

Erosion & Sediment Control (ESC) Requirements

Quick Guide for Applicants and Homeowners

Protecting Port Moody's Drainage System

The Port Moody *drainage system* refers to a network of storm sewer infrastructure (underground pipes and storm drains) and natural aquatic features (streams, ditches, wetlands) that collect and transport stormwater across the city to reduce the potential for flooding and supply continuous flows to the receiving environment. The drainage system receives and conveys watercourses, rainwater, snow melt, and runoff from roofs, roads and driveways.



Why is protecting the drainage system important?

Storm drains are 'entrances' to the City's drainage system and connect directly to streams via roadside ditches and underground pipes. This means that **all storm drains lead to fish habitat!** In addition to fish and environmental impacts, pollutants entering the drainage system like soil or concrete can clog pipes and cause flooding.

The water carried through storm sewer infrastructure is **not treated** before it flows into fish habitat. However, the City's drainage system is equipped with oil-grit separators and sediment traps at select locations to reduce the amount of road contaminants and sand. The *storm sewer* system is different from the *sanitary sewer* system, which collects water from toilets, sinks, and shower drains and transports this water to a special treatment plant.

How does contaminated stormwater impact wildlife and the receiving environment?

If a substance like oil, chlorinated water, paint, concrete, or soap enters a storm drain, it will flow directly into a stream and impact fish and aquatic wildlife such as salmon, harbour seals, shorebirds, plants, and endangered species. Because Port Moody is located on a marine shoreline, nearly all of our streams drain to Burrard Inlet. This means substances entering our drainage system not only impact our streams, but also impact the ocean waters and tidal flats. Even large amounts of soil or sand entering our streams can suffocate and smother fish.

How is the drainage system protected in Port Moody?

The City of Port Moody Stream and Drainage Bylaw 2023, No.3426 prohibits any material (other than clean water) from entering the drainage system. This Bylaw ensures compliance with other regulations, such as the federal *Fisheries Act*, *BC Approved Water Quality Guidelines*, and Canadian *Environmental Quality Guidelines*. This Bylaw prohibits pollution of the drainage system (whether intentional or accidental) to protect both storm sewer infrastructure and the receiving environment. The City's ESC Permit and Best Management Practices (BMPs) are additional tools to ensure proactive and responsible ESC measures are taken during construction projects.

What is Erosion & Sediment Control (ESC)?

Erosion & Sediment Control (ESC) refers to a range of strategies used to contain and stabilize soils, typically in a building construction context. Proper ESC management is critical for planned soil disturbance (such as excavating or landscaping) and unplanned soil disturbance (such as slope failure). Poor ESC management can lead to soils or contaminated water being washed into the drainage system, which can clog City pipes and suffocate fish downstream. Soils washed into the drainage system from construction areas may also contain other toxins such as concrete wash, paint, detergents, or heavy metals, and deposit these materials into natural streams and marine habitats.

Why was the City's Stream and Drainage Bylaw updated?

The City of Port Moody Stream and Drainage Bylaw 2023, No.3426 replaced the former Stream and Drainage System Projection Bylaw, 2000, No.2470. A lot has changed since the year 2000 when the former bylaw was first enacted. For example, our region is experiencing an increase in development, including the construction of more residential towers, which requires a lot of soil disturbance and deep excavation. We are also experiencing more extreme weather events, which means proactive ESC management is critical. Finally, there have been technological advancements and improvements to industry standards which keep best-practices constantly evolving. As such, the City's Stream and Drainage Bylaw was updated to better protect our receiving environment and drainage system

during construction projects, and modernize the City's ESC requirements to align with senior regulations and neighbouring cities.

Summary of Erosion & Sediment Control Requirements

If your construction project requires a Building Permit, Excavation Permit, or Development Permit, you will need to obtain an **Erosion & Sediment Control (ESC) Permit** prior to any ground disturbance (such as clearing, grading or excavation). The purpose of an ESC Permit is to ensure Applicants are aware of their responsibilities to protect the municipal drainage system and receiving environment during their construction project. There are reduced ESC Permit requirements for Single- and Two-Family projects. See **Table 1** below for a summary of ESC requirements.

