



UNDERWATER CABLES IN FRESHWATER SYSTEMS

Fisheries and Oceans Canada Pacific Region Operational Statement

Version 3.0

The placement of cables on the beds of freshwater lakes and rivers is a common practice used to deliver utility services (i.e., electricity and telephone) across water bodies when overhead lines are not feasible. The placement of underwater cables is more favourable than using unconfined open trench methods, which bury the cables within the substrate of the lake or river. Placing cables on the beds of freshwater lakes or rivers typically generates less sediment and avoids the need to use machinery in the water. In some instances, however, excavation may be required as cables may need to be buried near to the shoreline for operational safety reasons.

Potential impacts to fish and fish habitat include disruption of sensitive fish spawning areas (e.g., gravel, cobble, and rock rubble), erosion and sedimentation caused by disturbance to the shoreline and bed of water bodies, removal of riparian (bank) vegetation and underwater rocks and logs that provide cover, shade and food, and disruption of sensitive fish life stages.

Fisheries and Oceans Canada (DFO) is responsible for protecting fish and fish habitat across Canada. Under the *Fisheries Act* no one may carry out a work or undertaking that will cause the harmful alteration, disruption or destruction (HADD) of fish habitat unless it has been authorized by DFO. By following the conditions and measures set out below you will be in compliance with subsection 35(1) of the *Fisheries Act*.

The purpose of this Operational Statement is to describe the conditions under which it is applicable to your project and the measures to incorporate into your project in order to avoid negative impacts to fish habitat. You may proceed with your underwater cable project without a DFO review when you meet the following conditions:

- unconfined open trench methods, including ploughing and water-jetting, to bury cable are not used,
- underwater cables are not installed on or within known fish spawning habitat,
- cable trenching is limited to near shore areas and is to be no greater in width than that required to accommodate the cable,
- explosives are not used to trench the cable, and
- you incorporate the *Measures to Protect Fish and Fish Habitat when Placing Underwater Cables* listed below in this Operational Statement.

If you cannot meet all of the conditions listed above and cannot incorporate all of the measures listed below then your project may result in a violation of subsection 35(1) of the *Fisheries Act* and you could be subject to enforcement action. In this case,

you should contact the DFO office in your area if you wish to obtain DFO's opinion on the possible options you should consider to avoid contravention of the *Fisheries Act*.

You are required to comply with all municipal, provincial, territorial and/or federal legislation that applies to the work being carried out in relation to this Operational Statement. In British Columbia, please contact the Water Stewardship Division, Ministry of Environment (http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html) for information for information on the Provincial *Water Regulation* requirements when planning to install underwater cables in freshwater systems in or around BC waters.

The activities undertaken in this Operational Statement must also comply with the *Species at Risk Act* (<http://www.speciesatrisk.gc.ca>). For general information on SARA species visit the following web site: http://www.dfo-mpo.gc.ca/species-especies/actMeans/actMeans_criticalHabit_factsheet_e.asp and/or contact DFO by email at SARA@pac.dfo-mpo.gc.ca.

If you have questions regarding this Operational Statement, please refer to the list of **Frequently Asked Questions** (http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/os-faq_e.htm) or contact DFO Regional Headquarters at 1-866-845-6776.

Please notify DFO 10 working days before starting your work by filling out and sending the Pacific Region Operational Statement **notification form** directly to DFO Regional Headquarters. This information is requested in order to evaluate the effectiveness of the work carried out in relation to this Operational Statement. It is recommended that you keep a copy of the Operational Statement at the work site to demonstrate to Habitat and Fishery Officer staff that the conditions and measures, as outlined in the OS, are being followed.

Area of Application

This Operational Statement applies to the province of British Columbia and Yukon Territory freshwater systems only.

Measures to Protect Fish and Fish Habitat when Placing Underwater Cables

1. Use existing trails, roads, or cut lines wherever possible to avoid disturbance to the riparian vegetation.

2. While this Operational Statement does not cover the clearing of riparian vegetation, the removal of select plants may be necessary to accommodate the cable. This removal should be kept to a minimum.
3. Where cables are buried within 10 metres of the **high water mark** (HWM) (http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/definitions_e.htm), time the installation to prevent disruption to sensitive fish life stages by adhering to appropriate fisheries **timing windows** (http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/timing_e.htm).
4. Isolate any in-water trench work to contain suspended sediment and prevent it from entering the surrounding waters.
5. Install effective sediment and erosion control measures on land before starting trench work to prevent entry of sediment into the water body. Inspect them regularly during the course of construction and make all necessary repairs if any damage occurs.
6. Operate machinery on land above the **HWM** or on water (i.e., from a barge or vessel) in a manner that minimizes disturbance to the banks or bed of the water body.
 - 6.1. Machinery is to arrive on site in a clean condition and is to be maintained free of fluid leaks, invasive species and noxious weeds.
 - 6.2. Wash, refuel and service machinery and store fuel and other materials for the machinery away from the water to prevent any deleterious substance from entering the water.
 - 6.3. Keep an emergency spill kit on site in case of fluid leaks or spills from machinery.
 - 6.4. Restore banks to original condition if any disturbance occurs.
7. Relocate any fish trapped within an isolated area to the main water body before starting any trenching.
8. During dry land trenching, stockpile the material that is moved from the bank of the water body (below the **HWM**) and return it to its original location once the cable is installed.
9. If any material (e.g., rock, cobble, woody material) is moved to place the cable on the bottom, it should be relocated to a similar depth within the water body in close proximity to its original location.
10. Restore the original contour, gradient and bottom of the water body, bank and shore. Allow sediment to fully settle inside any isolated area before removing sediment and erosion control measures.

