

A USERS GUIDE
TO WORKING IN AND AROUND WATER

REGULATION UNDER
BRITISH COLUMBIA'S *WATER ACT*

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A Message From Water Management

This booklet has been published to help proponents understand and comply with Part 7 of the Water Regulation (under the *Water Act*) for works and changes in and about a stream. In this document, Part 7 is referred to as "the Regulation."

The Regulation was brought into force in June, 1995 and was intended to reduce the number of activities that required an approval under the *Water Act*. It ensures that water quality, riparian habitat, and the rights of licensed water users are not compromised. The success of the Regulation in dealing with the large number of proposed projects while protecting water quality has led to amendments in order to expand the scope of activities covered by it.

The Regulation was amended April 21, 1998 (B.C. Reg. 134/98, Order in Council 520/98) with the addition of subsections (2), (3) and (4) to section 44, and the inclusion of additional activities that can be undertaken in compliance with the Regulation rather than under the authority of an approval. The amendments to section 44 recognize that measures conducted in compliance with the *Forest Practice Code of BC Act* and Part 11 of the "Health, Safety and Reclamation Code for Mines in British Columbia" meet the stream protection requirements of the Regulation.

In addition, activities such as the construction and removal of temporary fords, ice bridges and snowfills, the removal of beaver dams, and works constructed during a declared flood emergency can now be conducted in compliance with the terms of the Regulation or the above mentioned Codes.

The Regulation now provides a more complete package to proponents. In addition to covering a number of routine works, it also provides for the temporary diversion of water in order to construct works or changes.

The Regulation and subsequent amendments were produced with the assistance of the general public, environmental groups, government and industry. We are indebted to everyone who assisted in developing the Regulation. Their cooperation and comments have been invaluable.

Introduction

This guide is intended for anyone wanting to do work or make changes in and about a stream. It was developed to help applicants understand the Regulation under British Columbia's *Water Act* that sets standards for work around water. The Regulation is provided at the end of this document (pages 18 -29).

Ownership of the water and most streambeds is vested in the Crown. Changes in and about streams have been managed and regulated through legislation for many years in order to protect and maintain certain values, resources, and legal rights associated with streams.

The Regulation will help to ensure the highest level of protection for our water resources while reducing the need to obtain a formal approval or a licence.

Prior to the Regulation, many works could only be authorized by obtaining a formal approval or a licence, more time-consuming and costly processes. Under the Regulation, a person may carry out a number of routine works, provided that the general conditions and notification requirements are met. Formal approvals are only required in cases involving more complex work and for the short-term use or diversion of water. Some activities such as the construction of a dam require a licence.

Following the Regulation will help to protect water quality and quantity, aquatic and shoreline habitats, public safety, and water and property rights.

Failure to meet standards, notification requirements or general conditions could result in penalties under the *Water Act* and other legislation such as the *Fisheries Act (Canada)*.

Key Definitions

“approval” means an approval of the comptroller, regional water manager or engineer under sections 8 or 9 of the *Water Act*;

“bridge abutment” means that part of a bridge structure which supports the bridge span at the ends;

“changes in and about a stream” means

- (a) any modification to the nature of a stream including the land, vegetation, natural environment or flow of water within a stream, or
- (b) any activity or construction within the stream channel that has or may have an impact on a stream;

“ditch” means a long narrow excavated channel for drainage or to mark a boundary. A **“ditch”** may also be constructed to replace a stream channel;

“engineer” means a professional engineer employed by the government and designated in writing by the comptroller as an engineer and includes a regional water manager;

“fish passage” means fish in a stream are able to pass by or through in both upstream and downstream directions;

“licence” means a licence issued under the *Water Act*;

“public utility” as defined in the *Utilities Commission Act* means a person, or his lessee, trustee, receiver or liquidator, who owns or operates in the Province, equipment or facilities for:

- the production, generation, storage, transmission, sale, delivery or furnishing of electricity, natural gas, steam or any other agent for the production of light, heat, cold or power to or for the public or a corporation for compensation, or
- the conveyance or transmission of information, messages or communications by guided or unguided electromagnetic waves, including systems of cable, microwave, optical fibre or radio communications where that service is offered to the public for compensation,

but **“public utility”** does not include:

