

Maplewood Marine Restoration Project

About the project

The **Maplewood Marine Restoration Project** is located on the north shore of Burrard Inlet, approximately two kilometres east of the Ironworkers Memorial Bridge, in a marine site that was identified as a restoration priority by the Tsleil-Waututh Nation. The site lies within a large marine tidal area immediately south of a wildlife conservation area.

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 has restored approximately 4.5 hectares of habitat within this basin by creating a tidal flat, an eelgrass bed and a rock reef. This

restoration has provided higher-diversity marine habitat for fish, birds and other wildlife compared to pre-restoration conditions.

The project was delivered by the Vancouver Fraser 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, delivered the project. A major portion of the marine habitat created at the project site is being used to fulfil the fisheries habitat offsetting requirements for the **Centerm Expansion Project**, as determined by Fisheries and Oceans Canada.

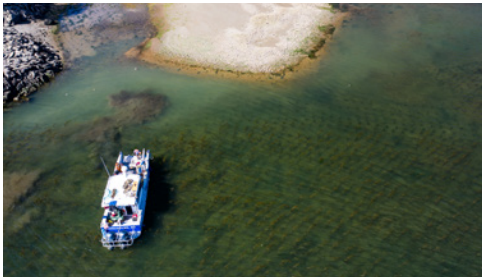
The port authority thanks Tsleil-Waututh Nation for their collaboration on this project, and Musqueam and Squamish Nations for their involvement.



About 4.5 hectares of tidal flat, eelgrass bed and rock reef has been restored, and is expected to provide long-term benefits for fish, birds and other wildlife.

Status and next steps

All project works on the Maplewood Marine Restoration Project were completed in 2021, when transplanting eelgrass from donor sites into the Maplewood basin wrapped up. Crews transplanted ~125,000 eelgrass shoots to create a 1.5-hectare eelgrass bed, the largest eelgrass transplant ever performed in Burrard Inlet. The port authority worked with Indigenous nations on the planning and implementation of this transplanting work, which will increase the overall understanding of future restoration and offsetting opportunities. Watch a **short video** on the transplanting process used on this project.



Eelgrass provides important refuge and nursery habitat for juvenile fish and invertebrates such as this opalescent nudibranch (above top left). 125,000 eelgrass shoots were transplanted, the largest eelgrass transplant ever performed in Burrard Inlet.

Prior to this eelgrass transplanting work, marine works construction was completed in spring 2020. Nearly 230,000 cubic metres of dredged Fraser River sand was beneficially reused to restore and raise the Maplewood basin floor, which will support a variety of shellfish and crab and allow marine plants like eelgrass to establish. Eelgrass is a type of seagrass that forms part of the most diverse and productive ecosystems in the world. Eelgrass provides food, shelter and protection from predators for many juvenile fish and shellfish of ecological, cultural and recreational importance.

As is the case with all habitat enhancement projects, the port authority will assess the site annually to ensure the site continues to meet its biophysical objectives.

Project recognition

In 2022, the project received the Innovation in Sustainability Award from Engineers and Geoscientists of BC. This award celebrates ethics, imagination, and innovation and recognizes the leadership roles engineers and geoscientists play in environmental protection and environmental enhancements. The project also received the Natural Resource & Habitat Award for Engineering Excellence at the Association of Consulting Engineering Companies-British Columbia Awards.

In 2021, the project was given the Environmental Managers Association of BC award for remediation and restoration, which recognizes outstanding work in the investigation and remediation or restoration for the environmental improvement of a site under federal or provincial jurisdiction.

For more information

Project website: portvancouver.com/maplewood

Habitat enhancement program: portvancouver.com/projects/habitat-restoration/

Email: habitat.enhancement@portvancouver.com