

Region 7 Omineca – Reduced Risk Timing Windows for Fish and Wildlife

STANDARDS AND BEST PRACTICES FOR INSTREAM WORKS



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Final



**BRITISH
COLUMBIA**

Ministry of Water, Land and Air Protection
Omineca Region Ecosystem
Environmental Stewardship Division

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Preface

British Columbia is recognized globally for its exceptional wildlife, diversity of ecosystems and its rich natural resources. The Ministry of Water, Land and Air Protection (WLAP) works to maintain these valuable natural assets, which are at the heart of many recreational and economic activities enjoyed by British Columbians in all regions of the province.

WLAP has responsibility for the protection and stewardship of BC's environment. To achieve this goal, the Ministry develops policy and legislation, regulations, codes of practice, environmental contracts and covenants (legal agreements). In addition, the Ministry sets science- and results-based objectives and standards for activities that affect biodiversity. It monitors and reports on selected species and habitats, and acquires information on habitat and species health.

Clear goals, objectives, meaningful performance measures and science-based tools guide Ministry actions in improving environmental management. Regulatory frameworks allow headquarters and regional staff to set and report on standards for environmental quality, and for discharges and emissions to air, land and water. Regulatory compliance is addressed through policy development, enforcement and publicly reporting the results of compliance monitoring.

An Increasing Role for Stewardship

While the Ministry takes a leading role in facilitating the wise stewardship of BC's natural resources, species, and habitats, environmental protection and stewardship is the responsibility of all British Columbians. Stewardship of natural resources is key to maintaining and restoring the province's natural diversity, and achieving the Ministry's important environmental mandate. A stewardship approach involves all British Columbians taking responsibility for the well being of the environment by acting to restore or protect a healthy environment.

The Ministry is actively pursuing opportunities for sharing the responsibility of environmental protection. As a Ministry, WLAP looks to establish vital partnerships and move forward together to protect the environment and the health of all British Columbians. WLAP is listening to and developing partnerships with governments, First Nations, communities, academic institutions, industries, volunteer organizations, and citizens. The involvement of these partners in the shared environmental protection and stewardship of BC's resources is essential because of their local knowledge, resources and expertise. The environment will benefit as a result of an increased level of responsible environmental stewardship ethics, immediate and long-term improvements to environmental health and an increased awareness of ecosystem needs among the partners.

A Changing Process

Over the next several years, the Ministry will be making strategic shifts (changes in business practices) towards:

- Shared stewardship between the Ministry and other stakeholders;
- Clear roles for gathering environmental information and achieving environmental objectives;
- Integrated WLAP program delivery based on the best available science and an ecosystem-based approach; and
- Clear, reasonable environmental outcomes, with discretion as to how to achieve these outcomes.

This ***Region 7 Omineca - Reduced Risk Timing Windows for Fish and Wildlife*** document is an interim document and will change in the future as new information becomes available. Changes to the delivery model of this information are also expected, through the movement towards Internet-based access.

What will this document do for me?

This document exists to help you act as a steward of the environment. Its purpose is to provide ***instream reduced risk work windows*** for works that are scheduled for fish-bearing streams or if fish presence in the watercourse is not known, for complete in-channel or bank work within the Omineca Region. It will also provide the ***vegetative clearing timing window for the protection of nesting birds*** so activities will not result in the disturbance of birds nest, young or eggs.

The information within the provincial “Standards and Best Practices for Instream Works” document (See section 2.9 for web address) will help to ensure that your proposed development activities are planned and carried out in compliance with the various legislation, regulations, and policies that apply to your activity. By understanding the standards your activities must meet, you can choose an appropriate set of best practices to help you carry out your activities to achieve the required standards.

Please refer to that document, specifically section 14.1 Timing Windows for information related to periods of least risk and how works may proceed outside of the instream timing windows.

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1 Timing Windows

1.1 Background

All works in and about a watercourse are high-risk activities, and fish or wildlife populations and their habitats can be significantly impacted at **any** time. As a result, all instream works require strict mitigative best practices to ensure that fish and wildlife populations and habitats are protected. By controlling the timing of works, changes in and about a stream can be limited to **periods of least risk**.

IF THE STREAM CHANNEL IS DRY...

Works may proceed **outside** of the instream timing window, providing no species at risk are present and that they are completed with sediment controls in place to ensure no sediment is introduced to downstream fish-bearing streams or stream sections and in the absence of any flows within the channel.