- a municipality, regional district in respect of services furnished by the municipality or regional district within its own boundaries,

- a person not otherwise a public utility who furnishes the service or commodity only to himself, his employees or tenants, where the service or commodity is not resold or used by others,
- a person not otherwise a public utility who is engaged in the petroleum industry or in the wellhead production of oil, natural gas or other natural petroleum substances, or
- a person not otherwise a public utility who is engaged in the production of a geothermal resource;

“**stream**” includes 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;

“**stream bed**” means the bed of a stream and the banks of a stream, whether above or below the natural boundary and whether usually containing water or not, including all side channels (see Figure 1);

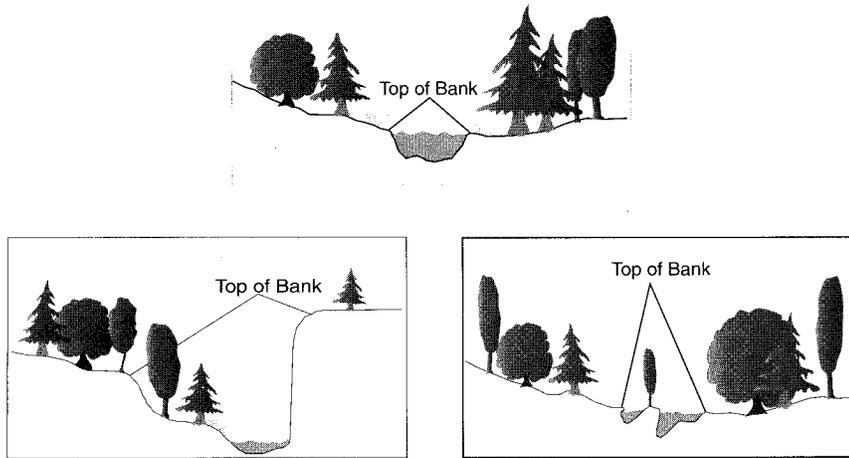
“**stream channel**” means the bed of a stream and the banks of a stream, whether above or below the natural boundary and whether usually containing water or not, including all side channels;

“**works**” means anything capable of or useful for:

- diverting, storing, measuring, conserving, conveying, retarding, confining or using water;
- producing, measuring, transmitting or using electricity;
- collecting, conveying or disposing of sewage or garbage, or
- preventing or extinguishing fires.

In addition, “**works**” means booms and piles placed in a stream; obstructions placed in or removed from streams or the banks or beds of streams; and changes in and about a stream and includes access roads to them.

Figure 1 - A Stream Channel in Various Topographic Settings



Activities Carried Out Under the Regulation

In general, works that do not involve any diversion of water, may be completed within a short period of time, and have little impact on the environment may be conducted in compliance with the Regulation.

More specifically the following types of activities may be carried out under the Regulation:

- installation, maintenance or removal of:
 - stream culverts
 - clear span bridges
 - docks or wharves
 - ice bridges
 - stream fords
 - fences

- installation and maintenance of:
 - pipeline crossings
 - storm sewer outfalls
 - drain tile outlets

- repair and maintenance of:
 - dykes
 - bridge superstructures

- cutting of annual vegetation,

- harvesting of Eurasian watermilfoil,
- removal of beaver dams,
- construction of a temporary stream diversion around a worksite,
- construction of works under the *Forest Practices Code of BC Act*,
- construction of works under part 11 of the "Health, Safety and Recreation Code for Mines in British Columbia",

Government agencies may also undertake or authorize:

- stream channel restoration or maintenance,
- construction of flood emergency works,
- fish habitat restoration or maintenance,
- construction, maintenance or removal of water flow measuring devices,
- emergency clearing of an obstruction, or
- construction or removal of fish or game installations.

In addition, a public utility may carry out minor and routine maintenance.

What must I do to carry out any of the listed activities?

All projects conducted under the Regulation must adhere to the general conditions listed below, any of the conditions specific to a particular activity noted in the Regulation and the notification requirements.