11. Vegetate any disturbed areas by planting and seeding with native trees, shrubs or grasses and cover such areas with mulch to prevent erosion and to help seeds germinate. All seeding and/or planting trees should follow the DFO guidance on **Riparian Revegetation** (http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/riparian-reveg_e.htm). If there is insufficient time remaining in the growing season, the site should be stabilized (e.g., cover exposed areas with erosion control blankets to keep the soil in place and prevent erosion) and vegetated the following spring.
 - 11.1. Maintain effective sediment and erosion control measures until re-vegetation of disturbed areas is achieved.

DFO REGIONAL HEADQUARTERS

Fisheries & Oceans Canada
 Regional Habitat Manager
 200-401 Burrard Street
 Vancouver, BC V6C 3S4.
 Toll Free: 1-866-845-6776
 Fax: (604) 666-7907
 Email: dfo_epmp@pac.dfo-mpo.gc.ca

Aussi disponible en français

http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/modernizing-moderniser/epmp-pmpe/index_f.asp



NOTIFICATION FORM

Fisheries and Oceans Canada Pacific Region Operational Statement

Version 3.1

PROPONENT INFORMATION

NAME: STREET ADDRESS:
CITY/TOWN: PROVINCE/TERRITORY: POSTAL CODE:
TEL. NO. (RESIDENCE): TEL. NO. (WORK):
FAX NO: EMAIL ADDRESS:

CONTRACTOR INFORMATION (provide this information if a Contractor is working on behalf of the Proponent)

NAME: STREET ADDRESS:
CITY/TOWN: PROVINCE/TERRITORY: POSTAL CODE:
TEL. NO. (RESIDENCE): TEL. NO. (WORK):
FAX NO: EMAIL ADDRESS:

PROJECT INFORMATION

Select Operational Statements that are being used (check all applicable boxes):

- | | | |
|--|--|--|
| <input type="checkbox"/> Aquatic Vegetation Removal in Lakes | <input type="checkbox"/> Ice and Snow Fill Bridges | <input type="checkbox"/> Routine Maintenance Dredging for Navigation |
| <input type="checkbox"/> Bridge Maintenance | <input type="checkbox"/> Isolated Pond Construction | <input type="checkbox"/> Small Moorings |
| <input type="checkbox"/> Culvert Maintenance | <input type="checkbox"/> Maintenance of Riparian Vegetation
in Existing Rights-of-Way | <input type="checkbox"/> Small Clear-Span Bridges |
| <input type="checkbox"/> Directional Drilling | <input type="checkbox"/> Overhead Line Construction | <input type="checkbox"/> Temporary Ford Crossings |
| <input type="checkbox"/> Dock and Boathouse Construction
in Fresh Water Systems | <input type="checkbox"/> Public Beach Maintenance | <input type="checkbox"/> Underwater Cables in Fresh Water Systems |
| <input type="checkbox"/> Dry Open-Cut Crossings | <input type="checkbox"/> Punch and Bore Crossings | |

Select the type of water body or watercourse at or near your project:

- | | | |
|---|--|---|
| <input type="checkbox"/> River, Stream, Creek | <input type="checkbox"/> Marine (Ocean or Sea) | <input type="checkbox"/> Pond or wetland (pond is less than 8 hectares) |
| <input type="checkbox"/> Lake (8 hectares or greater) | <input type="checkbox"/> Estuary | |

PROJECT LOCATION (S) (fill out this section if the project location is different from Proponent Information; append multiple project locations on an additional sheet if necessary)

Name of water body or watercourse	Coordinates of the Project (UTM co-ordinate or Degrees, Minutes, Seconds), if available
Nearest Town to site	Easting: Northing: Latitude: Longitude:
Legal Description (Plan, Block, Lot, Concession, Township, Section, Range)	Directions to Access the Project Site (i.e., Route or highway number, etc.)
Proposed Start Date (YYYY/MM/DD):	Proposed Completion Date (YYYY/MM/DD):

Please notify DFO, preferably 10 working days before starting your work, by filling out and sending in, by mail, email or by fax, this notification form to the DFO Regional Headquarters. This information is requested in order to evaluate the effectiveness of the work carried out in relation to the Operational Statement.

I, _____ (print name) certify that the information given on this form is, to the best of my knowledge, correct and complete.

Signature _____ Date _____

Note: If you cannot meet all of the conditions and cannot incorporate all of the measures in the Operational Statement then your project may result in a violation of Subsection 35(1) of the *Fisheries Act* and you could be subject to enforcement action. In this case, you should contact the DFO office in your area if you wish to obtain DFO's opinion on the possible options you should consider to avoid contravention of the *Fisheries Act*.

Information about the above-noted proposed work or undertaking is collected by DFO under the authority of the *Fisheries Act* for the purpose of administering the fish habitat protection provisions of the *Fisheries Act*. Personal information will be protected under the provisions of the *Privacy Act* and will be stored in the Personal Information Bank DFO-SCI-605. Under the *Privacy Act*, individuals have a right to, and on request shall be given access to, any personal information about them contained in a personal information bank. Instructions for obtaining personal information are contained in the Government of Canada's Info Source publications available at www.infosource.gc.ca or in Government of Canada offices. Information other than "personal" information may be accessible or protected as required by the provisions of the *Access to Information Act*.

This Notification Form (Version 3.1) may be updated as required by Fisheries and Oceans Canada. It is your responsibility to use the most recent version. Please refer to the Operational Statements web site at http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/modernizing-moderniser/epmp-pmpe/index_e.asp to ensure that a more recent version has not been released.

DFO REGIONAL HEADQUARTERS

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200 – 401 Burrard Street
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