# Public Notice

# Trial Island Lightstation – New Desalinator and Freshwater Distribution System

# Public Comments Invited

**September 14, 2022** - The Fisheries and Oceans Canada must decide whether the New Desalinator and Water Distribution System located at Trial Islands Lightstation in Victoria, B.C. is likely to cause significant adverse effects.

To help inform this decision, Fisheries and Oceans Canada is inviting comments from the public on the project and its potential effects on the environment. All comments received will be considered public. For more information, individuals should consult the [Privacy Notice](https://www.ceaa-acee.gc.ca/050/evaluations/Protection?culture=en-CA) on the Registry website.

Written comments must be submitted by **October 14, 2022** to:

# Emily Sapsford, Project Engineer

# Fisheries and Oceans Canada, Real Property Technical Services, Pacific Region

# Email: Emily.Sapsford@dfo-mpo.gc.ca

# Tel: (250) 217-0323

# 200 - 401 Burrard Street

# Vancouver, B.C.

# V6C 3S4

# Assessment Summary

DFO and CCG are proposing to install a seawater desalinator unit at the Trial Islands Lightstation. The lightstation is staffed by two lightkeepers 24/7. Rainwater collection is the staff’s main source of water supply. Due to yearly water shortages on Trial Island Lightstation, the source of rainwater is not sufficient to support onsite operations. The proposed design was chosen as it utilizes existing infrastructure and minimizes ground disturbance. The construction will take place in the fall or winter of 2022 and will take place for a duration of approximately 10 working days.

This proposed project involves the installation of a seawater desalinator and associated distribution system to assist in the supply of fresh water to the staffed light station. The proposed water supply system includes the replacement of existing infrastructure and the addition of new components. Added components include: 2 new 1-Horsepower Cast Iron pumps, 1 new desalinator, 1 new 1000L fresh water storage tank and above-ground fresh water piping from freshwater tank to Assistant Keeper residence cistern. Existing infrastructure that will be replaced includes: 1-horsepower cast iron pump, seawater intake head, saltwater piping from ocean to pump and from pump to storage tank, 2500 gallon saltwater storage tank, and any associated fittings. The Assistant Keeper cistern, which is located in the basement of the residence, will remain as existing. Aside from the saltwater storage tank and water lines, all equipment will be housed inside the existing boathouse structure and the lightkeeper residence on site.

To replace an 8m length of saltwater line, the project works do require ground disturbance for the piping of a foot print of 8.5m2 limited to the pre-disturbed rocky area. Helicopter slinging will be used to mobilize and demobilize equipment. No in-water works is anticipated for this project.

The Trial Islands lightstation is located on the Trial Islands, a group of islands on the south-eastern tip of Vancouver Island. The islands are located 1km south of Anderson Hill in Victoria. The islands are part of the 23 hectare Trial Islands Ecological Reserve. The Trial Islands Lightstation is also located within the Victoria Harbour Migratory Bird Sanctuary.

# Project Locations

Trial Island Lightstation is located on the Trial Islands, a 23 hectare group of islands on the south-eastern tip of Vancouver Island. The islands are located 1km south of Anderson Hill in Victoria, BC. The water body surrounding the island is the Strait of Juan de Fuca.

Site Access: Helicopter or Boat

# Coordinates:

# Latitude: 48ᵒ 23’ 43” N

# Longitude: 123ᵒ 18’ 18” W