# Timing Windows and Measures To Adequately Manage and Conserve Aquatic Resources For The Following Forest Districts Within The Cariboo Region:


## Central Cariboo Forest District
**Becky Bings**
**Geoff Price**
**Designated Environment Officials**

## 100 Mile House Forest District
**Roger Packham**
**Designated Environment Official**

## Quesnel Forest District
**Charlotte Kurta**
**Designated Environment Official**

## Chilcotin Forest District
**Chris Schmid**
**Designated Environment Official**

## North Island and Mid Coast Forest District – The Mid Coast Portion of that District
**Ken Dunsworth**
**Designated Environment Official**



**Revised December 1, 2004**

# TIMING WINDOWS AND MEASURES TO ADEQUATELY MANAGE AND CONSERVE AQUATIC RESOURCES FOR THE FOREST DISTRICTS IN THE CARIBOO REGION

## 1.0 BACKGROUND

The *Forest Practices Code of British Columbia Act* (FPC) authorizes the Designated Environment Official (DEO) to provide timing windows and measures for construction, modification and deactivation activities on crossings on fish bearing streams in order to adequately manage and conserve aquatic resources. The FPC also authorizes the DEO to provide timing windows and measures for deactivation activities on non-fish bearing streams. The Ministry of Water, Land and Air Protection (MWLAP) has established Ecosystem Officers and Ecosystem Biologists as Designated Environment Officials for the purposes of:

Timber Harvesting and Silviculture Practices Regulation (December 17, 2002)
- Part 3, Section 14(2)

Forest Road Regulation (December 17, 2002)
- Part 3, Section 9(1) (h) (i)
- Part 5, Section 14

Woodlot License Forest Management Regulation (December 17, 2002)
- Part 4, Division 4, Section 49(1) (h) (i)
- Part 4, Division 6, Section 54
- Part 5, Section 68(c)

Section 42(1) (a) of the *Water Act – Water Regulations* gives authority to a Habitat Officer to add specific conditions to ensure the protection of fish habitat in addition to the conditions of the general application. Under this authority, MWLAP Habitat Officers, Cariboo 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 (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,

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

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

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

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

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

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

(h) the requirement to obtain an approval from the Department of Fisheries and Oceans in connection with the change.

This document has been prepared using the best information currently available and replaces all other direction regarding timing windows and conservation measures for the listed Forest Districts in the Cariboo Region. **This document refers to terminology, guidance and procedures outlined in the FPC *Fish-stream Crossing Guidebook* (March 2002) and is to be used in conjunction with this Guidebook.** These timing windows and conservation measures may be revised from time to time as required.

## 2.0 OTHER LEGISLATION AND RESOURCES AGENCIES

These timing windows and conservation measures do not authorize anyone to conduct or participate in activities that are contrary to any statute, provincial or federal. The timing windows and measures established by the DEO are for the management and protection of aquatic resources under the legal authority of the *Forest Practices Code of British Columbia Act*. If followed, the expected result is that the risk to aquatic resources will be decreased or largely eliminated. However, no authorization to alter, disrupt or destroy or introduce deleterious substances into fish habitat is expressed nor implied as such authorization is the exclusive purview of the Minister of the Canada Department of Fisheries and Oceans (DFO). These measures are not approvals for activities that may result in the harmful alteration, disruption or destruction of fish habitat or the introduction of deleterious substances. It is the responsibility of the proponent to contact DFO regarding activities that fall under the federal *Fisheries Act.*

## 3.0 OBJECTIVES

Some of the objectives considered necessary to adequately manage and conserve aquatic resources are:

1. to protect fish habitat.
2. to provide for safe fish passage.
3. to prevent impacts to fish eggs and alevins that are present in the gravel or on adult or juvenile fish that are migrating, overwintering or rearing.
4. to reduce the risk of the release of sediment or other deleterious substances during work at stream crossings.

