

Proposed Tsawwassen Eelgrass Project

Description, location and size

The proposed Tsawwassen Eelgrass Project consists of two sites located on Roberts Bank south of the Tsawwassen Ferry Terminal near Delta, British Columbia (Figure 1). The subtidal sites are bordered to the north by a recreational boating channel and are surrounded by eelgrass meadows to the south and east. The sites currently consist of subtidal depressions which were likely created as a result of maintenance activities in the adjacent recreational boating channel. These depressions are too deep to be naturally colonized by eelgrass.

The proposed project would result in the conversion of lower-value subtidal areas into higher value eelgrass habitat. The total area of habitat enhancement is approximately 4 hectares. Creation of these eelgrass beds would be accomplished by constructing rock containment berms followed by the placement of suitable substrate material and transplanting of eelgrass.



Figure 1 Approximate location of the proposed Tsawwassen Eelgrass Project (Imagery Source: DeltaMap 2014)

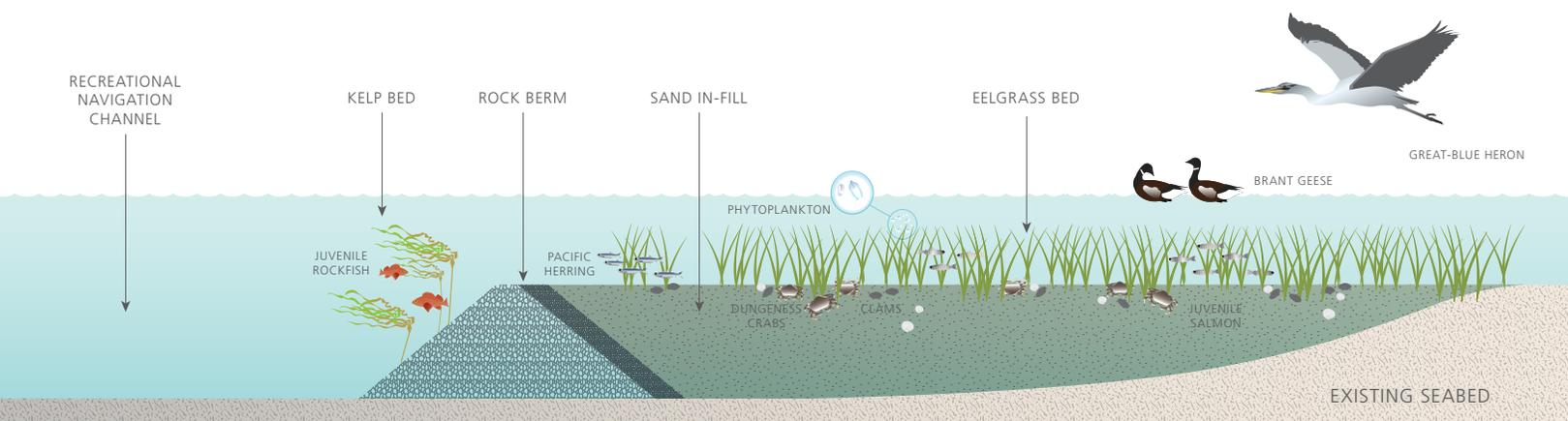


Figure 2 Cross-section rendering of the proposed Tsawwassen Eelgrass Project, depicting the eelgrass bed and some typical species that use eelgrass habitat

Rationale

The proposed sites were selected for eelgrass restoration because of their current relatively low habitat values. Consistent with the broader understanding of eelgrass habitats in the Pacific Northwest, local studies suggest that fish communities within eelgrass habitats are more diverse and abundant than fish communities within areas devoid of eelgrass. Eelgrass provides important habitat for fish and wildlife including juvenile salmon, Pacific herring, Dungeness crab, migrating Brant geese, bivalves, shrimp, and sea stars. In addition to providing refuge and nurseries for juvenile fish and invertebrates, eelgrass beds also support a number of other critical ecological functions including nutrient cycling, protection of shorelines from storms, export of organic matter, and carbon storage. The rock containment berms proposed for construction of the eelgrass beds also provide attachment sites for various kelp species, which would contribute to an increase in the diversity of fish and wildlife at the project sites (Figure 2).

Status and next steps

The proposed Tsawwassen Eelgrass Project is currently in the design, permitting and approvals stage. Completion of the regulatory review of the project is anticipated by late summer 2018. Following completion of the regulatory review, the earliest project work could start, pending final access and project approvals, is late summer 2018, for a period of approximately four to five months. Updates will be provided as the project moves forward.

To mitigate potential impacts to fish and wildlife habitat, the works would be scheduled to occur within the least-risk work window for Roberts Bank. Transplanting of donor stock eelgrass would occur during the following two summers (2019 and 2020).

The project team will continue to engage Aboriginal groups, stakeholders and regulators, and will notify the public of project updates, as appropriate. The proposed project may change based on further consultation and technical input.

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A separate but parallel consultation process with Aboriginal groups has been undertaken by the Vancouver Fraser Port Authority. Port authority-led consultation with Aboriginal groups will continue throughout Project development.

For Further Information

For further information about the Habitat Enhancement Program, please visit portvancouver.com/habitatenhancement or email habitat.enhancement@portvancouver.com.