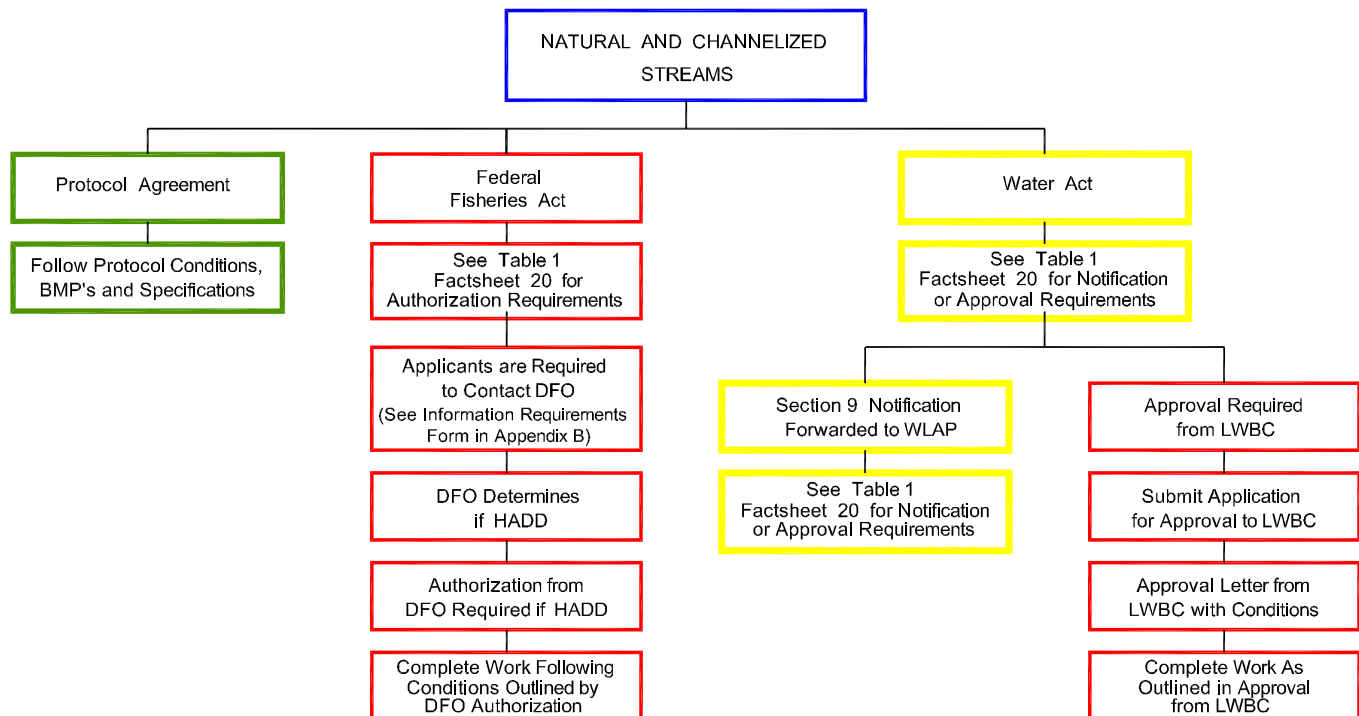


# Watercourse Maintenance FACTSHEET

## AGENCY CONTACT REQUIREMENTS For Channelized and Natural Stream Maintenance

The Drainage Management Guide outlines a process and provides guidance on agency contact requirements for drainage maintenance works. The intent of the factsheet series is to provide best management practices that should be followed when doing work in and about a stream. **Contact with agencies is required for most works on channelized and natural streams.** Figure 1 below and Table 1 in this factsheet provide guidance on the contact requirements with agencies for works in and about natural and channelized streams.

This factsheet is provided for general information. Contact with DFO is required for most works in and around channelized and natural streams. See Table 1 of this factsheet for contact requirements.