## 4.0 REFERRALS

**A Notice of Commencement for each stream crossing stating the stream classification, type of crossing structure, location and estimated start date of the construction must be sent to the DEO a minimum of 72 hours prior to conducting any stream crossing activities.**

In-stream activities consistent with the timing windows and measures in this document do not require a referral, only a Notice of Commencement to the DEO unless specifically requested. In-stream works conducted under the authority of the *Forest Practices Code of British Columbia Act,* or a regulation under that act, do not require a *Water Act* referral.

In-stream works that cannot be carried out within the specified timing windows and/or according to the specified measures must be referred to the DEO and must outline the following:

- fisheries resources values
- details of the proposed activities
- the potential impacts to the fisheries resource
- describe any mitigation strategies, and
- include an environmental monitoring plan as detailed in Section 2.5 of the *FPC Fish-stream Crossing Guidebook.*

Proponents should plan to conduct all in-stream works within the specified in-stream work timing windows described in Section 7 of this document. However, a January 1 to December 31 timing window will apply to the construction, modification and deactivation of stream crossings during forest practices if any of the following conditions are met:

- the structure does not encroach onto the stream channel, no work is proposed within the stream channel of a fish stream and actions will be taken to prevent the delivery of sediments into fish habitat:
- work is in a non-fish bearing stream and action will be taken to prevent the delivery of sediment into downstream fish habitat:
- during installation the modification or deactivation of a clear span structure there is no running water at the crossing and the stream will not deliver sediment into fish habitat as a result.

## 5.0 MEASURES

The following measures apply to all construction and modification of fish stream crossings and deactivation activities for all stream crossing whether fish-bearing or not, except as specified in Section 4 of this document. These measures are as per the FPC *Fish Stream Crossing Guidebook* (March 2002). The words in **bold** type are as per the definitions in the *Fish Stream Crossing Guidebook* (March 2002). If the proponent chooses to install a closed bottom structure in a fish stream that may be marginal fish habitat, the proponent should conduct a fish habitat evaluation to determine if the habitat is critical, important or marginal. A qualified professional or technologist with adequate training and knowledge of fish habitat must conduct this evaluation.

### 5.1 Crossing Structures – New Installations

Crossing structures for fish streams with greater than 6% stream gradient are limited to clear span bridges or other open bottomed structures (OBS) regardless of habitat

type and must be designed and installed in accordance with the FPC *Fish Stream Crossing Guidebook* (March 2002).

The crossing structure must not cause:

- disturbance of the instream habitat;
- encroachment on the stream channel:
- excessive loss of riparian habitat:
- delivery of sediments into fish habitat.

Crossing structures for fish streams with **marginal habitat** (as defined on pages 6 and 7 of the Guidebook) and with less than 6% stream gradient can include clear span bridges, other open bottom structures (OBS) or closed bottom structures (CBS) installed as per the Guidebook provided that the following requirements are met:

- **stream channel width** is 2.5 meters or less and:
- the CBS is **embedded** to replicate the stream bed inside the pipe.

**5.2 Replacement Structures**

Where existing closed bottom structures are proposed for removal and replacement on fish streams and where the channel width is 2.5 meters or greater, OBS are required as per Section 5.1 of this document. Where the stream channel width is less that 2.5 meters and the stream gradient is less than 6% any type of OBS or CBS (not the preferred choice and may require agency review) may be acceptable provided that the design and installation are in accordance with Guidebook.

**5.3 Highly Active Streams**

Crossing sites on fish streams must be avoided in areas where streams are meandering, braided or located on alluvial fans.

**5.4 Stream Width and Stability**

5.4.1 Crossing Structures, bridge abutments or associated riprap must not constrict the stream channel width at the crossing location.

5.4.2 During bridge installation over a fish stream streambed and channel stability must be maintained by avoiding damage to the stream banks.

**5.5 Sediment Control**

5.5.1 In a fish stream the work area must be isolated from the stream flow and works completed in the dewatered channel, including but not limited to:

- when the channel of a fish stream is dewatered to isolate the work area, fish must be salvaged from the dewatered area and returned to the stream. **Fish salvaging requires a collection permit from the Permit and Authorization Service Bureau (Victoria).**

- silt laden water from the work site must not be discharged back into the stream channel during the course of the work and prior to re-establishing the streamflow.

