

TFN Member Opportunity

Biofilm Quality and Taxonomy Studies at Roberts Bank

Overview

Global Container Terminals (GCT) has retained Hatfield Consultants to conduct environmental fieldwork programs in proximity to the proposed Deltaport Berth Four (DP4) expansion Project starting in April 2022 and continuing into 2023. GCT and Hatfield recognize the importance of, and look forward to, working with Tsawwassen First Nation to complete biofilm quality and taxonomy studies at Roberts Bank.

A layer of biofilm often forms on the top 2 mm of intertidal mudflats in the Pacific Northwest and is an important food source for shorebirds. Changes to the quantity and quality of biofilm at Roberts Bank could have a negative impact on the high densities of shorebirds that use the mudflats to rest and refuel during migration. Prior data (i.e., from the Roberts Bank Terminal 2 assessment) indicates that biofilm was more abundant north of the Roberts Bank causeway. Biofilm will be sampled following published methodologies and analyzed for photopigment density, total carbohydrates, total organic carbon, and total lipids.

Scope of Work

Biofilm quality and taxonomy surveys are planned on the north and south sides of the Roberts Bank causeway to Brunswick Point. One person will assist Hatfield biologists with biofilm collection by sampling upper surface sediments (up to ~2 mm depth) for lab analysis.

Duration

Biofilm surveys will be conducted approximately monthly from April 2022 to October 2023 with weekly sampling during spring and summer shorebird migrations (with possibility of extensions). 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 interested and available.

- Task include walking/wading in muddy intertidal areas, carrying equipment, sampling biofilm and recording data.
- Required equipment includes boots or dive booties and waders, weather appropriate clothing, gloves, lunch, and water. A PFD and high visibility vest can be supplied if required.
- An interest in biofilm or the ability or willingness to learn to identify biofilm is beneficial.

Deadline

- Deadline for submission of interest for October fieldwork is **Friday September 30, 2022, at 4 PM**. The opportunity will remain open until it is filled.

***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.**