

Eelgrass in Davie Bay, Texada Island

Attached are photos and maps of the proposed dock location and possible eelgrass beds. The locations and direction of the photos A to E are shown on the attached maps of Davie Bay.

At Davie Bay a small bed of *Z. japonica* was observed on the north side of the sandbar in the inter-tidal zone. A substantial bed of the native *Z. marina* is visible to the north in water that is at or below the low tide level and this appears to fill the full width of the inlet at this point.

A report [1] on a survey of eelgrass beds in Boundary Bay, BC., found that the native *Z. marina* occurred mostly between -0.9 m and -5.5 m mean water level. The non-native *Z. japonica* was found mainly from the mean water level 0 m to -1.8 m.

Charts of Davie Bay show an extensive area of relatively shallow sub-tidal water within Davie Bay and there may well be a considerable area of native eelgrass if the sea floor is mainly sand/mud and a suitable rooting medium for this species. The area of the beds could be in the range 10 to 12 hectares, but an underwater survey is required to arrive at a more reliable estimate. The beds of the non-native species are likely to be very small as the inter-tidal beaches around Davie Bay are mostly shingle and rocks.

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[1] *Expansion of seagrass habitat by the exotic Zostera japonica, and its use by dabbling ducks and brant in Boundary Bay, British Columbia*, Marine Ecology Progress Series, Vol. 103: 119-127, 1994.

[2] Online sites with information on eelgrass in British Columbia.

<http://www.crd.bc.ca/watersheds/protection/wildlife-plants/eelgrass.htm>

<http://www.pwlf.org/eelgrass.htm>

<http://oceanlink.island.net/Conservation/eelgrass/index.html>

<http://www.balanced.ca/hd/eelgrass.html>

<http://www.stewardshipcentre.bc.ca/static/eelgrass/law.html>

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Attachments, 5 photos and 3 maps

A: Sandbar looking west towards island



B: Intertidal bed of *Z. japonica* on beach north of sandbar



C: View north from sandbar; *Z. japonica* bed in foreground



D: *Z. marina* bed shows as dark green in this photo



E: Eelgrass bed Z marina close up



Map 1: Davie Bay map showing sand bar and dock location