5.5.2 Any materials, such riprap or gabion rock, placed within or adjacent to the stream channel must be free of silt, overburden or other substances deleterious to aquatic life. Rock used as riprap must be of a suitable size so as resist movement by stream flows.

5.5.3 To prevent sediment delivery to a stream the road grade should be elevated to ensure that the grade falls away from the crossing for a minimum of 10 meters on either side of the crossing if the topography permits.

5.5.4 Disturbance to the stream channel, stream banks and riparian vegetation in the vicinity of the work area must be minimized. All riparian vegetation associated with the stream crossing not impeding line-of-sight or compromising safety must be retained. Disturbance that occurs to the stream channel and/or banks must be stabilized to prevent sediment delivery into the stream.

5.5.5 For revegetation purposes associated with the stream crossing, a seed mix that is less palatable to livestock and is ecologically suitable should be used.

5.5.6 During periods of heavy or persistent precipitation work that could result in sediment delivery into the stream must stop. Measures must be taken to minimize the risk of sediment delivery into the stream during the shutdown period.

5.5.7 Minimize road material and gravel on a bridge deck from entering the stream. Consider the use of containment logs or boards between the bridge deck and the guard rails to minimize the potential for road material on the bridge decks from entering the stream.

5.5.8 Upon completion of the stream crossing structure or deactivation activity all material that has the potential to harm fish or fish habitat and is no longer being utilized must be removed and/or placed in a location where it will not re-enter the stream.

5.5.9 For the purposes of constructing stream crossings, and where there are no other practicable methods, one round trip crossing (over and back) of a fish stream within the instream work window is permitted. However, if the stream bed and banks are erodible (e.g. dominated by organic materials, silts, silt loams, etc.) and erosion, stream sedimentation and bank or stream channel degradation will result from heavy equipment crossings a temporary crossing structure must be used to protect the stream bed and banks. If no downstream sedimentation will result and if no spawning habitat is present, this crossing may be made outside of the in-stream work timing window.

### 5.6 Other Deleterious Substances

5.6.1 All machinery used on site must be in good repair and free from excessive grease or oil and have no fluid leaks.

5.6.2 Wood preservatives that are toxic to fish must be prevented from entering the stream.

5.6.3 All cast-in-place concrete and grouting must be completely separated from fish-bearing waters for a minimum of 48 hours if the ambient air temperature is greater than 0 degrees Celsius or for a minimum of 72 hours if the ambient air temperature is less than 0 degrees Celsius.

5.6.4 Tracks or wheels of the equipment being used must not be within the wetted perimeter of the stream except as specified in Section 5.5.9 unless authorized by the DEO.

5.6.5 Pile driving or blasting that may result in vibrations harmful to fish are subject to the in-stream work windows.

### 5.7 Protection of Redds

If redds (locations where fish have laid eggs) are present in or downstream of the in-stream work area, work activities must not commence or must be suspended and the DEO notified.

### 5.8 Deactivation/Modification of Stream Crossings

5.8.1 During the deactivation/modification of stream crossings, the steam substrate, channel, banks and other affected areas must be restored to their approximate original configuration and composition. Any fill material that has been added to the stream channel and floodplain must be removed and placed in location where it will not re-enter the stream.

5.8.2 During deactivation, the cribbing of a wooden culvert or bridge must be left in place if it is stable and over time has integrated into the stream banks and channel and now contributes to their complexity. If the upper portion of the cribbing will decay and fail in time, resulting in sedimentation, then it should be removed and only the lower portion left in place.

5.8.3 When a crossing structure is removed from a fish stream the stream crossing site, including approaches, must be left in a condition that renders the crossing impassable to protect fish habitat.

5.8.4 When a crossing structure is removed from a non-fish stream an armored ford should be established, if vehicle use of the crossing and sedimentation into downstream fish habitat is anticipated.

### 5.9 Temporary Winter Crossing Structures

Temporary winter crossing structures, such as snowfills, can be considered on streams that are dry or frozen to the bottom in winter. Snowfills must be designed and installed as per Section 3.3 of the *Fish Stream Crossing Guidebook* (pages 31 – 32).

