# Stormwater Management for Small Projects

(Residential)

Brochure #56



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#### **HISTORY & REGULATION**

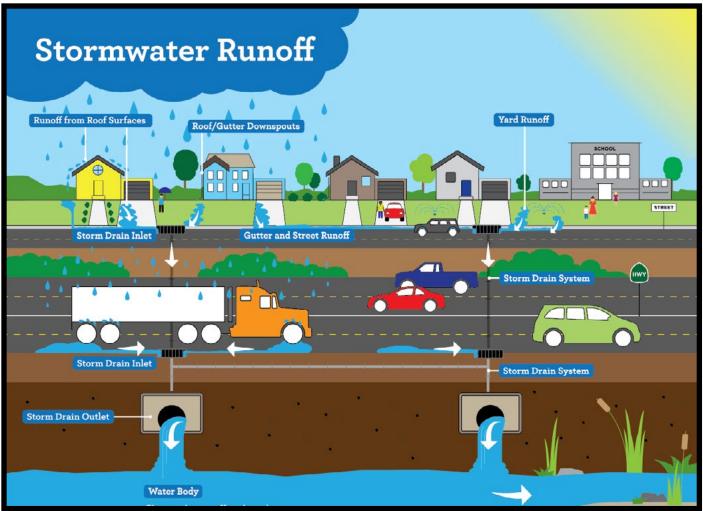
The National Pollution Discharge Elimination System (NPDES) permit program, created in 1972 by the Clean Water Act (CWA), helps address water pollution by regulating point sources that discharge pollutants to waters of the United States.

Under the CWA, the Environmental Protection Agency (EPA) authorizes the NPDES permit program to state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. Kitsap County operates under a Phase II Municipal Stormwater Permit.

Stormwater drainage can be found under Title 12 in the Kitsap County Code and the Stormwater Design Manual.



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Credit: City of Bainbridge Island, WA

#### **EFFECTS OF STORMWATER RUNOFF**

Stormwater is rain and snow melt that runs off surfaces such as rooftops, paved streets, highways, and parking lots. As water runs off these surfaces, it can pick up pollutants that contaminate local water bodies.

Unmanaged stormwater runoff can:

- Damage salmon habitat.
- Contribute to flooding and drought.
- Contaminate swimming areas.
- Pollute shellfish beds.
- Contaminate the groundwater you drink.
- Degrade water quality.

#### **INTENT OF STORMWATER MITIGATION**

During construction the ground is disturbed creating a need for stormwater mitigation to minimize the impact during rainfall. This is especially true during the months of October through March in the Kitsap area. Putting in place stormwater mitigation processes help:

- **Minimize Erosion** - rain washing away soil material, creating an increased potential for flooding, as well as washing away soil nutrients and degrading the soil.

- **Control Sedimentation** - eroded material being transported by water and later settling or depositing in a different area.

#### - Control wastes from leaving the site.

The need to mitigate stormwater extends beyond the completion of your project. An increase in impervious (not allowing fluid to pass through) surface means that stormwater will need to be handled in a manner to avoid erosion and sedimentation especially if near a critical area.

We have several worksheets to help you understand which permits will need to be submitted for your project. As well as worksheets that will help you prepare the documents for your mitigation choices.

#### DO ALL REQUIREMENTS IN THE STORMWATER MANUAL APPLY TO EVERY PROJECT?



No, not all requirements apply to every development.

The requirements vary depending on the project type and the size of the project. The Stormwater Worksheet will help you determine which requirements apply to your project.



#### FOR A RESIDENTIAL PROJECT, HOW CAN I DETERMINE WHICH REQUIREMENTS APPLY?

The first step is to fill out the Stormwater Worksheet.

Using information about your project and parcel, this worksheet helps determine what on-site management and erosion control measures are required for your project.

Once some preliminary information is filled out, a flow chart in the worksheet assists in determining the minimum requirements, as well as the level of drainage review that will be required.

The last section of the worksheet includes a list for each level of drainage review, of which documents and plans will need to be submitted with a permit application to ensure a complete review.

#### **STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SITE DEVELOPMENT ACTIVITY PERMIT (SDAP)**

The SWPPP is required on all projects. It is made up of two parts. The first is a narrative that will include information on 13 elements of the development and how those elements will be managed. The second part is a site plan that shows the information from your narrative on a map.

The SDAP is not required on all projects. Some of the factors determining the requirement include:

- Development is determined to be a Large Project
- Connection to a public storm drainage system
- Grading activity meets the threshold
- Land clearing on slopes greater than 30% or within mandatory setbacks
- Construction in a critical drainage area
- Contributes to an existing drainage problem

There are more detailed brochures available on the <u>SWPPP</u> and the <u>SDAP</u>.



### COULD A RESIDENTIAL PROJECT REQUIRE AN ENGINEERED DESIGN FOR ON-SITE STORMWATER MANAGEMENT?

Residential projects that fall within the "small project" threshold do not typically require an engineered design. A professional engineer is required when one or more of the following conditions exists:

- Land use, building, or development on real property which meets the definition of a large project.
- Improvement within the boundaries of Kitsap County rights-of-way for which Kitsap County will ultimately assume responsibility for maintenance.
- Site development activity where the County determines it is in the public's best interest to require that certain submittal documents be prepared by a Professional Civil Engineer.
- Whenever an engineer is required by the Kitsap manual, including but not limited to design of conveyance, on-site storm water management, flow control, and water quality treatment BMPs.

Keep in mind that areas of critical concern (i.e., poor drainage areas, steep slopes, waterfront) or plat conditions may require the involvement of a geotechnical and/or civil engineer.

These types of critical concerns may be identified early by looking at the map layers for a property in Kitsap County's Parcel Search tool. Projects that are considered a "small project" and need engineered design will require a Simplified Drainage Review – Engineered or Abbreviated Drainage Review – Engineered.

## **HELPFUL LINKS**

<u>My Stormwater Plans</u> <u>Clean Water Kitsap</u> <u>Stormwater Pollution Prevention Plan</u> <u>SWPPP Map Example</u> <u>Parcel Search</u>



**Kitsap County** Department of Community Development (DCD)

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