



Kootenay-Boundary *Water Sustainability Regulation* Notification Terms and Conditions

The terms and conditions described within this document do not indicate compliance with other provincial, federal or municipal requirements. The proponent must be aware of, and comply with, obligations under the federal *Fisheries Act*, *Species at Risk Act*, *BC Wildlife Act*, *BC Riparian Areas Protection Act* (where applicable), *Local Government Act* or any other legislation related to the proposed works.

General Information

Only changes in and about a stream of the kind listed in Part 3 of the *Water Sustainability Regulation* (http://www.bclaws.ca/civix/document/id/complete/statreg/36_2016) can proceed as a Notification. Changes must occur in accordance with requirements of the regulation including any terms and conditions specified by a Habitat Officer (i.e., this document).

A proposed ‘change in and about a stream’ not listed in Part 3, Section 39 will require a separate Approval under the *Water Sustainability Act*.

Under the provisions of the regulation, a government Habitat Officer has 45 days following receipt of your application by the Ministry of this Notification:

- to request additional information from you; and
- to specify additional terms and conditions specific to your proposal.

A person making a change in and about a stream under this regulation, other than under section 39(1)(o) to (s) or 39(2) or 39(5), must then make that change in accordance with the regulation and any terms and conditions specified by the Habitat Officer. This includes the terms and conditions described below or as specified subsequently within 45 days of Habitat Officer receipt of this notification.

If you are not contacted by a Habitat Officer within 45 days of submitting your *Water Sustainability Act* application, you may proceed with your proposed changes in and about a stream.

It is recommended that copies of the following documents be kept or posted at the work site during implementation of the works so they may be shown to a Ministry official upon request:

1. A copy of your Notification letter, if received
2. A copy of your application
3. A copy of this document.
4. A copy of any impact mitigation plan(s) if developed by a Qualified Professional as described above.
5. A copy of any other documentation pertinent to the works.

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44 (2) A habitat officer may provide to a person carrying out or proposing to carry out an authorized change in accordance with this Part, for the protection of an aquatic ecosystem, a written statement containing terms and conditions applicable to the person in relation to the following:

a) the timing window during which the change may be made;

- i. If works are proposed on a stream that contains fish (fish-bearing), all works must be completed during the applicable timing window to protect fish, wildlife or the aquatic ecosystem within that stream. Timing windows represent periods during which works can occur to ensure the lowest risk to environmental and wildlife values. For the Kootenay Boundary Region, timing windows are determined by the geographic location of the works and the species of fish found at the site (https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/work_window_kootenays.pdf)
- ii. Worksites located in the *Delayed Instream Work Window Zone* are typically at higher elevations. Colder temperatures associated with higher elevations often delay the lifecycles of resident fish species, which is why the timing windows in these areas occur later in the year.
- iii. If any one of the following conditions is met, the timing window is not applicable:
 - a. If the stream channel is naturally dry (no flow) or frozen to the bottom at the worksite and the instream activity will not adversely impact fish habitat (e.g. result in the introduction of sediment into fish habitat).
 - b. If construction of a winter crossing is proposed and such works does not adversely impact the stream channel (including stream banks), fish habitat or fish passage.
 - c. The structure does not encroach below the high water mark, no work is proposed below the high water mark of a fish stream, and measures will be taken to prevent the delivery of sediments or contaminants into fish habitat.
 - d. You retain a Qualified Professional (such as a Registered Professional Biologist) to prepare a prescription that provides specific measures to comply with to prevent impacts to fish or fish habitat. This document must be submitted to the Habitat Officer via Front Counter B.C. with reference to your Notification file number.
 - e. Work is in a non-fish stream and measures will be taken to prevent the delivery of sediments into downstream fish habitat or the stream is not fish-bearing and discontinuous with no connection to downstream fish habitat.
 - f. If you are uncertain if the stream on which works will occur is fish bearing, please consult the Fisheries Inventory Data Queries: <http://gov.bc.ca//fish-inventory-data-queries>. The lack of fish records for a particular area does not necessarily indicate fish absence.

b) the minimum instream flow or the minimum flow of water that must remain in the stream while the change is being made;

- i. The original rate of water flow in the stream (existing prior to commencing work) must be maintained upstream and downstream of the worksite during all phases of instream activity associated with the work.
- ii. Any post-application changes to the proposed works in and about a stream that includes the alteration or diversion of stream flows will require a formal *Water Sustainability Act* Approval.

c) the removal of material from the stream or stream channel in connection with the change;

- i. The stream channel width must not change as a result of the work.
- ii. The permanent removal of stable, naturally occurring material from the stream or stream channel must be minimized and completed only as necessary to make the change in accordance with Part 3 of the *Water Sustainability Regulation*.

d) the addition of a substance, sediment, debris or material to the stream or stream channel in connection with the change;