## 6.0 OTHER CONSIDERATIONS

### 6.1 Emergency Actions

If, during works that are subject to the timing windows and measures, emergency actions are required to protect roads, stream environments or crossing structures from catastrophic events, or a crossing has failed due to catastrophic events, and damage to fish habitat has or may occur the incident must be reported to the DEO (or designate) as soon as possible.

### 6.2 Beaver Dams

Section 9 of the *Wildlife Act* requires authorization from the Ministry of Water, Land and Air Protection for a person to disturb, molest or destroy a beaver house, den or beaver dam. A culvert blockage created by a beaver qualifies as a beaver dam. The removal or modification of a beaver dam must be authorized by a permit issued under the *Wildlife Act.*

## 7.0 TIMING WINDOWS

Stream crossings that require instream works that may result in damage to fish habitat and/or the introduction of sediment to fish habitat must be conducted within the specified timing window for the stream or watershed. These timing windows must be applied to all fish bearing waters, as well as non-fish bearing waters that are direct tributaries to downstream fish habitat, where there is a reasonable expectation of sedimentation. Timing windows ensure that all in-stream works occur at the correct time of the year to minimize damage to spawning habitat, the destruction of fish eggs and juveniles and to minimize the impacts to adults and juveniles that may be migrating, overwintering or rearing. **The specific timing windows for each Forest District are identified on the following pages.**

**CONTACT THE APPROPRIATE DEPARTMENT OF FISHERIES AND OCEANS OFFICE FOR THE IN-STREAM WINDOWS FOR SALMON SPECIES.**

Where other water quality objectives must be maintained, e.g. community watersheds or domestic use, there may be other timing considerations depending on the site specific circumstances.