Work in or around streams can result in harmful effects to fish and fish habitat, including the harmful alteration or destruction of spawning habitat, introduction of sediment and the destruction of fish eggs and alevins prior to emergence from gravels, and displacement or other behavioural impacts on fish. Therefore, such work must be undertaken during times or periods when such harmful effects will be minimized. Using timing windows of least risk ensure that instream works avoid damage to habitat, fish eggs, or juvenile fish and prevent impacts to adults and juveniles that may be migrating, overwintering or rearing.

Timing windows for the clearing of vegetation help to reduce the risk of impacting bird eggs, nests, and young. Timing windows vary depending on a site-specific basis, depending on which species may be present and the sensitivity of habitat. Please be advised that for certain species at risk there may be no period of least risk.

1.2 Objectives

To reduce the risk of impacts to fish and wildlife populations and their habitats, instream works and vegetation clearing are limited to non-critical periods of the year.

2 Timing Windows - Region 7 Omineca

2.1 Introduction

The intent of this document is to provide the instream work windows of least risk for all proposed works pursuant to the British Columbia Water Act. These are the standards of the Environmental Stewardship Division (ESD), Omineca Region, Ministry of Water, Land and Air Protection.

This document has been developed to assist proponents in appropriately addressing fish and wildlife population and habitat protection in the proposal, design and completion of works, and is only applicable within the Omineca Region. Please contact Water Licensing, Land and Water Management Division, British Columbia Assets and Land Corporation if your application requires an approval pursuant to Section 9 of the Water Act.

This document has been prepared by ESD Ecosystem Biologists within the Omineca Region, using the best information currently available, and in consultation with Ministry of Water, Land and Air Protection (MWLAP) fisheries staff and Fisheries and Oceans Canada (DFO) who have been involved in the development of the document.

2.2 Purpose/Scope

If the instream reduced risk work window is followed, it is expected that risks to aquatic resources will be significantly reduced or eliminated. However, these timing windows do not authorize anyone to conduct or participate in any activity that is contrary to any provincial or federal statute. No authorization to alter, disrupt or destroy fish habitat, or introduce deleterious substances to water frequented by fish, is expressed or implied, as such authorization is within the exclusive purview of the Minister of Fisheries and Oceans, Canada. It is highly recommended that any proposed works that may be a HADD be referred to the DFO, to ensure compliance with the Canada Fisheries Act.

2.3 Background

Birds in British Columbia are protected under the federal *Migratory Birds Convention Act*, 1994 and Section 34 of the provincial *Wildlife Act*, 1982.

Migratory Birds Convention Act (MBCA):

The MBCA is Canadian legislation that governs the 1916 Migratory Birds Convention - a treaty between Canada and the United States which was designed to protect and manage migratory bird species that used habitats in both countries. The following species are covered by the **MBCA**:

FEDERAL STANDARDS:

The federal *Fisheries Act* regulates fish and fish habitat in Canada. Section 35 of the *Act* prohibits the “harmful alteration, disruption, or destruction of fish habitat” (HADD) unless authorized by DFO.

If your works may result in a HADD, you will need to contact DFO for an Authorization of your works.

If species at risk are present, the federal Species at Risk Act will also apply.

- Waterfowl; cranes; rails and coots; shorebirds, including gulls and terns; pigeons and doves; insectivorous songbirds (excluding blackbirds); seabirds; loons; grebes; herons, egrets and bitterns.

The **MBCA** has comprehensive, corresponding regulations to the Act to protect, and regulate management of these species.

British Columbia Wildlife Act:

The ***Wildlife Act***, 1982 is provincial legislation designed to protect and manage wildlife species in British Columbia.

Section 34 of the ***Wildlife Act*** states:

A person who, except as provided by regulation, possesses, takes, injures, molests or destroys

- (a) a bird or its egg,
- (b) the nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron or burrowing owl, or
- (c) the nest of a bird not referred to in paragraph (b) when the nest is occupied by a bird or its egg commits an offence.

Birds protected under the ***Wildlife Act*** include:

- Birds described in the American Ornithologists Union Checklist of North American Birds, 6th edition or its supplements, which are native to Canada or the United States of America and were not introduced by man.

Some additional species (e.g., Eurasian Skylark, Crested Myna, all raptors and native as well as some introduced upland gamebirds) are afforded additional protection under the Act; while a few species are specifically exempted for management reasons (e.g., Crows, European Starling, Rock Dove, Brown-headed Cowbird, House Sparrow and Black-billed Magpie).