- i. The stream channel width must not change as a result of the work.
- ii. Any work associated with the proposed changes in and about a stream must not cause stream channel instability or increase the risk of sedimentation into the stream.
- iii. During works, erosion and sediment control materials must be available onsite at all times and must be installed if sedimentation is likely to occur into the stream (e.g. silt fences, straw bale dikes, settling basins, ditch blocks, or filter cloth). A contingency plan must be developed outlining the measures to be taken by workers when carrying out any work to control erosion and sediment. All erosion and sediment control devices must be regularly inspected and maintained to remain functional during works. These devices and any accumulated sediment must be removed from the site after the completion of works.
- iv. Soil disturbance must not occur in heavy rain conditions and any soil removed must be placed in a location that ensures that sediment or debris does not enter the stream.
- v. Work must be suspended if the sediment control measures are ineffective and result in the introduction of sediment into the stream. In the event of sediment release into a stream, proponents are directed to immediately stabilize and mitigate the release, and then notify the Habitat Officer.
- vi. There must be no deposition of concrete materials into the stream or any watercourse through spillage, hosing off, rain, cleaning of tools, etc. All cast-in-place concrete and grouting must be completely separated from any stream or watercourse for a minimum of 48 hours if ambient air temperature is greater than 0°C or 72 hours if ambient air temperature is less than 0°C.
- vii. The only preservative that will be accepted for use on materials that could come in contact with water is copper chromate arsenate (CCA; wood preservative). Application of CCA must be upland, well away from any stream or watercourse. Application of treatment solutions must never be carried out on or over water. The use of creosote is not permitted under any circumstances.
- viii. Bridge abutments or other structures and materials must not be placed within the stream channel width. Rip-rap must be keyed into the stream bank and must not constrict the natural stream channel width.
- ix. Road material and gravel on a bridge deck or culvert fill must be prevented from entering the stream.
- x. Machinery must operate from outside the wetted perimeter of the stream (e.g. from the top of the bank or from within a naturally dry stream channel).

- xi. Any equipment used in conducting work must be in good mechanical condition. When operating in close proximity to the wetted perimeter of a stream, the operator must prevent entry of any substance (i.e., fuel, hydraulic fluid), sediment or debris into the stream. Failure to comply may result in a remediation order.
 - xii. Fueling and servicing of vehicles and equipment must occur away from the streams and any spills must be properly cleaned up and reported as required by the *Spill Reporting Regulation* (B.C. Reg. 263-90). Every effort must be made to contain the spill and prevent adverse impacts to the environment.
 - xiii. Any materials, such as riprap or gabion rock, used for stream bank armoring must be clean and not contain substances that could be harmful to fish, wildlife or the aquatic ecosystem of the stream.
- e) the salvage or protection of fish or wildlife while the change is being made or after the change has been made;**
- i. All activities in and about streams must be conducted in a manner that does not cause harm to fish or fish habitat and species at risk or their habitat.
 - ii. All water pumps used within fish-bearing streams are to be fitted with screens to prevent fish entrainment. Details of required mesh sizes can be found at www.dfo-mpo.gc.ca/Library/223669.pdf
 - iii. Open bottom structures such as clear span bridges or open bottom culverts are preferred on all fish bearing streams. If proponents wish to install a closed bottom culvert (e.g. round or elliptical) on a fish bearing stream, they must ensure that upstream fish passage through the culvert is maintained. In addition, closed bottom culverts must be embedded in order to provide a natural substrate such that there is no net loss of fish habitat. To achieve this, proponents must comply with the requirements detailed in Section 3.2 of the 2012 *Fish-Stream Crossing Guidebook*. See weblink in Best Management Practices section (below).
 - iv. Culvert flow capacity after embedment must be equivalent to the hydraulic capacity of the stream channel or it must be capable of passing the 1 in 200-year maximum daily flow (as per Section 39(1)(a) (vii) of the WSA).
- f) the protection of natural materials and vegetation that contribute to the aquatic ecosystem or stream channel stability;**
- i. The disturbance of natural materials (e.g. embedded logs) and stream bank vegetation must not occur or be minimized as much as possible. Any trees at the work site or within the clearing width area adjacent to streams that must be removed must be felled away from the stream to the fullest extent possible.
- g) the restoration of the worksite after the change has been made.**
- i. Any areas that are disturbed during the work (such as exposed soil) must be promptly restored to the pre-disturbance (or better) condition. All disturbed soils adjacent to the stream shall be re-vegetated with a suitable mix of grass, shrubs and/or trees immediately after the completion of

works, or as soon as site conditions are conducive to growth.

Additional Information

It is the responsibility of persons intending to carry out changes in and about a stream, as described under Part 3 of the *Water Sustainability Regulation* to:

- Ensure that all sections of the Notification form are properly completed;
- Comply with provincial, federal and municipal requirements; and
- Obtain the approval of the landowner for proposed changes and related works or activities intended to take place on private land or premises or to use any privately owner works, before proceeding.

In the event of non-compliance with the requirements of the regulation (including habitat officer terms and conditions), it is the responsibility of persons carrying out changes in and about a stream to:

- Report non-compliance with the regulation within 72 hours and then to take measures to remedy the non-compliance, as may be specified by a Water Sustainability Act Engineer, as well as to comply with any additional terms and conditions specified by the Habitat Officer; and
- Report damage to an aquatic ecosystem within 72 hours to a Habitat Officer and then to restore and repair the habitat to the state that existed before the damage was caused or as directed by the Habitat Officer.

Best Management Practices

Additional guidance when proposing works in and about a stream can be found at:

- *Standards and Best Practices for Instream Works*
<http://www.env.gov.bc.ca/wld/documents/bmp/iswstdsbpsmarch2004.pdf>
- *Fish Stream Crossing Guidebook*
https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/resource-roads/fish-stream_crossing_web.pdf
- *BC Guidelines and Best Management Practices*
<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-standards-and-guidance/best-management-practices>