Note: HADD = Harmful, Alteration, Disruption or Destruction of Fish Habitat

**Figure 1 Contact Requirements for Channelized and Natural Streams**

## Agency Contact Requirements

Prior to undertaking works in or around a stream (channelized or natural), it is necessary to determine if there are regulatory requirements that must be met prior to commencing works and/or any activity. This factsheet outlines the type of contact with agencies that may be required under the Federal *Fisheries Act* and the BC *Water Act*.

Where uncertainty exists as to whether or not the proposed works will impact fish or fish habitat, proponents should contact Fisheries and Oceans Canada (DFO) and/or Land and Water BC (LWBC) and/or the Ministry of Water, Land and Air Protection (WLAP) for advice before proceeding with the proposed works.

This factsheet describes the various contact requirements for DFO, LWBC and WLAP. See Factsheet #19 for agency contact information.

Table 1 in this factsheet may provide some guidance on contact requirements for projects that are drainage maintenance related.

## CANADA FISHERIES ACT

Fisheries and Oceans Canada (DFO) is responsible for enforcing the *Fisheries Act* by protecting fish habitat and the quality of water that fish use. The *Act* defines fish habitat as “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes” – in other words, all parts of the environment on which fish depend throughout their life cycles, including both watercourses and riparian areas along the banks

Under the *Fisheries Act*, you have to make sure that works conducted in or about a watercourse do not

- harmfully alter, disrupt or destroy fish habitat (section 35);
- deposit a deleterious (harmful) substance (e.g., sediment) into waters that fish use (section 36);
- harm or kill fish (section 34);
- block fish passage (e.g., with dams or improperly installed culverts) (section 20); or
- block flows to fish-bearing habitat downstream from the work site (sec. 22); or
- entrain fish (sec. 30 requirements top screen intakes)

## DFO Authorization

**Applies to fish habitat in any watercourse and wetland.**

If the proposed work has the potential to result in the harmful alteration, disruption or destruction (HADD) of fish habitat, DFO must be contacted for a possible authorization of the impacts to fish habitat that may result from works in a constructed ditch, channelized or natural stream. Examples of HADDs include but are not limited to:

- Loss of riparian vegetation. Fish habitat features provided by riparian vegetation include insect drop, contribution of large woody debris, and shading to regulate water temperature.



- Siltation which can smother fish spawning gravels, and benthic invertebrates that provide a food source for fish.
- Removal of Channel Complexities
- Removal of instream vegetation that can result in loss of fish shelter and food supply.
- Infilling of the stream channel with debris causing a loss of habitat and food supply.
- Loss of fish habitat following a significant flow reduction downstream.

An Authorization is a signed agreement between the proponent and DFO, which allows for specific impacts to fish habitat and outlines mitigation and compensation requirements.

### How to Obtain an Authorization

To obtain an authorization from DFO, the proponent must submit a clearly written proposal detailing the type of work to be done, justification for the proposed works, equipment to be used, extent of fish use and habitat type, mitigation measures, proposed habitat compensation and timing of work. This information must be submitted to DFO well in advance of the work being done. Applications should be submitted by May 1<sup>st</sup> of any calendar year, in order to ensure adequate time for processing of the application prior to the Timing Window.

The following information is generally required for DFO to evaluate compliance with the Fisheries Act.

- proponent information
- project title
- location of works
- agent name
- environmental monitor
- proposed start and finish dates
- notification to WLAP ?
- tenure of the land any restrictive covenants
- written project rationale
- description of proposed activities
- description of fish and fish habitat
- fish habitat impact assessment
- mitigation proposed
- habitat compensation plans
- maps
- photographs
- signature and date

In order to assess the potential impact of your proposed project on fish habitat a template for project review requirements is available in Appendix B of the Drainage Management Guide. Ensure the form is completed as much as possible. Some information may not be applicable. Please be advised that additional information may be requested.

