

TFN Member Opportunity

Dungeness Crab Nursery Habitat Surveys at Roberts Bank

Overview

Global Container Terminals (GCT) has retained Hatfield Consultants to conduct environmental fieldwork programs in proximity to the proposed Deltaport Expansion Berth Four Project (DP4) starting in April 2022 and continuing into 2023. GCT and Hatfield recognize the importance of, and look forward to, working with TFN to complete Dungeness Crab Nursery Habitat Surveys.

Dungeness crabs are a vital part of the marine food web, serving as both predators and prey throughout their life cycle. As larvae they drift in plankton, consuming smaller organisms, but also serving as prey items for larger plankton and larval fish. As juveniles and adults, they are opportunistic feeders, preying often on molluscs and crustaceans or scavenging and recycling dead organisms. They also serve as an important food source for fish, birds, and humans. The Fraser River Estuary (FRE) provides important habitats for Dungeness crab that support crabs during different stages of their life cycle. Juvenile crabs can be difficult to find, but knowing the nursery habitats in which they feed and rear is important when determining how crab abundance may be affected by marine projects and help us minimize and counterbalance any changes to their environment. The Dungeness Crab Nursery Habitat Surveys are being conducted to understand which habitats in the Deltaport area contribute to local Dungeness crab productivity.

Scope of Work

Surveys are planned July through October 2022 in representative habitats found within the DP4 footprint and outside of the footprint on the north and south sides of the Roberts Bank causeway, including the area that used to be the turning basin that is no longer used.

A foot-based intertidal survey will be conducted to assess the number of juvenile crabs within each habitat. Juvenile Dungeness crabs, including larval stages (megalopae), will be counted and measured within 0.25 m² quadrats. Each quadrat will be sampled to a depth of 10 cm and sorted through two coupled sieves (mesh sizes 2 and 4 mm). Crab carapace widths (mm) will be measured using calipers and sex will be determined for larger individuals where external characteristics are easily distinguishable.

Duration

One-day Dungeness crab nursery habitat surveys were conducted once every two weeks in July and August and will be conducted one day in October. The work will be completed during daylight hours, however early morning / late evening work may be required.

Specific Requirements

Those assisting surveys are not required to assist on all surveys throughout the year, rather they can assist on a single survey or more if desired.

- Tasks include walking in intertidal areas, carrying equipment, sampling, sieving, counting, and measuring crabs.
- Required equipment includes rubber boots, weather appropriate clothing, sunscreen, lunch, and water. A PFD and high visibility vest can be supplied, if required.
- An interest in crabs or the ability or willingness to learn to identify crabs is beneficial.

Deadline

Deadline for submission of interest is **Friday, September 30, 2022 at 4 PM.**

***Please send submissions to Robin Buss rbuss@tsawwassenfirstnation.com or call at 604-202-3202. All received submissions will also be shared with Hatfield Consultants.**