



Rooftop Downspout Disconnection & Dry Wells

Controlling water runoff

Lake friendly living
means using lakeshore
BEST MANAGEMENT
PRACTICES

BMP

Rooftop Downspout
Disconnection & Dry Wells

STANDARDS

Structures/Septic

- No erosion caused from impervious surface runoff
- Less than 20% of property contains impervious surfaces

LAKE BENEFITS

Disconnecting roof gutter downspouts from the sewer system, driveways or roads and installing dry wells allows roof water to drain to soil, lawns and gardens. It's a more natural way to manage roof runoff because it allows water to soak into the ground, plants and soils that filter pollutants and prevent them from entering the lake.

MATERIALS

Hacksaw, sheet metal screws, drill, downspout elbow, tape measure, downspout extension, pliers, standpipe cap, splash block, geo-textile cloth, crushed stone and gravel.

Rooftop Downspout Disconnection

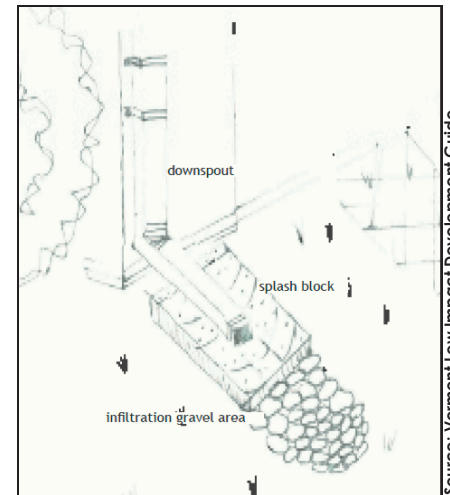
Description: Disconnecting a roof gutter downspout from a standpipe that connects to a sewer system or enhancing a downspout to prevent drainage onto an impervious surface.

Purpose: Disconnecting your downspout from a sewer intake pipe (standpipe), road or driveway, and then redirecting the flow of water to a grassy area or garden is a simple way to keep runoff onsite and reduce runoff impacts to surface water resources.

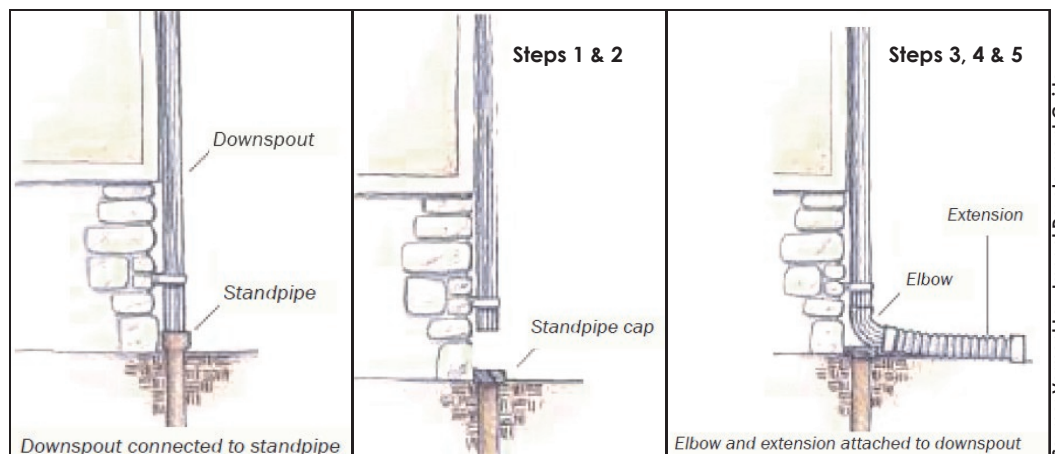
How to:

1. Cut the existing downspout approximately 9 inches above the sewer standpipe with a hacksaw.
2. Cap the sewer standpipe.
3. Attach elbow, crimping the downspout with pliers to ensure a good fit.
4. Connect elbow to downspout using sheet metal screws. It may be necessary to pre-drill holes.
5. Attach the elbow to the extension, securing with sheet metal screws. Water should drain at least five feet away from the house, so direct the extension accordingly. A splash block will help direct water further away from the house.

Note: There are different types, lengths and sizes of standpipe caps, so be sure to take measurements before shopping. Capping the standpipe prevents water from going in and keeps pests (such as rodents) from entering/exiting the pipe.



Source: Vermont Low Impact Development Guide



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Dry Wells

Description: A Dry Well is a subsurface storage facility that temporarily stores and infiltrates stormwater runoff from the roofs of residential and small structures. Roof leaders connect directly into the Dry Well, which may be either an excavated pit filled with uniformly graded stone, wrapped in geotextile or a prefabricated storage chamber or pipe segment.


Purpose: Dry wells collect and infiltrate runoff at gutter downspouts and other places where large quantities of concentrated water flow off rooftops. These systems help control erosive runoff on your property, and reduce wear on your house by minimizing back splash.



How to: Dry wells should measure about 3' x 3' x 3', be lined with non-woven geotextile fabric and back-filled with 1/2" to 1 1/2" crushed stone. Slope the bottom of the drywell away from the house so that water does not drain towards the foundation. Make sure to dispose of the removed soil in areas where it will not wash into the lake.

Extend the life of the dry well by lining the sides with non-woven geotextile fabric and filling to within 3" of the ground level with stone. Fold a flap of filter fabric over the top of the dry well and top off with additional stone.

Note: Dry wells work best in sand and gravelly soils that can quickly disperse a large volume of water. They should not be used on structures with improperly sealed foundations, as flooding may result. If flooding is of concern, place the drywell 6' away from the base of the foundation.

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 to clean out the accumulated sediment and debris.