#### **Project Review Information Requirements for Works Affecting Fish Habitat**

In order for DFO to determine whether or not an authorization will be granted, a site visit to assess the proposed works may be required. If DFO determines an Authorization is not required, a letter of advice may be issued instead. For Protocol Agreements and long term plans, letters of advice and/or Authorizations may be issued for a term of longer than one year, thereby foregoing the necessity to apply on an annual basis.

In situations where the habitat impacts of the proposed works will be too great, DFO may choose not to authorize the proposed works.

## **BC WATER ACT**

The *BC Water Act* applies only to channelized and natural streams, not to constructed ditches. The *Water Act* defines a stream as “a natural watercourse or source of water supply, whether usually containing water or not, groundwater, and a lake, river creek, spring, ravine, swamp or gulch.” This means that you can do maintenance work on a constructed ditch without notifying WLAP or LWBC.

The main purpose of the *Water Act* is to protect water supplies for licensed users such as industry and public water suppliers. Section 9 of the *Water Act* along with the *Water Act Part 7 Regulation* regulates changes in or about a stream and ensures that water quality, riparian habitat, and the rights of water licensed water users are not compromised. Under the *Water Act Regulation*, you can carry out specified stream works (those that do not involve any diversion of water, are completed within a short period of time, and have little impact on the environment), provided that you first notify your regional WLAP office (listed in Appendix C) and follow the regulation. The *Water Act Regulation* provides a complete list of those works that may be done with notification. Table 1 in the regulation summarizes the notification requirements.

Notification means that you don’t need approval although WLAP may contact you if it has any questions or concerns about the proposed project. To determine what process you need to follow refer to Factsheets 3 and 20 of the Drainage Management Guide. For more information contact your regional WLAP offices.

Stream works that are more complex or require water diversion require formal Land and Water British Columbia (LWBC) approval. LWBC is a Crown Corporation that administers the approval process.

## **WLAP Notification Process**

### **Applies to: Channelized and Natural Streams**

If your works are listed below, Part 7 of the *Water Act Regulation*, upon the submission of a notification to WLAP, authorizes you to construct your works and to complete other specified changes in and about a stream following acceptable standards.

In general, the Regulation allows works to be done without a permit and through the Notification process if:

- diversion of water is not required,
- the works may be completed within a short period of time; and
- the work has little impact on the environment.

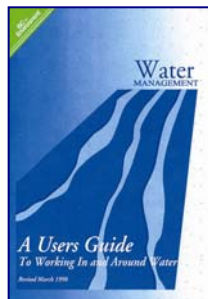
The notification process is described in the document *Standards and Best Practices for Instream Works*. The guidebook outlines many of the requirements for working in and about a stream. It is available on the web at:

<http://wlapwww.gov.bc.ca/wld/documents/bmp/iswstdsbpsmarch2004.pdf>

The notification and regulation are also described in *A Users Guide to Working In and Around Water*.

The guide is available at:

<http://wlapwww.gov.bc.ca/ske/wateract/userguide.pdf>



The WLAP notification form can be found at:

<http://wlapwww.gov.bc.ca/vir/es/pdf/Sec9Notification-form2004.pdf>

If the standards and best practices listed in the document *Standards and Best Practices for Instream Works* are adhered to, the following works in and about a stream (that are drainage maintenance related) may be constructed:

1. **With Notification at least 45 days** prior to works:

- stream culvert
- clear - span bridge
- pipeline crossing
- cutting of annual vegetation
- repair of existing dyke or erosion control works
- control of aquatic vegetation
- ice bridge or winter ford
- minor and routine maintenance of public utility works
- beaver dam management

2. **Without Notification:**

- installation or cleaning of drain tile outlets
- repair of bridge superstructure (excluding foundations)
- repair, removal or construction of fences not in the stream channel

3. **Without** pre-notification but requires reporting or notification within **72 hours** following works:

- erosion or flood protection works during an emergency flood event as designated under the *Emergency Protection Act* – such works are generally done by the crown or an agent for the crown (municipality)
- clearing of an obstruction from a bridge or culvert by a municipality

An outline for the Notification Process is outlined in the document *Standards and Best Practices for Instream Works*.

