

Gladstone Park Tidal Marsh Project

Description, location and size

The Gladstone Park Tidal Marsh is located along Gladstone-Riverside Park in the City of Vancouver and extends approximately 400 metres west from Elliott Street towards Portside Drive (Figure 1). Prior to marsh construction, the site consisted of riparian, narrow fringe marsh and unvegetated intertidal mudflat located along an eroding bank of the north arm of the Fraser River. The habitat was converted to intertidal brackish marsh in May 1993. The site covers a gross area of approximately 5,205 square metres (0.52 hectares).



Figure 1 Location of the Gladstone Park Tidal Marsh Project area along the north arm of the Fraser River in Vancouver, B.C.

Overview of completed project

The project involved construction of a rock containment berm and placement of appropriate fill material for establishment of an intertidal bench on which a variety of different brackish marsh vegetation, most notably Lyngbye's sedge, have become established through a combination of transplanting and natural colonization. Establishment of a productive intertidal brackish marsh along this stretch of shoreline, which was previously an eroding and unvegetated slope with low habitat values, has provided food and shelter for a wide range of wildlife. Wildlife that utilize the site include invertebrates (chironomids), fish (over 20 species of anadromous and freshwater fishes), waterbirds including ducks (mallards, American widgeon and green-winged teal), Canada geese and gulls, shorebirds, wading birds (great blue heron) and other wildlife such as raccoons and beavers. Most notably, at high tide this brackish marsh provides important feeding and cover habitat for juvenile coho, Chinook and chum salmon and foraging and roosting habitat for waterbirds during high and low tides.

The project was undertaken through a Memorandum of Understanding between Fisheries and Oceans Canada and the North Fraser Harbour Commission and partnerships with the City of Vancouver and the Vancouver Board of Parks and Recreation. This site has been providing productive fish and wildlife habitat on the north arm of the Fraser River for over 30 years and continues to be monitored regularly by the port authority to ensure that the habitat continues to meet its biophysical objectives. Recent adaptive management at the site included the removal of large fallen cottonwood trees as they were observed to be impacting the brackish marsh vegetation.



Aerial view of the Gladstone Park Tidal Marsh site, looking north (2021)



Site conditions, looking west (2021)



Site conditions (2022)

For more information

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

Email: habitat.enhancement@portvancouver.com