

**P**ollution created by our daily activities is the greatest threat to water quality in the Puget Sound Region. **You can help detention ponds function properly by not using them as dumping grounds for**

**garbage, pet waste and other debris.**

There are 15 major drainage basins in the City of Everett. Only in the combined-

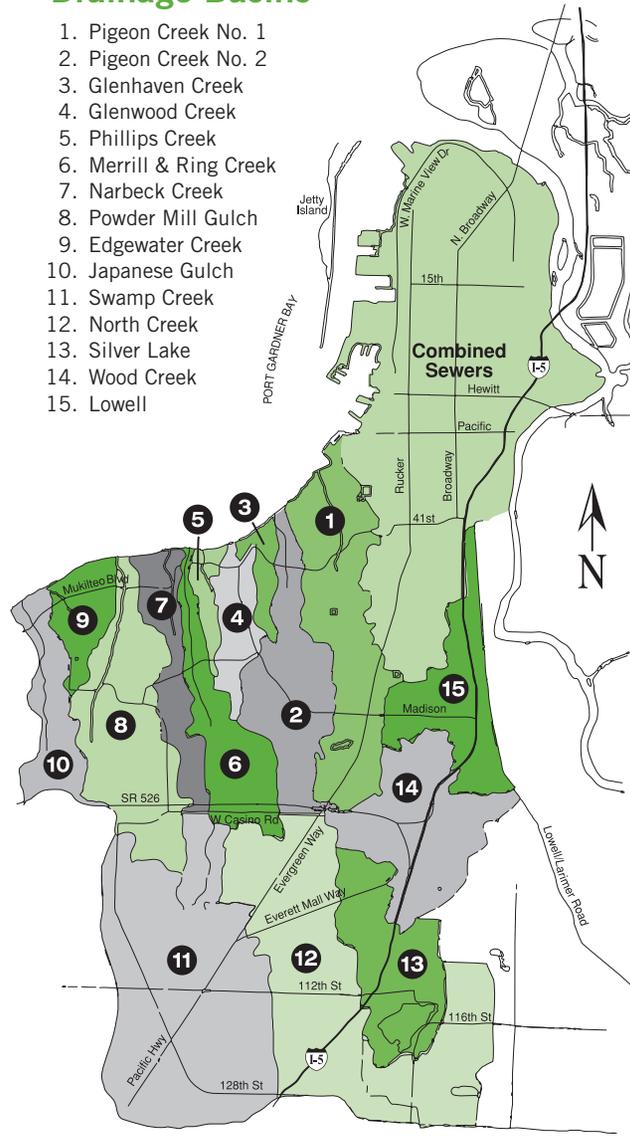
sewer area is stormwater treated at the City's wastewater treatment plant. In the other drainage areas, stormwater drains into detention ponds, or in some cases, directly into local creeks and streams.

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## City of Everett Drainage Basins

1. Pigeon Creek No. 1
2. Pigeon Creek No. 2
3. Glenhaven Creek
4. Glenwood Creek
5. Phillips Creek
6. Merrill & Ring Creek
7. Narbeck Creek
8. Powder Mill Gulch
9. Edgewater Creek
10. Japanese Gulch
11. Swamp Creek
12. North Creek
13. Silver Lake
14. Wood Creek
15. Lowell



## Contact us:

For more information on how the City of Everett protects surface water visit our web site at [www.ci.everett.wa.us/pw](http://www.ci.everett.wa.us/pw). You may also contact us directly at [everettpw@ci.everett.wa.us](mailto:everettpw@ci.everett.wa.us) or by phone at 425-257-8800.



REVISED MARCH 2013

# What is a Detention Pond?



BROUGHT TO YOU BY THE CITY OF EVERETT

## What are detention ponds, and why are they needed?

Water runoff from streets and parking areas carries oil, dirt and pollutants from pavement and landscaped areas. To reduce these pollutants from entering our urban creeks, streams, ponds and lakes, developers are required to treat stormwater runoff.

A common stormwater treatment system is called a wet detention pond. Wet detention ponds contain water at all times and serve a dual purpose. They treat stormwater runoff to protect our creeks and streams, and during severe storms, they help prevent flooding.

The other kind of detention pond used in Everett is a dry detention pond. Generally, dry detention ponds only hold water during rainstorms and their primary function is flood prevention.

While most of the stormwater treatment system is located underground and is not visible, the detention pond is a vital component of this system.

## How does it work?

Some of the pollutants in stormwater, like phosphorous and nitrogen, serve as nutrients for plants. In a natural stream or wetland, these nutrients can cause problems by encouraging too much plant growth. Plants in the wet detention ponds use these same nutrients to fuel growth, so fewer of these pollutants enter the natural streams and wetlands. Insects and micro-organisms living in the pond's mud help remove pollutants from the stormwater.

## Do mosquitoes breed there? Will algae be a problem?

Before the wet pond matures and the plants have grown, mosquitoes and algae may become a problem.

As the plants grow and fill the water, they remove the extra nutrients that cause algae.

Eventually other kinds of organisms that eat mosquito larvae move into the pond. Usually, these ponds attract frogs, dragonflies and red-winged blackbirds.

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## retention vs. detention

A **retention** pond does not discharge to a downstream system. The only way water leaves a retention pond is by evaporation or by soaking into the surrounding soils.

A **detention** pond discharges into a drainage system, usually through an underground pipe. The majority of ponds in the City of Everett are designed to be detention ponds.

## Is the pond supposed to have vegetation?

Ponds have various kinds of wetland plants such as reed grass, yellow iris and bulrushes. These plants absorb excess nutrients and pollutants, which can then be removed by cutting down the plants. This encourages new plant growth and hence the removal of more pollutants. Over time sediment build up will occur, which also needs to be removed to help maintain a healthy, functional pond.

## How are pond levels controlled?

The ponds are designed to slow down the water runoff to prevent flooding. To slow the water down there is a special restrictor device located downstream from the pond. The restrictor has a small hole for water to pass through to leave the site. When more water enters the pond than can get out of the hole, the water backs up and is temporarily stored in the pond. After it stops raining, the pond should slowly empty to its normal level.

## Who maintains these ponds?

If the detention pond is located in a multi-family complex or a condominium complex, the owner or homeowners' association maintain the ponds. City of Everett employees inspect the ponds to make sure they are functioning properly. In most single-family residential subdivisions the City owns and maintains the ponds.