The notification forms are available at the Ministry of Water, Land and Air Protection regional offices.

No fee is required and the application form must be received at the regional office at least 45 days prior to start of the proposed activity. It is requested that applications be submitted by May 1<sup>st</sup>, so that applications can be processed in accordance with the timing window that has been established.

The WLAP Habitat Officer will review the plans and may set specific conditions which must be followed in carrying out the work, including best management practices. It is the responsibility of the applicant to contact DFO. It is the proponent's responsibility to contact other relevant municipal or provincial authorities.

If the works are not listed in any of the categories listed above then you must obtain a formal approval or license through the Water Act approval process.

## LWBC Approval Process

### Applies to: Channelized and Natural Streams

All proposed activities in channelized and natural watercourses that are not listed in the *Water Act*. Part 7 Regulation requires an Approval. Approvals are legal documents issued under Section 9 of the *Water Act*.

Approvals for changes in and about a stream may be required for activities such as:

- surface drainage of farmland or a land development site;
- altering the channel of a stream; and
- placement of a bridge, culvert or other structure within a stream channel that does not meet the Regulation requirements.

Table 1 provides additional guidance on when approvals are required.

Approval forms are available from the LWBC regional offices. A fee of \$130 must accompany the application. The Approval document will not be issued without payment. Completed applications must be submitted to LWBC well in advance of the work being done. Applications should be submitted by May

1<sup>st</sup> of any calendar year, in order to ensure adequate time for processing of the application prior to the Timing Window.

The application will receive a technical review. Possible impacts on the interests of any other persons or agencies that may result from the proposed works will be assessed. The proposed work cannot proceed until an Approval document is issued.

## Protocol Agreements

### Applies to: Channelized and Natural Streams

A Protocol Agreement is a standing legally binding agreement between DFO, WLAP, LWBC and the local municipality or other corporate entity that permits ongoing drainage maintenance works to be undertaken over a specified time period. Protocol Agreements specify the terms and conditions under which the drainage maintenance works may be undertaken and may set forth mitigation or compensation requirements within the context of a watershed or watershed sub-basin.

The objective of a Protocol Agreement is to allow for area-specific needs for drainage maintenance to be met while ensuring protection of fish and fish habitat. Protocol Agreements may be based on comprehensive long-term plans having schedules for ongoing maintenance works on an annual to 10-year basis. Protocol Agreements may specify work locations, types of maintenance works, quantities of works, work methodologies, timing windows or other specific maintenance requirements.

Protocol Agreements may recognize area specific needs such as:

- the necessity for conducting works after the fall harvest of crops has been completed;
- municipal workload volumes, equipment and/ or machine operator availability, or other related constraints;
- specific channels which are primarily used for irrigation and which may require maintenance works after water levels are lowered;
- flood protection;
- emergency work protocols;
- the protection of fish and fish habitat.



Before conducting works and/or activities in and about a stream that are not listed in the above table, contact WLAP and/or DFO. Further information can also be found in WLAP's publication *A Guide for Working in and Around Water*.

**Fish salvage must be done prior to commencing works in a stream if fish are present. A fish salvage permit must be obtained from WLAP and DFO. See *Fish Salvage Factsheet No. 17*.**

**A Protocol Agreement that has been established in accordance with regulations and agreed to by DFO, LWBC and WLAP will supercede other conditions and requirements.**

### The Process for Works In and About a Stream ( Natural or Channelized )

For works in and about a channelized or natural stream a WLAP notification or LWBC approval may be required and DFO may need to issue an Authorization, refer to Table 1. Therefore more than one document may be required before you would legally be able to proceed with your proposed work.

