

Basis of Design

The purpose of this section is to provide guidelines for the development of specifications for stormwater management and protection during construction.

Overview

Projects must minimize the pollution of stormwater. Storm drains at UW Seattle and UW Bothell drain directly into Portage Bay and Lake Washington. Storm drains at UW Tacoma drain directly to the Puyallup River, another salmon corridor. The biggest pollution concerns for construction projects are settleable solids (mainly sediment) and pH.

Construction stormwater protection

Below are general outlines of requirements in Seattle, Tacoma and Bothell for construction-phase stormwater protection. If your project disturbs more than one acre of land, you must also apply for coverage under the state Construction National Pollutant Discharge Elimination System (NPDES) permit. EH&S Environmental Programs (EP) will assist with permits on behalf of the project and provide guidance and advice in planning and during construction. Requirements and permit applications are at the following link: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>.

The Seattle campus has three storm drainage systems with three different owners: the City of Seattle, King County and University of Washington. The process for construction projects is the same for all three – submit appropriate plans to the City of Seattle Department of Planning and Development.

Some types of minor projects are exempt from this requirement, including maintenance, repair and installation of utilities and existing sanitary sewer or drainage systems; road maintenance and shoulder grading; drainage ditch maintenance and vegetation maintenance.

For all other projects that disturb land or involve new or replaced impervious surfaces of over 750 square feet, the City of Seattle requires a Small Project Construction Stormwater Control Plan. For projects that involve over 5,000 square feet of new or replaced impervious surfaces, the City of Seattle requires a Large Project Construction Stormwater Control Plan. Requirements for both types of projects are at <http://www.seattle.gov/dpd/codes/dr/DR2009-16.pdf>.

Requirements for the City of Tacoma can be found in the Tacoma Surface Water Management Manual at <http://www.cityoftacoma.org/Page.aspx?hid=951#manual>. All projects must comply with the twelve required “Elements” of the Construction Stormwater Pollution Prevention Plan (SWPPP). Redevelopment construction projects that add or replace over 2000 square feet of impervious surface or disturb over 7000 square feet must also address additional requirements.

For the City of Bothell, Bothell’s Surface Water Design Manual outlines drainage review. It is at http://www.ci.bothell.wa.us/Site/Content/Public%20Works/Surface%20Water%20Mgmt/Chapter4_Bothell-Standards_2011_Jan.pdf

Additional advice

- The consultant assigned to the project should create the Stormwater Pollution Prevention Plan (SWPPP) and complete permit applications.
- Both EH&S and Campus Engineering should review any applications before they are signed and submitted.
- Both EH&S and Campus Engineering should receive copies of the final signed permit application and final permit. Signatures must come from the director level or an authorized representative.

- Monthly discharge monitoring reports (DMRs) are required.
- Termination forms are required once the project is complete.
<https://fortress.wa.gov/ecy/publications/SummaryPages/ecy02087.html>

Local discharge permits for dewatering/contaminated stormwater

Discharge authorizations are required for discharge of stormwater to the sanitary sewer. EH&S Environmental Programs (EP) is the UW liaison for King County Industrial Waste Division and will assist with authorization and permits on behalf of the project. Requirements and permit applications are at the following link:

<http://www.kingcounty.gov/environment/wastewater/IndustrialWaste/GettingDischargeApproval/Construction.aspx>.

Post-construction stormwater protection

Depending on the size of the project, permanent stormwater detention and/or treatment may be required. Guidance and specifications are provided by the city issuing the building permit and EH&S is generally not involved. Contact EH&S (Environmental Programs) at 206.685.3759 for assistance.