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the 100 Mile House Forest District.**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Throughout, elevation greater than 1325 m | RB | August 7 | October 15 |
| Throughout, elevation less than 1325 m | RB | July 22 | October 31 |
| Throughout | KO | July 22 | August 31 |
| Throughout | EB | July 22 | September 15 |
| Throughout | MW | July 22 | September 15 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the 100 Mile House Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Boss Creek, Hendrix Cr., Deception Cr., Canimred Cr., Ruth Redfern Cr., Spanish Cr., Jim Cr. (upstream of outlet to Bowers Lake), Windy Cr., Bridge Cr. (upstream of Stack Lakes), Phinetta Cr., Tributaries to Birch Lake and Lac des Roches, McDonald Cr., Hihium Cr., Scot Cr., Brown Cr. | RB | August 7 | October 15 |
| Bonaparte River and Lower reaches of any creeks tributary to the Fraser river | ST, RB, Salmon | July 22 | August 15 |
| McKinley Cr., Lower reaches of Eagle Cr. and Bradley Cr., 111 Mile Cr., Deka Cr. and Bridge Cr. (upstream of Buffalo Cr.), Lower reaches of Canimred Cr., Upper reaches of Bonaparte River. | RB, KO | July 22 | August 31 |
| 111 Mile Cr., Scottie Cr., Fifty-nine Cr., Fifty seven Cr., Fifty One Cr., | RB, EB, MW | July 22 | September 15 |
| All other streams | All | July 22 | October 31 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Central Cariboo Forest District.**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Horsefly R. watershed (downstream of falls) and tributaries, McKinley Cr. and tributaries, Woodjam Cr. downstream of falls, Moffatt Cr. downstream of falls, less than 1325 m elevation. | RB, BT, KO, WF, CN, CO, SK. | July 22 | August 15 |
| Horsefly R. watershed (downstream of falls) and tributaries, McKinley Cr. and tributaries, Woodjam Cr. downstream of falls, Moffatt Cr. downstream of falls, greater than 1325 m elevation. | RB, BT, KO, WF, CN, CO, SK. | August 7 | August 15 |
| Horsefly R. watershed (upstream of falls) and tributaries, Woodjam Cr. upstream of falls, McKusky R. and tributaries, MacKay R. and tributaries, Moffatt Cr. upstream of falls, less than 1325 m elevation. | RB, WF. | July 22 | October 31 |
| Horsefly R. watershed (upstream of falls) and tributaries, Woodjam Cr. upstream of falls, McKusky R. and tributaries, MacKay R. and tributaries, Moffatt Cr. upstream of falls, greater than 1325 m elevation. | RB, WF. | August 7 | October 31 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Central Cariboo Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Quesnel R. watershed and tributaries, Cariboo Lynx Cr., Blue Lead Cr., Penfold Cr., Mitchell R., less than 1325 m elevation. | RT, BT, KO, WF, CN, CO, SK. | July 22 | August 15 |
| Quesnel R. watershed and tributaries, Cariboo Lynx Cr., Blue Lead Cr., Penfold Cr., Mitchell R., greater than 1325 m elevation. | RT, BT, KO, WF, CN, CO, SK. | August 7 | October 31 |
| Cariboo R. and tributaries less than 1325 m elevation. | All | July 22 | August 7 |
| Beaver Cr. watershed and tributaries, less than 1325 m. elevation. | RB, KO. | July 22 | August 31 |
| Beaver Cr. watershed and tributaries, greater than 1325 m. elevation. | RB, KO. | August 7 | August 15 |
| Lower Chilcotin R. watershed and lower reaches of any creeks tributary to the Chilcotin R., less than 1325 m elevation. | ST, RB, BT, WF, CN, SO, CO, Chisel mouth. | July 31 | August 15 |
| Lower Chilcotin R. watershed and lower reaches of any creeks tributary to the Chilcotin R., greater than 1325 m elevation. | ST, RB, BT, WF, CN, SO, CO, Chisel mouth. | August 7 | August 15 |
| Chilcotin R. tributaries, Big Cr. and tributaries, less than 1325 m elevation | RT, BT, CN, CO. | July 22 | August 15 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Central Cariboo Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Quesnel R. watershed and tributaries, Cariboo Lynx Cr., Blue Lead Cr., Penfold Cr., Mitchell R., less than 1325 m elevation. | RT, BT, KO, WF, CN, CO, SK. | July 22 | August 15 |
| Quesnel R. watershed and tributaries, Cariboo Lynx Cr., Blue Lead Cr., Penfold Cr., Mitchell R., greater than 1325 m elevation. | RT, BT, KO, WF, CN, CO, SK. | August 7 | October 31 |
| Cariboo R. and tributaries less than 1325 m elevation. | All | July 22 | August 7 |
| Beaver Cr. watershed and tributaries, less than 1325 m. elevation. | RB, KO. | July 22 | August 31 |
| Beaver Cr. watershed and tributaries, greater than 1325 m. elevation. | RB, KO. | August 7 | August 15 |
| Lower Chilcotin R. watershed and lower reaches of any creeks tributary to the Chilcotin R., less than 1325 m elevation. | ST, RB, BT, WF, CN, SO, CO, Chisel mouth. | July 31 | August 15 |
| Lower Chilcotin R. watershed and lower reaches of any creeks tributary to the Chilcotin R., greater than 1325 m elevation. | ST, RB, BT, WF, CN, SO, CO, Chisel mouth. | August 7 | August 15 |
| Chilcotin R. tributaries, Big Cr. and tributaries, less than 1325 m elevation | RT, BT, CN, CO. | July 22 | August 15 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Central Cariboo Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Streams with species not mentioned. | DV. | July 22 | August 15 |
| Streams with species not mentioned, less than 1325 m elevation. | CT. | July 22 | October 31 |
| Streams with species not mentioned, greater than 1325 m elevation. | CT. | August 7 | October 31 |
| Streams with species not mentioned. | WF. | July 22 | August 31 |
| Streams with species not mentioned. | Chiselmouth | Site specific. | |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Quesnel Forest District.**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Baker Cr. watershed, downstream of Puntataenkut (Tibbles) lake, and for Merston sub-basin downstream of District Lot 2454. | CN, RB. | July 15 | July 31 |
