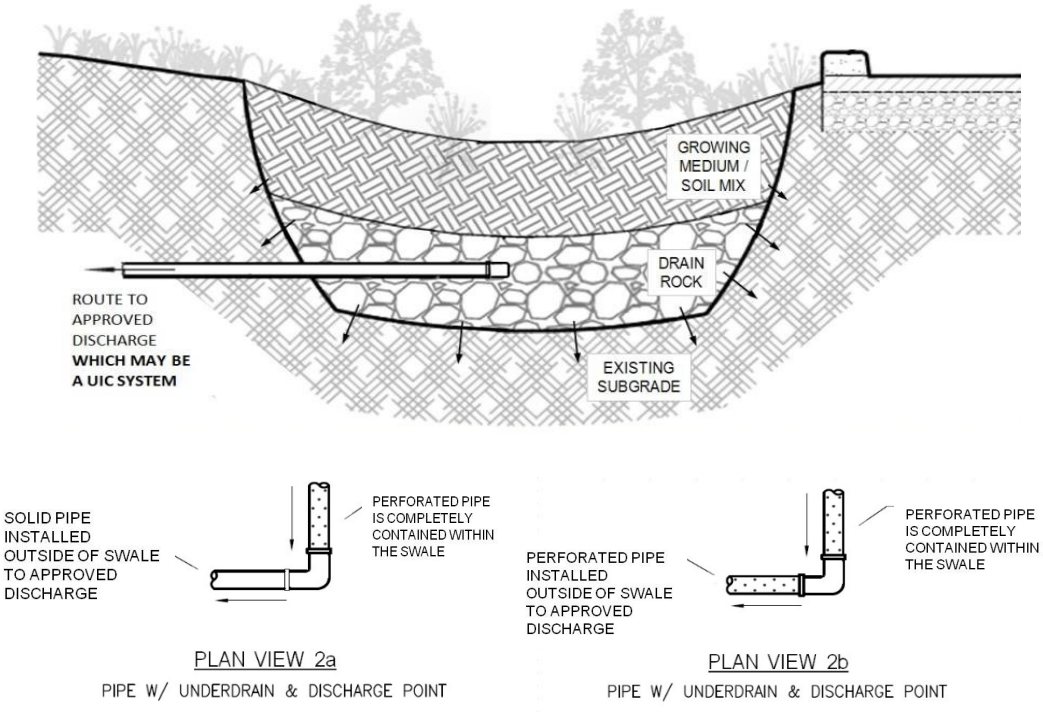

Figure 2. If a swale uses perforated pipe to discharge water in the subsurface, it is considered to be a UIC.

Plan View 2a. The perforated pipe collects and conveys water to approved discharge (for example, sewer). This is not a UIC.

Plan View 2b. Perforated pipe routes water to an approved discharge point, but also functions to discharge water into the subsurface. Therefore, this is a UIC system.

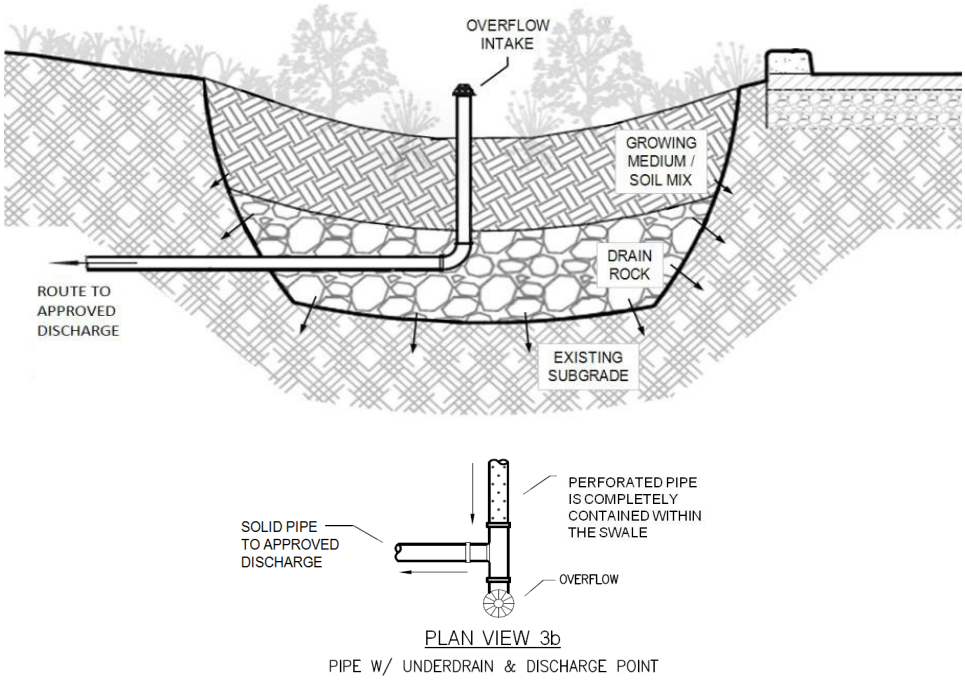

Figure 3. If perforated pipes only collect and convey stormwater, and the perforated pipes are located within the swale, then the swale is not considered to be a UIC.

Plan View 3b. The perforated pipe runs the length of the swale, collects stormwater, and conveys the stormwater to an approved discharge. This is not a UIC.

Drawings in Figures 1-3 were adapted from City of Portland's Stormwater Management Manual, 2008.