General Conditions

Every project carried out under the Regulation must meet the following conditions:

Land ownership: (section 37 (4) (b)) If a person does not own the land, the approval of the landowner must be obtained whether the land is private or Crown land.

Protection of water quality: (section 41) A person must ensure that no sediment or other compounds enter the stream, that water quality objectives are met, that the stream channel is not destabilized during or after construction and that environmentally sound construction practices are followed. *Stream Stewardship: A Guide for Planners and Developers* (see page 17) provides a good overview of water quality protection measures that should be followed.

Protection of other water users: (section 43)	A person must ensure that existing water uses under the <i>Water Act</i> are protected and that the users are given three days prior notice and provided with a supply of water as required.
Public safety: (section 38 (2))	A person must design, construct and maintain the works so that life, property and the environment are not endangered.
Timing and duration of work: (section 38 (1) (b))	The changes must be completed without delay, unless necessary to preserve the nature of the stream. Information on timing instream work is provided in Appendix 1 and Table 1 (pages 30, 31) of this document to give general guidance and help plan the timing of activities. Table 1 shows those times of year when work in and around streams is likely to present a lower risk to various fish species. The Table is for general guidance only - habitat officers may require or permit activities to occur at other times due to yearly variations in these lower-risk windows and due to the nature of the activity being proposed.
Use of equipment: (section 44(1) (a) (i), (b) (ii))	Equipment used for site preparation, construction and maintenance must be situated in a dry stream channel or operated from the top of the bank.
Other legal requirements: (section 37 (4) (a))	A person will comply with all applicable federal, provincial, or municipal enactments, such as the <i>Fisheries Act (Canada)</i> , <i>Workers Compensation Act</i> , local zoning and building requirements, and is responsible for obtaining the necessary permits.
Note:	Where a person's proposal may have a significant detrimental impact on the nature of the stream or stream channel, an application for an approval or licence under the <i>Water Act</i> may be required. Refer to section 37 (3) of the Regulation.

Specific Project Requirements

Requirements Under Section 44: Authorization for Changes in and About a Stream

In addition to the general conditions listed above, all works must be carried out under the Regulation must comply with the specific construction standards as listed in section 44.

The Regulation was amended April 21, 1998 (B.C. Reg. 134/98, Order in Council 520/98) with the addition of subsections (2), (3) and (4) to section 44. Section 44 now

recognizes the following legislation as providing sufficient protection for authorized changes in and about a stream:

- Subsection (2) recognizes the *Forest Practices Code of BC Act*, including the regulations and standards established under it,
- Subsection (3) recognizes Part 11 of the "Health, Safety and Reclamation Code for Mines in British Columbia" and any condition in a permit under section 10 of the *Mines Act*, and
- Subsection (4) recognizes that an application for a permit to carry out mineral exploration activities under section 10 of the *Mines Act* meets the requirement for notice of intended work as outlined in section 40 of the Regulation.

(Refer to the exact wording of section 44 at the end of this document.)

Conditions Set by a Habitat Officer

A person must also follow any conditions set by a habitat officer with regard to:

- timing of the work,
- in-stream flow requirements,
- material removal,
- introduction of material to the stream,
- fish and wildlife protection or salvage,
- protection of natural materials,
- restoration of the site, and
- the requirements of Fisheries and Oceans Canada (see below).

Requirements Under the Fisheries Act (Canada)

The *Fisheries Act* is the primary regulatory tool used by the federal government to manage the fisheries resource. Key sections in the act that proponents should be aware of are:

- Section 35(1) “no person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.”
- Section 36(3) “... no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish...”
- Section 34 (1) ... “‘*deleterious substance*’ means any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be

rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water ...”

If you have any questions about meeting any federal requirements, contact one of the Fisheries and Oceans Canada offices listed below.