| Baker Cr. watershed, downstream of Puntataenkut (Tibbles) lake, and for Merston sub-basin upstream of District Lot 2454. | RB. | July 15 | October 31 |
| Blackwater R. watershed, Nazko R., Euchiniko R., Blackwater R. downstream of Nazko R., and tributaries. | CN, RB. | July 15 | July 31 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Quesnel Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Baker Cr. watershed, downstream of Puntataenkut (Tibbles) lake, and for Merston sub-basin downstream of District Lot 2454. | CN, RB. | July 15 | July 31 |
| Baker Cr. watershed, downstream of Puntataenkut (Tibbles) lake, and for Merston sub-basin upstream of District Lot 2454. | RB. | July 15 | October 31 |
| Blackwater R. watershed, Nazko R., Euchiniko R., Blackwater R. downstream of Nazko R., and tributaries. | CN, RB. | July 15 | July 31 |
| Blackwater R. watershed, and tributaries upstream of Nazko R. | CN, BT, RB. | July 22 | July 31 |
| Blackwater R. watershed, headwaters | RB, BT, CH (possibly). | July 22 | July 31 |
| Bowron R. watershed. | CN, BT, RB. | July 22 | July 25 |
| Cariboo R. watershed | CN, BT, RB. | July 22 | August 7 |
| Cottonwood/Swift R. watershed, Swift R. and tributaries downstream of the confluence with Bendixon Cr., excluding Lightning Cr. | CN, BT, RB. | July 15 | July 31 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Quesnel Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Cottonwood/Swift R. watershed, Swift R. and Little Swift R. and their tributaries, above their confluence. | CN, RB, BT. | No Reduced Risk Work Window | |
| Cottonwood/Swift R. watershed, Lightning Cr. and tributaries. | CN, RB, BT. | No Reduced Risk Work Window | |
| Dean R. watershed. | All species | Not confirmed, site specific. | |
| Narcosli Cr. watershed. | CH, RB. | July 15 | July 31 |
| Quesnel R. watershed. | CN, RB. | July 15 | July 31 |
| Willow R. watershed. | CN, BT, RB. | July 15 | July 25 |
| Other Fraser R. tributaries. | All species | July 15 | July 31 |
| Creeks and rivers within the Kluskus Supply Area. | All species | Not confirmed, site specific. | |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Chilcotin Forest District.**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Lower Chilcotin R. watershed, Chilko R. downstream of Chilko Lake, Taseko R. Chilcotin R. and tributaries, less than 1325 m elevation. | ST, RB, BT, WF, CN, SO, CO, Chiselmouth. | July 31 | August 15 |
| Lower Chilcotin R. watershed, Chilko R. downstream of Chilko Lake, Taseko R. Chilcotin R. and tributaries, greater than 1325 m elevation. | ST, RB, BT, WF, CN, SO, CO, Chiselmouth. | August 7 | August 15 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Chilcotin Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Upper Chilcotin R. watershed, Chilcotin R. upstream of the confluence of Chilko R. and tributaries, less than 1325 m elevation. | ST, RB, BT, WF, CN, CO, Chiselmouth. | July 31 | August 15 |
| Upper Chilcotin R. watershed, Chilcotin R. upstream of the confluence of Chilko R. and tributaries, greater than 1325 m elevation. | ST, RB, BT, WF, CN, CO, Chiselmouth. | August 7 | August 15 |
| Homathko R. watershed, Homathko R. Mosely Cr. and tributaries, less than 1325 m elevation. | RB, BT, DV. | July 22 | August 15 |
| Homathko R. watershed, Homathko R. Mosely Cr. and tributaries, greater than 1325 m elevation. | RB, BT, DV. | August 7 | August 15 |
| KlinaKlini R. watershed, KlinaKlini R., McClinchy Cr., Kleena Kleene R. and tributaries, less than 1325 m elevation. | RB, BT, CT. | July 22 | August 15 |
| KlinaKlini R. watershed, KlinaKlini R., McClinchy Cr., Kleena Kleene R. and tributaries, greater than 1325 m elevation. | RB, BT, CT. | August 7 | August 15 |
| Upper Dean R. watershed, headwaters and tributaries, less than 1325 m elevation. | RB, DV. | July 22 | August 15 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Chilcotin Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Upper Dean R. watershed, headwaters and tributaries, greater than 1325 m elevation. | RB, DV. | August 7 | August 15 |
| Alexis Cr. watershed, Upper Nazko Cr. (upstream of Nazko Lake), Chilanko R. less than 1325 m elevation. | RB. | July 31 | August 15 |
| Alexis Cr. watershed, Upper Nazko Cr. (upstream of Nazko Lake), Chilanko R. greater than 1325 m elevation. | RB. | August 7 | October 31 |
| Puntzi Cr. watershed, less than 1325 m elevation. | RB. | July 22 | October 31 |
| Puntzi Cr. watershed, greater than 1325 m elevation. | RB. | August 7 | October 31 |
| All other streams within the Chilcotin Forest District, less than 1325 m elevation. | Any species | July 22 | August 15 |
| All other streams within the Chilcotin Forest District, greater than 1325 m elevation. | Any species | August 7 | August 15 |
| Streams with species not mentioned. | ST. | July 31 | August 15 |
| Streams with species not mentioned, less than 1325 m elevation | RB. | July 22 | October 31 |
| Streams with species not mentioned, greater than 1325 m elevation | RB. | August 7 | August 15 |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Chilcotin Forest District (continued).**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Streams with species not mentioned. | KO. | July 22 | August 31 |
| Streams with species not mentioned. | BT. | July 22 | August 15 |
| Streams with species not mentioned. | DV. | July 22 | August 15 |
| Streams with species not mentioned, less than 1325 m elevation. | CT. | July 22 | October 31 |
| Streams with species not mentioned, greater than 1325 m elevation. | CT. | August 7 | October 31 |
| Streams with species not mentioned. | WF. | July 22 | August 31 |
| Streams with species not mentioned. | Chiselmouth | Site specific. | |