Fish and fish habitat are protected under the *Fisheries Act of Canada*. This legislation has provisions to address the harmful alteration damage or destruction of all types of fish habitat and deposition of deleterious substances into fish bearing waters.

Region 7 Omineca - Reduced Risk Timing Windows for Fish and Wildlife, are intended to provide specific timing window for the Omineca Region to reduce the risk of impacts to fish and wildlife and to support the guidelines contained within the provincial “**Standards and Best Practices for Instream Works**” WLAP BMP Series.

The “**Standards and Best Practices for Instream Works**” document must be considered regarding the Notification and Approval application process under the BC Water Act and used in the application of these regional specific in-stream work windows.

2.4 Operational Best Practices

These recommended timing requirements apply to **all** proposed instream work types.

- Only undertake works during favourable weather and low water conditions.
- During periods of heavy and persistent precipitation, stop works if there is a risk of sediment delivery to the watercourse. Ensure sediment control measures are in place.
- Complete the works as quickly as possible once started.

2.5 Reduced Risk Timing Windows for Fish

If your works involve fish bearing streams...

If your works are proposed outside the Omineca Region.

Contact that regional MWLAP office, to find out the timing window requirements for that area.

- If works are scheduled for **fish-bearing streams** or if fish presence in the watercourse is not known, complete in-channel or bank work during the ***instream reduced risk work window*** approved for the Omineca region. .
- ***Region 7 Omineca - Reduced Risk Timing Windows for Fish*** are shown in Table 1.
- White (non-shaded) areas in Table 1 represent time periods when in-stream work must be conducted. Numbers in the Table represent an approved start or end date for in-stream work

Table 1. Region 7 Omineca - Reduced Risk Work Window for Fish Bearing Streams

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species												
A. grayling			31					15				
Rainbow tr.				15				15				
Steelhead									15	15		
Bull trout						15		15				
Dolly Varden							15		31			
Kokanee						1			31			
M. whitefish						1			15			
Spring and Fall Spawners							15	15				
Anadromous Salmon	Contact Fisheries and Oceans Canada (DFO) BC Offices for appropriate timing window.											

If No Fisheries Information is Available:

If fish species information for a particular stream is not available, the instream timing window for both spring and fall spawners must be used.

District-specific timing windows are as follows. These timing windows replace the general *Reduced Risk Work Window for Fish* provided below, for the specified area and fish species.

- Mackenzie Forest District
 - Bull trout – July 1st to August 15th
 - Mountain whitefish - July 15th to August 31st
- Vanderhoof Forest District
 - Kokanee – June 1st to July 31st - Cluculz watershed area
- Fort St. James Forest District
 - Kokanee – June 1st to July 31st – Tsilcoh River watershed area

Works **outside** of the instream window may only be completed if a technical rationale completed by an appropriately qualified professional(s) is provided which details that there would be **no increased risk** to fish and wildlife populations and habitats and that the proposed works:

- **Are** in a section of stream with confirmed fish absence;
- **Are not** in a stream or section of a stream immediately upstream of a fish-bearing section;
- **Are not** in a stream or section of a stream with known or suspected vulnerable, threatened, rare, or endangered wildlife or fish species present; is this redundant if first bullet is met?
- Would **not** adversely impact any individual, species or population of wildlife;
- Do **not** include the use of concrete pours;
- Would **not** result in the discharge of sediment to downstream fish bearing streams or sections; and
- Would **not** impact benthic macro-invertebrate production.

2.6 Reduced Risk Timing Windows for Wildlife

If your works involve vegetation clearing...

If your vegetation clearing works are proposed outside the Omineca Region.

Contact that regional MWLAP office, to find out the vegetation clearing timing window for that area.

- Only clear vegetation for worksite access and stream crossing right-of-way within the *vegetation clearing timing window for the protection of nesting birds* approved for your region.
- Ensure that your activities will not result in the disturbance of bird nests, young or eggs.
- Be advised that for certain fish and amphibian species at risk, there may be no window of least risk.

- **Region 7 Omineca - Reduced Risk Timing Windows for Wildlife** are shown in Table 2.

Table 2. Region 7 Omineca - Vegetation Clearing Timing Window for the Protection of Nesting Birds

Vegetation clearing should only be undertaken during the period of **August 1** through to **April 30** to avoid contravention of Section 34 of the *Wildlife Act*.

2.7 Alternatives to BMPs

The recommended instream work windows apply to all proposed instream works types within the Omineca Region.

