Maplewood Marine Restoration Project

Eelgrass transplanting work continues

The Maplewood Marine Restoration Project is nearing completion. The final leg of the project, transplanting eelgrass from donor sites into the Maplewood basin, is scheduled to start in spring/summer 2021. This work will involve transplanting about 150,000 eelgrass shoots to create a 1.5-hectare eelgrass bed, which will be the largest eelgrass transplant ever performed in Burrard Inlet.

As part of a November 2020 pilot project, we transplanted approximately 5% of the total eelgrass bed in the Maplewood basin. The port authority is working with Indigenous groups on the planning and implementation of this transplanting work, which will increase the overall understanding of eelgrass transplanting for this project as well as future restoration and offsetting opportunities.

How is eelgrass transplanted?

Eelgrass is harvested using a proven three-step process:

- Divers harvest eelgrass shoots from the selected donor sites.
- Harvested shoots are then stored in fresh, cold, shaded seawater. Following this, a shore team prepares the shoots for transplanting.
- Divers transplant eelgrass in the Maplewood basin. To sink the eelgrass to the bottom of the ocean floor, the field team attaches an anchor.

Underwater image of a crew member harvesting eelgrass in November 2020.

Once harvested, anchors are attached to the eelgrass shoots.

The project team is working with Indigenous groups to assess eelgrass harvesting sites at Bedwell Bay in Burrard Inlet and potentially at Roberts Bank. As eelgrass regrows quickly after harvesting, impacts to harvested areas are not anticipated.

Post-construction view of the newly created tidal flat at low tide.
The rock reef is under water as is the area that will be transplanted with eelgrass in 2021.

Marine works construction complete

Marine works construction for the Maplewood Marine Restoration Project wrapped up in spring 2020. During construction, nearly 230,000 cubic metres of sand was placed 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 provides important refuge and nursery habitat for juvenile fish. Over 13,000 tonnes of rock was also placed to create a rock reef and other features that will support various kelp species and contribute to an increase in the diversity of fish and wildlife in the basin.

About the project

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 marine site was identified as a restoration priority by the Tsleil-Waututh Nation. The site was selected for because of its relatively low habitat values prior to restoration, and based on input from Indigenous groups.

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.

For more information

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