**Region 5 (Cariboo): Reduced Risk Work Windows for Fish and Fish Habitat for the Mid Coast Portion of the North Island and Mid Coast Forest District.**

It should be known and understood that there is no actual time when fish (adults, fry, juveniles, alevins or eggs) are not within numerous watershed systems in the Mid Coast portion of the North Island and Mid Coast Forest District. However, these timing windows provide the time of least risk to fish and fish habitat. Salmon species are included.

**CONTACT THE DEPARTMENT OF FISHERIES AND OCEANS FOR IN-STREAM WORK WINDOWS FOR SALMON SPECIES.**

| Location | Species | Reduced Risk Work Window | |
|---|---|---|---|
| | | Start date | Finish date |
| Throughout | All Salmon | May 15 | July 15 |
| Throughout | RB, DV, ST, CT | August 1 | November 30 |
| Throughout | KO | August 1 | September 1 |
| Throughout | DV, BT | June 1 | September 15 |

## Glossary of Abbreviations

**Common Name, Scientific Name and Species Code of Fish identified in the Reduced Risk Work Window Tables.**

| Common Name | Scientific Name | Species Code |
|---|---|---|
| Steelhead | Oncorhynchus mykis | **ST** |
| Rainbow trout | Oncorhynchus mykis | **RB** |
| Cutthroat trout | Oncorhynchus clarki | **CT** |
| Dolly Varden char | Salvelinus malma | **DV** |
| Bull trout | Salvelinus confluentus | **BT** |
| Lake trout | Salvelinus namacush | **LT** |
| Brook trout | Salvelinus fontinalis | **EB** |
| Chinook salmon | Oncorhynchus tshawytscha | **CN** |
| Chum salmon | Oncorhynchus keta | **CH** |
| Coho salmon | Oncorhynchus kisuch | **CO** |
| Pink salmon | Oncorhynchus gorbuscha | **PI** |
| Kokanee | Oncorhynchus nerka | **KO** |
| Sockeye salmon | Oncorhynchus nerka | **SO** |
| Mountain whitefish | Prosopium williamsonii | **MW** |