- Proponents or their agents must use the instream work windows and vegetation clearing timing window described in ***Region 7 Omineca - Reduced Risk Timing Windows for Fish and Wildlife***, OR
- Alternatives recommended in a technical rationale developed, signed and sealed by an appropriately qualified professional(s) if the proposed works can be considered "**emergency instream works as identified under Part 7 of the Water Act Regulations**". The technical rationale must describe in detail the justification for the works outside the recommended instream works window, and describe in detail how the increased risk to fish and wildlife populations and habitats would be mitigated, OR
- Alternatives recommended in a technical rationale developed, signed and sealed by an appropriately qualified professional(s) detailing how there would be no increased risk to fish and wildlife populations and habitats from the proposed works.

2.8 Glossary

Alevin: Another name for juvenile fish which have recently hatched from the egg. This is an intermediate life stage during which the fish feed off an attached yolk sac.

Annual vegetation: vegetation that completes its growth cycle in one year.

“Appropriately qualified professional”: an applied scientist or technologist specializing in a relevant applied science or technology including, but not necessarily limited to, agrology, forestry, biology, engineering, geomorphology, geology, hydrology, hydrogeology or landscape

architecture, and who is registered in British Columbia with their appropriate professional organization, and acting under that association's Code of Ethics and subject to disciplinary action by that association, and who, through demonstrated suitable education, experience, accreditation and knowledge relevant to the particular matter, may be reasonably relied on to provide advice within their area of expertise.

Aquatic Habitat: Areas associated with water that provide food and cover and other elements critical to the completion of an organism's life cycle (*e.g.*, bogs, swamps, riparian areas and streams).

Avoidance: Minimizing the effects of an undertaking on fish habitat through the identification and bypassing of areas of concern to fisheries.

Bedload: Particulates that are transported along the channel bottom in the lower layers of stream flow by rolling and bouncing.

Benthic Invertebrates: Animals lacking backbones that live in the substrates of aquatic systems.

Best Practice: a method or technique that **should** be followed to ensure the standards are met and impacts to riparian and aquatic habitats are mitigated.

Bioengineering: The use of living plant materials to perform some engineering function (*e.g.*, enhanced soil stability).

Check Dam: A small dam constructed in a ditch or similar place to decrease water velocity and promote the accumulation of sediment.

Clear-span bridge: a stream crossing structure which spans the stream's bankfull channel.

Coffer Dam: A watertight enclosure built in a shallow river or creek, which is pumped dry to allow construction activities in the isolation of flowing water.

Compensation: "The placement of natural habitat, increase in the productivity of existing habitat or maintenance of fish production by artificial means in circumstances dictated by social and economic conditions, where mitigation techniques and other measures are not adequate to maintain habitats for Canada's fisheries resources" (DFO, 1986).

Critical habitat: habitat used by **species at risk** or habitat critical to sustaining local populations of a species, because of its rareness, productivity, and sensitivity. This includes high value spawning/rearing or nesting habitat.

DFO: Federal Department of Fisheries and Oceans

Deleterious substance: any substance that, if added to any water, would degrade or alter the quality of that water so that it becomes toxic or harmful to aquatic organisms or habitat.

Diversion Dam: A barrier built within the active channel of a watercourse in order to divert water along a different flow path.

Diversion Ditch: A ditch that directs water and silt into stabilized areas away from a watercourse.

Due Diligence: A legal term that requires individuals on the job to maintain a reasonable standard of care. This term applies to environmental precautions but also to other areas such as safety, for example.

Dyke: An impervious elongated mound of earth constructed to confine water or another liquid from entering or leaving an area of land.

Ecosystem: the dynamic and interrelated complex of plant and animal communities and their non-living environment. All parts of an ecosystem, including physical, chemical, and biological components, are interconnected; that is, they affect and are affected by all other parts.

Erosion: a natural process of sediment movement as a consequence of water currents, rainfall runoff, or wind, which may be considered beneficial or detrimental, depending upon the associated environmental concerns.

Fish: all fish, shellfish, crustaceans and marine animals, and the eggs, spawn, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.

Fish habitat: the areas in and about a stream, such 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. This includes streamside habitat.

Floodplain: a level, low-lying area adjacent to streams that is periodically flooded by stream water. It includes lands at the same elevation as areas with evidence of moving water, such as active or inactive flood channels, recent fluvial soils, sediment on the ground surface or in tree bark, rafted debris, and tree scarring.

