



Managing Construction Runoff on Your Site

Polluted stormwater runoff is the primary cause of surface water pollution. Our goal is to protect water quality by preventing the transport of sediment and pollutants into the municipal stormwater drainage system.

In the City of Olympia, all projects are required to manage stormwater runoff. Construction activities such as demolition, clearing, and grading have the potential to discharge pollutants to local surface waters. Polluted stormwater runoff that leaves your site can eventually make its way to our local streams, rivers, lakes, and Puget Sound, harming the health of our local waterways.

This guide sheet is the first step in preparing your site for construction or land disturbing activity based on **Core Requirement #2 – Construction Stormwater Pollution Prevention** in the **City of Olympia Drainage Design and Erosion Control Manual (DDECM)**.

What is the problem?

Construction activities can generate 400 times the amount of soil erosion and sediment deposition compared to that of an undisturbed, vegetated landscape. Common pollutants leaving construction sites such as sediment, oils, nutrients, and metals have detrimental impacts to aquatic habitat and water quality.

The **Federal Clean Water Act** and the **Western Washington Phase II Municipal Stormwater Permit** require the City of Olympia to regulate and permit any construction stormwater discharges.

All projects and permitted activities are required to manage construction stormwater runoff and prevent pollutants (listed at right) from leaving the site, or entering the City’s storm drainage system that flows to streams and Puget Sound.

How do I manage construction runoff on my site?

Volume II of the City of Olympia Drainage Design and Erosion Control Manual provides best management practices (BMPs) and instructions on how to manage construction runoff, limit erosion, and prevent transport of pollutants in stormwater.

Project Activities and Pollution Sources	Construction Related Pollutants								
	Sediment	Phosphorus/Nitrogen	Heavy Metals	pH (acids & bases)	Pesticides/Herbicides	Oil & Grease	Bacteria/Viruses	Trash, debris, solids	Other toxic chemicals
<i>Clearing, Grading, Excavations, and Exposed Soils</i>	✓							✓	
<i>Landscaping Operations</i>	✓	✓						✓	
<i>Paving Operations</i>	✓							✓	
<i>Concrete Washout and Waste</i>			✓	✓				✓	
<i>Structure Construction/Cleaning/Painting</i>		✓		✓				✓	✓
<i>Demolition and Debris Disposal</i>	✓							✓	
<i>Dewatering Operations</i>	✓	✓							✓
<i>Material Delivery and Storage</i>	✓	✓	✓	✓	✓	✓		✓	✓
<i>Material handling during construction</i>		✓	✓	✓	✓	✓		✓	✓
<i>Solid Waste (trash & debris)</i>								✓	✓
<i>Hazardous Waste</i>			✓	✓	✓	✓			✓
<i>Contaminated Spills</i>		✓	✓	✓	✓	✓			✓
<i>Portable Toilet Use</i>		✓		✓			✓		✓
<i>Equipment fueling and maintenance</i>						✓			✓
<i>Vehicle/Equipment Use and Storage</i>						✓			✓

What steps do I take?

As part of your permit application, you may be required to prepare a **Construction Stormwater Pollution Prevention Plan (C-SWPPP)**. This plan identifies the potential sources of pollution and best management practices for a site to effectively control runoff and reduce pollution.

A C-SWPPP is a required component of a **Drainage Control Plan** (large projects) or an **Abbreviated Drainage Plan** (small projects and single-family home construction). Some drainage plans may require hiring an engineer.

If your project proposes more than 7,000 square feet of land disturbing activity or creates more than 2,000 square feet of new or replaced hard surface, you must prepare a C-SWPPP for City review and approval. Refer to Guide Sheet 1A to determine if your project is required to prepare a drainage plan and C-SWPPP.

All projects that fall below this threshold for plan preparation are still required to address construction stormwater runoff using basic best management practices for construction sites.

First, identify any activities that are sources of pollution using the table on the first page. Once you have identified project activities, select construction stormwater BMPs from Volume II of the DDECM (<http://olympiawa.gov/ddecmm>) that address your site needs and incorporate the following erosion control and pollution prevention principles into your project plans:

- **Protection of natural features, soil, and vegetation** – *Natural vegetation covering a site is especially effective in protecting against soil erosion. Trees and vegetation should be preserved whenever possible.*
- **Construction entrances and track-out** – *Soil and sediment track-out from sites is one of the biggest sources of pollutants entering the City's storm system. Remove any sediment from streets each day.*
- **Site stabilization and soil stockpiling** – *When construction activities are put on hold or soils must be left unworked for more than 2 days during the wet season, the site must be stabilized to limit erosion and transport of sediment. Covering erodible soils and pollutant sources is a great first step.*
- **Silt fencing and slope protection** – *Properly installed silt fencing can keep large quantities of sediment onsite in heavy rain events. Slope protection such as plastic sheeting, straw, or jute-mat also minimizes erosion.*
- **Storm drain inlet protection** – *Any inlet to the City's stormwater system should be protected from sediment and pollutants. The City storm drain system drains to groundwater, local streams, and Puget Sound.*
- **Concrete washout and waste areas** – *Concrete waste and improperly managed cleaning of concrete equipment can create polluted stormwater high in pH, which is toxic to aquatic wildlife.*
- **Spill protection and waste cleanup** – *Sources of other toxic chemicals, such as building materials or portable toilets, must be covered and runoff directed away from storm drains. Spills should be contained onsite and not allowed into the storm drain.*
- **Maintain BMPs** – *All stormwater pollution prevention BMPs must be maintained throughout the project.*

Applicable Stormwater Pollution Regulations

- 2016 City of Olympia Drainage Design and Erosion Control Manual (effective December 1, 2016)
- 2013-2018 Western Washington Phase II Municipal Stormwater Permit (effective August 1, 2013)
- State of Washington Water Pollution Control Law, Chapter 90.48 RCW
- Federal Water Pollution Control Act (The Clean Water Act), Title 33 US Code, Section 1251 *et. seq.*

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For more information or clarification of stormwater requirements within the City of Olympia:

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