

Maplewood Marine Restoration Project

Ocean surface foam

The foam seen from time to time in the project area is not toxic and is a result of dry sand being placed in the ocean. A combination of surface tension, release of air bubbles and natural proteins in the sand result in the foam generation. It looks unsightly but it is harmless and eventually settles back to the seabed.

Construction continues

Marine works construction on the Maplewood Marine Restoration Project, a project being delivered by the Vancouver Fraser Port Authority's **Habitat Enhancement Program**, started in September 2019 and is anticipated to carry on through May 2020.

Activities this spring will continue to largely consist of placement of sand to raise targeted sections of the marine basin, to create suitable growing conditions for marine vegetation. From time to time, this placement of dry sand generates foam on the surface of the water. This foam is not toxic and is a result of surface tension, release of air bubbles and natural proteins in the sand. It looks unsightly but it is harmless and eventually settles back to the seabed.



Figure 1 An excavator moves dry sand from a barge to sections of the marine basin, to raise the basin floor.

A silt curtain boom is in place adjacent to the Maplewood Flats Conservation Area and will continue to be monitored and adjusted depending on tidal conditions. An environmental monitor will be onsite throughout construction and additional mitigation measures for fish and birds are in place, including:

- extra precaution is being exercised to avoid causing harm to birds and/or their active nests and eggs, and
- work will be stopped if finfish presence or spawning activity is observed and will not resume until the fish are no longer present or the spawning activity has been completed.

Project background

The project is located on the north shore of Burrard Inlet, approximately two kilometres east of the Ironworkers Memorial Bridge. The marine site lies within a large marine tidal area immediately south of a wildlife conservation area. The upland Maplewood Flats Conservation Area is managed and administered by Environment Canada and operated by the Wild Bird Trust of British Columbia.

The project site is located within a deep waterlot basin – up to nine metres deep – that was dredged in the 1940s to support a gravel extraction business and was later used as a log storage area.

The project is anticipated to enhance approximately five hectares of low-value marine habitat into higher-value marine habitat for fish, birds and other wildlife.

Rationale

The marine site was identified as a restoration priority by the Tsleil-Waututh Nation. The site was selected for restoration because of its current relatively low habitat values, and based on input from Indigenous groups. The restored marine habitat at Maplewood is anticipated to provide long-term benefits for fish and invertebrates that depend on marine vegetation for rearing habitat, along with other fish and wildlife species such as waterfowl and wading birds.

The project is being delivered by the port authority's **Habitat Enhancement Program**, which focuses on creating, restoring and enhancing fish and wildlife habitat to help maintain a balance between a healthy

environment and future infrastructure development that may be required for port operations. A majority of the marine habitat created at the project site will be used to fulfil the fisheries habitat offsetting requirements for the **Centerm Expansion Project**, as determined by Fisheries and Oceans Canada.

Project design

Project design was refined and finalized in early 2019 after engagement with Indigenous groups and public and stakeholder consultation. Below is an artist's illustration that depicts the types of habitat that will be constructed to restore the marine site: intertidal mudflat, an eelgrass bed, and subtidal rock reef habitat.

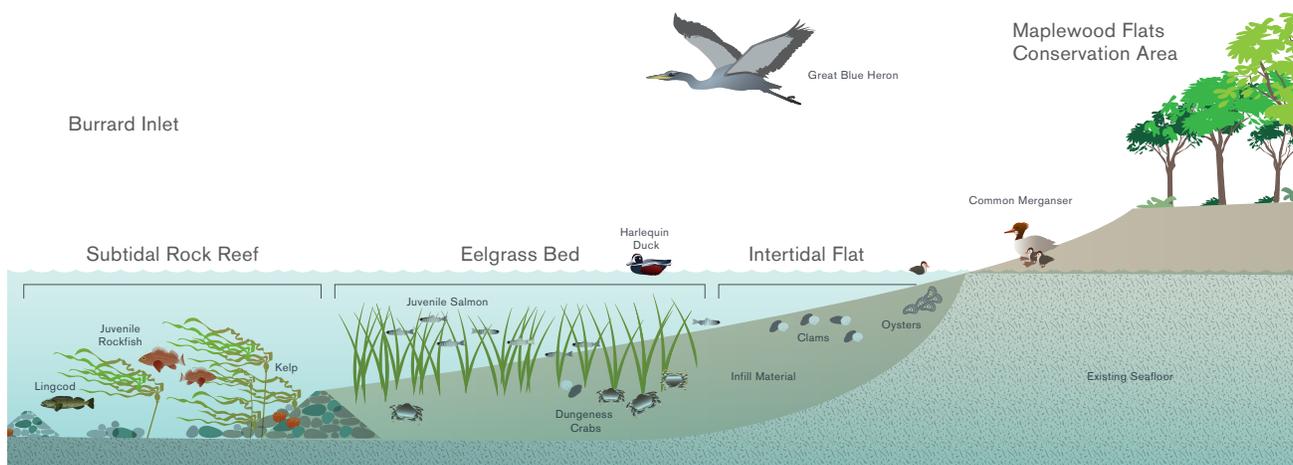


Figure 2 Artist's cross-section illustration of the Maplewood Marine Restoration Project.

Post-construction, the site will be monitored annually by biologists and coastal engineers, and in accordance with regulatory requirements, to ensure the biophysical objectives are met and the enhanced habitat continues to function well.

For more information

For more information about the Maplewood Marine Restoration Project, please email habitat.enhancement@portvancouver.com or call 778.988.6180. For further information about the Habitat Enhancement Program, please visit portvancouver.com/habitatenhancement.