Grade: The slope of road, channel, or natural ground.

Geotextile Filter Fabric: A synthetic material placed under erosion control material (*i.e.*, riprap), with the primary functions of layer separation, aggregate confinement and distribution of load.

Harmful Alteration, Disruption or Destruction of Fish Habitat

(HADD): The DFO define HADD of fish habitat as “any change in fish habitat that reduces its capacity to support one or more life processes of fish”.

Habitat: the natural home of a plant or animal within an ecosystem, which provides food and shelter and other elements critical to an organism’s health and survival.

Habitat Enhancement: Any manipulation of habitat that improves its value and ability to meet the specified requirements of one or more species.

Hyporheic zone: the porous layer of the streambed, crucial for the intermixing of ground and surface waters.

Instream window: A period of least risk during which instream works are permitted. When works are timed to occur during the instream window, there is a reduced risk of damage to spawning habitat, fish eggs, and juvenile fish and reduced impacts to adult and juvenile aquatic organisms that may be migrating, over-wintering or rearing.

Migration: Animal movements between two or more separate habitats (*e.g.*, from over-wintering habitat to spawning habitat).

Mitigation: Actions taken during the planning, design, construction, and operation of a project to alleviate or reduce potential adverse effects on aquatic habitat, such as culvert design modifications to allow fish passage, timing constraints for instream work, and erosion control measures.

No Net Loss: A working principle of the Federal DFO which strives to balance unavoidable habitat losses through avoidance, mitigation, and habitat replacement on a project-by-project basis. (DFO, 1986).

Revegetation: The re-establishment of vegetation in disturbed areas.

Riparian Vegetation: Vegetation adjacent to a watercourse, lake, swamp, or spring, that is generally critical for wildlife cover, fish food organisms, stream nutrients and large organic debris, and for stream bank stability.

Riprap: Rock or stone placed on earth surfaces for protection of the soil against the erosive action of flowing water or precipitation.

SARA: Federal *Species at Risk Act*

Sediment: Particulate matter that is entrained within, or settled out from, water.

Silt: The fine-particulate fraction of sediment.

Silt Fence: A synthetic barrier erected to restrict the movement of unconsolidated material from a disturbed area to any sensitive areas.

Spawning Habitat: Fish habitat associated with the breeding of fish.

Species at Risk: a species designated as a Species at Risk by provincial or federal legislation or policy due to its vulnerable, threatened, or endangered status.

Standard: a regulatory requirement that must be followed in the design and implementation of your works. This may also be referred to as a condition or requirement.

Stream: a natural watercourse or source of water supply, whether usually containing water or not, ground water, and a lake, river, creek, spring, ravine, swamp and gulch.

Substrate: The bottom or bed materials of a water body or watercourse in which plants and organisms live and grow.

Suspended Solids: Particulate matter, such as silt or clay, that is entrained within a water column (*i.e.*, has not settled to the substrate)

Vegetation clearing window: A period of least risk for vegetation disturbance when there will be a reduced risk of impacting bird eggs, nests, and young. Timing windows vary depending on a site-specific basis, depending on which species may be present and the sensitivity of habitat.

WLAP: BC Ministry of Water, Land and Air Protection

Woody Debris: Sound and rotting logs and stumps that provide cover for small animals and their predators (both fish and wildlife).

2.9 Additional Information Sources

The following British Columbia government search engines and libraries are recommended for queries related to provincial documents. They were accurate at the time of printing (April 20, 2004):

Government of British Columbia Search Engine
<http://datafind.gov.bc.ca/>

To access the full text of applicable federal and provincial legislation, try the following links:

Canadian Department of Justice – provides alphabetized links to federal statutes and regulations, including the Fisheries Act, Migratory Birds Convention Act, 1994, and Navigable Waters Protection Act.
<http://laws.justice.gc.ca/en/>

The Revised Statutes and Consolidated Regulations of British Columbia – provides links to provincial legislation including the Water Act Regulations, Forest and Range Practices Act, and Wildlife Act.
<http://www.qp.gov.bc.ca/statreg/>

For further information regarding the Water Act Regulation, refer to the following Provincial websites:

Users Guide to Working in and Around Water, Regulation Under British Columbia's Water Act
http://lwbc.bc.ca/water/brochures/user_guide.pdf

Water Act Regulations

<http://srmwww.gov.bc.ca/wat/wrs/waterreg/consolidatedreg.pdf>

The federal Department of Fisheries and Oceans websites contain information on responsibilities pertaining to the Fisheries Act:

