

Rain to stream: how homeowners can help keep our water clean

Downspout Disconnect Program - Overview

Are the downspouts at your home connected to an underground pipe?

If so, the water collected from your roof goes to a storm drain that leads directly to our local waterways. The pipe may outlet at the street curb which then washes to the storm drain, picking up pollutants along the way. Or, it may be connected directly to an underground storm pipe.

Water that is directed to pipes is **not** treated to remove pollution. Pollution reduces the health of our waterways and their ability to sustain wildlife, like threatened trout and salmon.

During heavy rains water channeled by connected downspouts cause intense flows that scour waterways and cause erosion. This harms the health of the river for fish and other animals, as well as threatens property by eroding stream banks.

But you can help!

How the water flows in your neighborhood:

- 1 Connected downspout
- 2 Weep hole to street
- 3 Storm drain
- 4 Storm drain discharge to creek

Disconnect your downspouts to let water soak into the ground (infiltrate)!

Water that infiltrates into the ground reduces erosion and recharges the groundwater supply that slowly seeps into our rivers, the way it has for thousands of years.

Is this really a big deal?

- **Yes!** For every inch of rainfall, we can expect to collect 600 gallons on 1,000 square feet of collection area.
- An average single family home with a 1,500 square foot roof will generate about **33,300 gallons of water a year** (assuming we get 37" of precipitation a year). That could fill a pretty big swimming pool!
- Rainwater washes across roofs carrying debris like shingle materials, bird/animal feces, moss, leaves, etc.
- In older neighborhoods, many downspouts lead to weep holes in the curb essentially washing pollutants along curbs, into drains only meant for clean rainwater. These pollutants include lawn cuttings, fertilizers, weeds, leaves, car wash soap, automotive oils/greases and other pollutants.



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A partnership project with:



Let the water soak in - ways to manage downspout runoff:



Splash block

Move water away from home and foundation to disperse into a lawn or landscape area.

- Lots of styles and choices available
- Add an artistic element to the landscape
- Materials include concrete, plastic or other durable material
- Low cost option to prevent erosion during heavy rains



Infiltration trench

Move water away from home and foundation into a trench filled with stones or rocks to let water slowly seep into the ground.

- Inexpensive option to build
- Can use a variety of stone or rock to compliment the landscape style.
- Use a downspout extension if needed to reach trench



Permeable pavers

Direct water from downspout extension to a permeable surface sidewalk or patio and let water soak in.

- Permeable pavers extend use of durable surfaces for seating, parking or other uses around the home.
- Lots of styles and colors available, include gaps for stone, grass or low groundcovers
- Can be expensive and needs to include subbase of rock



Rain planters

A raised planter box to receive water and add beauty to the yard. Has overflow to direct excess water to landscape.

- Lots of different materials can be used such as wood, metal water troughs, or precast concrete planters.
- Starting at the bottom, fill with layers of rock, fabric, sand, fabric and planting soil to allow proper drainage
- Fill with your favorite flowers and plants



Rain gardens

Direct downspout extension to a shallow depression that is planted with grasses and flowers that can tolerate some wet roots.

- Gardens can be sized to fit the yard and formed to desired shape to allow temporary holding of water while it seeps in
- Include a variety of grasses, flowers, low shrubs or ornamental elements
- Increases habitat for pollinators and adds beauty to the yard



Rain barrels or cisterns

Collect and reuse rainwater for watering in the yard or garden while directing overflow into a lawn or landscaped area.

- A variety of styles are available
- Easy to install and requires some maintainence
- Conserve water and reuse when needed to keep the garden green and healthy while reducing irrigation costs

Want to learn more about how to protect our creeks, streams and rivers?

Clark County Clean Water Division: www.clark.wa.gov/stormwater "What you can do"

Clark Conservation District: www.clarkcd.org/best-management-practices

