

**Terms and Conditions for changes in and about a stream specified by
Ministry of Environment (MOE) Habitat Officers, Thompson-Nicola Region**

Section 42 (1) of the *Water Regulation* gives authority to a Habitat Officer to add specific conditions to ensure the protection of habitat in addition to the conditions of general application. Under this authority, MOE Habitat Officers, Thompson-Nicola Region, require the following mandatory terms and conditions:

42 (1) To protect habitat, a person making a change in and about a stream under this regulation, other than under section 44(1) (o) to (s) or 42 (2), must make that change in accordance with terms and conditions specified by the habitat officer with respect to

(a) The timing window or the period or periods of time in the year during which the change can proceed without causing harm to fish, wildlife or habitat,

The timing window of least risk to fish and fish habitat must be applied to all activities in fish streams as well as tributaries that have any risk of deleterious effects (e.g. depositing sediment into fish streams). Windows of least risk are designed to protect all fish species known to occur in a stream. One way fish presence can be confirmed is through a fish inventory database¹. Please note when using this database that the lack of fish records for a particular area does not equate fish absence. All streams are assumed to have both spring and fall spawners until demonstrated otherwise. Generalized windows of least risk for the Thompson-Nicola Region are as follows:

Species	Work window
Kokanee (stream spawners)	Jun 1 - Aug 31
Kokanee (shore spawners)	Jun 1 - Sep 30
Rainbow trout, Steelhead, Cutthroat trout (early spawners)	Jul 22 - Oct 31
Rainbow trout, Steelhead, Cutthroat trout (late spawners)	Aug 7 - Oct 15
Eastern brook trout	Jun 1 - Sep 15
Bull trout	Jun 1 - Aug 15
Lake trout	Jul 15 - Sep 30
Burbot (shallow)	Jul 1 - Oct 31
Burbot (deep)	Jun 1 - Dec 31
Lake whitefish	Jun 1 - Oct 31
Whitefish	May 1 - Sep 30
Salmon (contact DFO for site specific timing windows)	Jul 15 - Aug 15

Please note there may be watershed or species specific work windows that supersede the General Work Windows. Specific watershed work windows can be found at http://www.env.gov.bc.ca/wsd/regions/thr/wateract/work_windows_jan17_2007.pdf :

- Minimize the environmental risk and worker safety by completing the work in a timely manner

¹ Fisheries Inventory site <http://www.env.gov.bc.ca/fish/>

Notwithstanding the above, if any one of the following conditions is met, the timing window is not applicable:

- 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).
- 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.
- 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.
- 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.

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

- The natural rate of water flow must be maintained upstream and down stream of the worksite during all phases of instream activity.

(c) The removal of material from the stream or stream channel in connection with the change,

- In fish streams, the permanent removal of stable, naturally occurring material from the stream or stream channel is not permitted.
- The channel width of the stream must not change.
- In non-fish streams, the permanent or temporary removal of stable, naturally occurring material must be minimized and completed only as necessary to make the change in accordance with Part 7 of the *Water Regulation*.
- The removal of material must not lead to stream channel instability or increase the risk of sediment delivery to the watercourse.
- Any spoil materials must be placed in a location which ensures that sediment or debris does not enter the watercourse.

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

- Instream activities must be conducted in the dry or the worksite must be isolated from water flowing in the stream channel.
- All equipment must be located and operated in the dry.

- Equipment used in close proximity to the wetted perimeter must be free of deleterious material (e.g. hydrocarbons) and in good mechanical condition (e.g. no fuel or hydraulic leaks). All refueling and servicing must be completed outside of the Riparian Management Area. All machinery operating near a stream must have a spill kit.
- Measures must be taken to ensure that no harmful material (e.g. fuel and other hydrocarbons, soil, road fill, or sediment), which could adversely impact water quality, fish and other aquatic life, and/or fish habitat, can enter the wetted perimeter as a result of the project activities.
- Erosion and sediment control structures are to be available onsite and utilized as necessary. A contingency plan should be developed which outlines workers roles and responsibilities.
- Do not work when the combinations of operations and weather conditions is likely to contribute to sediment production to the stream. i.e. operations resulting in exposed soils during periods of moderate or heavy rainfall.
- Within the work area, standing water that contains sediment must be pumped to a vegetated area or settling pond that is sufficiently far from the stream to allow for suspended fine particles to settle or be filtered out, prior to reintroducing stream flow to the work area. The return water must not cause erosion that results in sediment delivery to the stream.
- Any materials, such as riprap or gabion rock, placed within the stream channel must be free of silt, overburden, or other substances deleterious to aquatic life. Rock used as riprap must be angular in shape and suitably sized to resist movement by stream flows. Rock placement should be designed to minimize the potential for failure of riprap bank protection and displacement of riprap to the stream bed.

(e) The salvage or protection of fish or wildlife while the change is being made or after the change has been made,

- If dewatering of the worksite is necessary, fish salvage must occur on a fish-bearing stream prior to commencing works. A fish salvage permit must be obtained from MOE Fisheries (250-371-6200) prior to commencing salvage activities.
- If an area is de-watered as a result of beaver dam removal or modification and results in the stranding of fish, then these fish must be salvaged and returned to the stream.
- Measures must be taken to ensure that equipment (e.g. screened water pump intakes) does not harm aquatic life.
- Proponents are responsible for complying with the BC Wildlife Act, and must not disturb wildlife and/or their residences (e.g. beaver lodges², eagle, osprey, and heron nests) within the project area.

²Beaver may only be removed by the registered trapline holder or contract problem beaver trappers (contact BC Trappers Association, c/o Trappers International (250-561-1602)). A permit issued by the Fish, Wildlife Science and Allocation Section Head is required to remove beaver outside the trapping season.

(f) The protection of natural materials and vegetation that contribute to habitat or stream channel stability,

- Avoid disturbance to natural materials (e.g. embedded logs) and vegetation that contribute to habitat or stream channel stability. Trees on the work site or clearing width adjacent to streams must be felled away from the stream to the fullest extent possible. The tree(s) and all resultant debris must be removed from the channel concurrently with felling.

(g) The restoration of the work site after the change has been made, and

- Complete restoration activities (including erosion control), as required, that will lead to natural pre-disturbance conditions.
- Any disturbed areas must be restored to function as they did in their pre-disturbance condition.
- Stream flow is to be returned gradually to the work site and not in a single sudden rush to avoid erosion that would result in sediment delivery to the stream.

(h) The requirement to obtain an approval from Fisheries and Oceans Canada (DFO) in connection with the change.

- Proponents are responsible for complying with the federal *Fisheries Act*. No harmful alteration, disruption or destruction (HADD) of fish habitat is authorized by this document.
- Fisheries and Oceans Canada (DFO) Habitat technologists may authorize a net loss of fish habitat, or HADD, where a mitigation/compensation package can be negotiated between DFO and the proponent.
- Proponents are responsible for determining whether Fisheries and Oceans Canada (DFO) must be consulted with and whether an authorization from DFO is required prior to making the change (Kamloops office, 250-851-4950).
- Proposals for the installation of pipe culverts (round, elliptical, flat bottom or other) or baffled culverts in fish streams require DFO approval. At the time of this draft, DFO considers that all hard bottom structures in fish streams will likely result in harmful alteration or destruction of fish habitat (HADD) and that authorization and compensation could be required under the federal *Fisheries Act*.

This document does not supersede the requirements of the ***Water Act*** and ***Regulations***, Federal ***Fisheries Act***, ***Wildlife Act***, ***Fish Protection Act*** or any other related legislation. The proponent is obligated to comply with all applicable federal, provincial or municipal enactments.