The Canada *Fisheries Act*

<http://laws.justice.gc.ca/en/F-14/>

DFO Habitat Protection and Conservation Guidelines (1998)

http://www.dfo-mpo.gc.ca/canwaters-eauxcan/infocentre/guidelines-conseils/guides/fhmguide/index_e.asp

DFO Policy for Management of Fish Habitat

http://www.dfo-mpo.gc.ca/canwaters-eauxcan/infocentre/legislation-lois/policies/fhm-policy/index_e.asp

DFO Guidelines for Attaining No Net Loss

http://www.dfo-mpo.gc.ca/canwaters-eauxcan/infocentre/guidelines-conseils/guides/fhmcons/index_e.asp

“What the Law Requires” information

http://www.dfo-mpo.gc.ca/canwaters-eauxcan/infocentre/guidelines-conseils/guides/law-lois/index_e.asp

“Working Around Water?” Fact Sheet Series

http://www.dfo-mpo.gc.ca/canwaters-eauxcan/water-eau/index_e.asp

For further standards and best practices documents, refer to the following websites:

Land Development Guidelines for the Protection of Aquatic Habitat, Barry Chilibeck et al, 1992.

http://www-heb.pac.dfo-mpo.gc.ca/publications/pdf/guidelines/l dg_e.pdf

Stormwater Planning: A Guidebook for British Columbia

<http://wlapwww.gov.bc.ca/epd/epdpa/mpp/stormwater/stormwater.html>

Forest Practices Code of BC: Guidebook on Fish Stream Crossings

<http://www.for.gov.bc.ca/tasb/legsregs/fpc/FPCGUIDE/FishStreamCrossing/FSCGdBk.pdf>

Environmental Best Management Practices and Requirements for Land Developments, Ministry of Environment, Lands and Parks, Vancouver Island Region, March 2001.

http://wlapwww.gov.bc.ca/vir/pa/bmp_dev.pdf

Cement and Concrete: Environmental Considerations

<http://www.buildinggreen.com/features/cem/cementconc.html>

Carbon Dioxide for Concrete Wash Water Treatment

<http://www.praxair.com/Praxair.nsf/d63afe71c771b0d785256519006c5ea1/78b5b272ccfbcd88852565550069e32d?OpenDocument>

For information on British Columbia’s fish and wildlife species, including species at risk, that may help you to plan your works, refer to the following websites:

FishInfo BC – a Ministry of Sustainable Resources site providing on-line access to the BC Fisheries Data Warehouse and containing links to fish distribution data searchable with a mapping tool called Fish Wizard.

<http://www.bcfisheries.gov.bc.ca/fishinfobc.html>

BC Conservation Data Centre – a site including links to information on species at risk including red and blue listed plant and animal species.

<http://srmwww.gov.bc.ca/cdc/>

British Columbia Stewardship Centre - Lists information ranging from sensitive habitat inventories and habitat maps to stewardship and land development guidelines. This site has a wide variety of links to other online documents and resources.

http://www.stewardshipcentre.bc.ca/sc_bc/main/index.asp?sProv=bcB

Biodiversity and Wildlife in BC, MWLAP

<http://wlapwww.gov.bc.ca/wld/>

“The *Wildlife Act* Permit Regulation, An Introduction” and “*Wildlife Act*: New Requirements” pamphlets. Printed Sept 1, 2000, revised Aug 6, 2002.

<http://wlapwww.gov.bc.ca/wld/pub/permreg/permreg.htm>

For maps, atlases, and habitat inventories relating to your project area, try the following links:

Community Mapping Network Maps and Data Entry, including habitat mapping from regions across the province of BC

<http://www.shim.bc.ca/maps2.html>

Sensitive Ecosystem Inventories of BC, MWLAP and the Canadian Wildlife Service

<http://srmwww.gov.bc.ca/cdc/sei/index.htm>

For information on fish habitat restoration techniques, refer to the following websites and documents:

Fish Habitat Rehabilitation Procedures, Watershed Restoration Technical Circular No.9 and other Watershed Restoration Program documents

<http://srmwww.gov.bc.ca/frco/bookshop/tech.html>

General Best Practices Documents and Publication

<http://srmwww.gov.bc.ca/sry/csd/forms/>

Instream Works Best Practices Information Documents and Checklists

http://srmwww.gov.bc.ca/sry/csd/forms/index.htm#hpur_frm