Where Table 1 indicates that a WLAP notification, LWBC approval and/or DFO Authorization is required, it is the proponent's responsibility to contact the agencies.

For all regions of British Columbia, it is the proponent's responsibility to ensure that he/she submits all necessary documents and obtains approval from LWBC and/or authorization from DFO before proceeding with the proposed works.

Table 1

## DFO, LWBC and WLAP Contact Requirement for Channelized and Natural Stream Maintenance Work

| Activity                             | Description  | No Agency Contact | DFO Authorization | WLAP Notification | LWBC Approval * |
|--------------------------------------|--|-------------------|-------------------|-------------------|-----------------|
| <b>Drain Tile Outlets</b>            | Installation of drain tile outlets   | X                 |                   |                   |                 |
|                                      | Cleaning of drain tiles - Use Ditch Maintenance Form (DMF) Drainage Management Guide   |                   | DMF               |                   |                 |
| <b>Fencing</b>                       | Installation, repair, maintenance or removal of fences providing the fencing materials are not in the stream channel, do not block debris, and do not interfere with navigation of the stream. | X                 |                   |                   |                 |
| <b>Access Crossings</b>              | The repair or maintenance of clear span bridge decking excluding it's foundation.  | X                 |                   |                   |                 |
|                                      | Construction of a clear span bridge crossing   |                   |                   | X                 |                 |
|                                      | New culvert installation   |                   | X                 | X                 |                 |
|                                      | Replacement of an access road culvert  |                   | X                 | X                 |                 |
|                                      | Construction of a livestock watering area, ford or crossing, consistent with codes, guidelines and BMP's   |                   | X                 |                   | X               |
| <b>Vegetation Maintenance</b>        | Localized hand pruning of riparian vegetation above the high water mark (does not include whole tree removal)  | X                 |                   |                   |                 |
|                                      | Localized hand cutting of aquatic vegetation below the waterline   | X                 |                   |                   |                 |
|                                      | Machine mowing of emergent aquatic vegetation to the waterline or aquatic vegetation below the waterline (aquatic vegetation along the edges of the watercourse are not disturbed)             |                   | X                 | X                 |                 |
|                                      | Machine mowing of grass vegetation along a stream  |                   | X                 |                   | X               |
|                                      | Removal of riparian vegetation (i.e. removal of trees)   |                   | X                 |                   | X               |
| <b>Bank Stabilization</b>            | Bank stabilization by planting vegetation and seeding with native grasses.   |                   |                   | X                 |                 |
|                                      | Bank stabilization or repair through bio-engineered techniques, using rock or other 'hard' engineering techniques.   |                   | X                 |                   | X               |
|                                      | Repair or maintenance of existing dykes or erosion protection works  |                   | X                 | X                 |                 |
| <b>Drainage Works</b>                | Installation , maintenance or cleanout of sediment traps   |                   | X                 | X                 |                 |
|                                      | Hand removal of blockages to stream flow (e.g. debris dams, beaver dams)   |                   |                   |                   | X               |
|                                      | Machine removal of flow blockages  |                   | X                 |                   | X               |
|                                      | Channel diversion, relocation or infilling   |                   | X                 |                   | X               |
| <b>Instream Structures</b>           | Construction or replacement of instream structures   |                   | X                 |                   | X               |
|                                      | Construction or maintenance of a pipeline crossing   |                   | X                 | X                 |                 |
|                                      | Installation of instream structures (e.g. weirs, dams, trash racks, irrigation gates etc.) that are not authorized under a water license   |                   | X                 |                   | X               |
| <b>Emergency Works</b>               | Conducting emergency works according to an emergency works protocol as agreed to by DFO, LWBC and WLAP   |                   | X                 | X                 |                 |
| <b>Maintenance of Licenced Works</b> | Maintenance of existing screens, trash racks and irrigation diversions   | X                 |                   |                   |                 |

\* An LWBC approval or DFO authorization may not be required in all situations. Contact the agency to confirm the information required.