There is an escalating penalty system for contraventions to the Stream and Drainage Bylaw, including:

- \$500 for a first offense
- \$750 for a second offense
- \$1,000 for third+ offense

Each Day that the violation continues is deemed a separate offence.



Table 1: Summary of Erosion and Sediment Control (ESC) Requirements for Different Project Types

Requirement	Small Project ¹	Large Project ²	City Project ³
Maintaining ESC Best Management Practices during construction	Yes	Yes	Yes
Ensuring runoff from a project meets Bylaw water-quality criteria	Yes	Yes	Yes
ESC Permit	Yes	Yes	Yes
ESC Permit Fee	No	Yes ⁴	No
ESC Security – Irrevocable Letter of Credit	No	Yes ⁵	No
ESC Permit – Schedule A – Declaration of Permit Holder	Yes	Yes	Yes
ESC Permit – Schedule B – Letter of Undertaking	Yes	Yes	Yes
ESC Permit – Schedule C – Letter of Appointment	No	Yes	Yes
ESC Permit – Schedule D – Detailed Cost Estimate	No	Yes	Yes
ESC Permit – Schedule E – Water Treatment Chemical Checklist	No	Yes	Yes
ESC Permit – Schedule F – Simplified ESC Plan	Yes ⁶	No	No
Detailed ESC Plan	No	Yes	Yes
Independent Third-Party Real-Time Monitoring	No	Yes ⁷	Yes ⁷

NOTES:

- 1 – Small Project refers to ground disturbance or construction works requiring a Building Permit for Single- or Two-Family properties
- 2 – Large Project refers to ground disturbance or construction works requiring a Building Permit, Excavation Permit, or Development permit for anything other than Single- or Two-Family properties
- 3 – City Project refers to ground disturbance or construction works completed on behalf of the City by a third-party contractor
- 4 – Permit fee is non-refundable \$500 (2024 rate)
- 5 – Securities collected are 120% of Applicant's Schedule D – Detailed Cost Estimate provided to City.
- 6 – Single- and Two-Family projects can utilize the sample ESC Plan provided, and therefore do not need to provide a Detailed ESC Plan.
- 7 – For Large Projects or City Projects >2,000m².

KEY TERMS TO KNOW

BMP – Best Management Practice(s)

ESC – Erosion and Sediment Control

NTU – Nephelometric Turbidity Unit, a measure of water clarity

Any water leaving a site must fall under 75 NTU during/within 24 hrs of heavy rainfall, or under 25 NTU any other time

pH – A measurement of water acidity from 0 – 14

Any water leaving a site must fall between a pH of 6.5 to 8.0

ESC Permit Process

Submit your **Development Permit, Building Permit, or Excavation Permit** application. To initiate your project, visit eservices.portmoody.ca to submit the correct permit.



Staff review your application and notify you that an **ESC Permit** is required. Visit portmoody.ca/ESC to see permit requirements and upload the necessary documents to submit your ESC Permit application. Your Building Permit, Development Permit, or Excavation Permit will not be issued until your ESC Permit has been issued.

Single- and Two-Family Projects

For Single- and Two-Family projects, only Schedule A and Schedule B need to be submitted. There is no ESC Permit fee or securities collected.



All Other Construction Projects



For all other construction projects, an ESC Permit requires the Submission of Schedule A – E, as well as a Detailed Cost Estimate, Detailed ESC Plan, \$500 ESC Permit Fee, and collection of securities (120% of Detailed Cost Estimate). Staff in Engineering, Environment, and Buildings will review the documents submitted and advise you of any edits or changes required.



Staff accept documents submitted for ESC Permit.



ESC Permit is issued (PDF copy sent to you via email).



Relevant Building Permit, Excavation Permit, or Development Permit application is updated to reflect ESC Permit has been issued.



QUESTIONS?

For more information, contact staff at ESCPERMIT@PORTMOODY.CA or call 604-469-4574.