Bella Coola

Box 130 (HWY 20)
Bella Coola, BC V0T 1C0
Tel: (250) 799-5345
Fax:(250) 799-5540

Mission

32873 London Avenue,
Mission, BC V2V 6M7
Tel: (604) 814-1055
Fax:(604) 814-1064

Queen Charlotte City

PO Box 99, 137 Bay Street,
QCC, BC V0T 1S0
Tel: (250) 559-4413
Fax:(250) 559-4678

Campbell River

215-940 Alder Street,
Campbell River, BC V9W 2P8
Tel: (250) 850-5701
Fax:(250) 286-5852

Nanaimo (SCD)

3225 Stephenson Point Road,
Nanaimo, BC V9T 1K3
Tel: (250) 756-7257
Fax:(250) 756-7162

Salmon Arm

Box 1160
1751-10th Ave SW,
Salmon Arm, BC V1E 4P3
Tel: (250) 832-8037
Fax:(250) 832-9373

Clearwater

Box 610
1121 E. Yellowhead Hwy,
Clearwater, BC V0E 1N0
Tel: (250) 674-2633
Fax:(250) 674-3553

Port Alberni

250 - 4877 Argyle Street
Port Alberni, BC V9Y 1V9
Tel: (250) 724-0195
Fax:(250) 724-2555

Smithers

Box 578, 3177 Tatlow Road,
Smithers, BC V0J 2N0
Tel: (250) 847-2312
Fax:(250) 847-4723

Delta

100 Annacis Parkway, Unit 3
Delta, BC V3M 6A2
Tel: (604) 666-8266
Fax:(604) 666-7112

Port Hardy

Box 10, 8585 Wolloson Rd,
Port Hardy, BC V0N 2P0
Tel: (250) 949-6422
Fax:(250) 949-6755

Terrace

5235 A Keith Avenue,
Terrace, BC V8G 1L2
Tel: (250) 615-5350
Fax:(250) 615-5364

Duncan

Box 241, 5653 Club Road,
Duncan, BC V9L 3X3
Tel: (250) 746-8397
Fax:(250) 746-8397

Powell River

7255 Duncan Street,
Powell River, BC V8A 5N6
Tel: (604) 485-7963
Fax:(604) 485-7439

Williams Lake

310A North Broadway,
Williams Lake, BC V2G 2Y7
Tel: (250) 398-6544
Fax:(250) 398-8092

Kamloops

1278 Dalhousie Drive,
Kamloops, BC V2C 6G3
Tel: (250) 851-4950
Fax:(250) 851-4951

Prince George

3690 Massey Drive,
Prince George, BC V2N 2S8
Tel: (250) 561-5366
Fax:(250) 561-5534

Lillooet

Box 315-879 Main Street,
Lillooet, BC V0K 1V0
Tel: (250) 256-4525
Fax:(250) 256-4649

Prince Rupert

417-2nd Avenue West,
Prince Rupert, BC V8J 1G8
Tel: (250) 627-3436
Fax:(250) 627-3427

Notification Requirements

What works require notification?

The following works in and about a stream require written notification to an office of the Ministry of Environment, Lands and Parks:

- installation, maintenance or removal of stream culverts,
- construction, maintenance or removal of clear span bridges,
- construction or maintenance of pipeline crossings,
- construction, maintenance or removal of docks, wharves or piers,
- restoration or maintenance of stream channels,
- construction, maintenance or removal of flow or water measuring devices,
- maintenance of public utility works,
- construction or maintenance of storm sewer outfalls,
- control of Eurasian watermilfoil,
- cutting of annual vegetation,
- construction or removal of fish fences, screens, fish/game guards,
- removal of beaver dams,
- repair or maintenance of existing dykes and erosion protection works,
- restoration or maintenance of fish habitat,
- construction, maintenance or removal of ice bridges or winter fords,
- construction, maintenance or removal of temporary, seasonal fords, and
- construction, maintenance or removal of temporary diversions.

Where can I get a notification form?

Notification forms are available at Ministry of Environment, Lands and Parks regional offices (addresses for the regional offices are on page 16). A form with an appropriate sketch plan must be filled out by the applicant and forwarded to the nearest regional office. The form must be received by the regional office at least 45 days before the proposed activity is scheduled to begin. During this time the plans will be reviewed by a habitat officer. The habitat officer may set specific conditions that must be followed in carrying out the activity.

Once I've filed a notification form, when can I start the proposed activity?

If the regional office has not contacted the applicant within 45 days after receipt of notification, the person may proceed with the proposed activity without further contact. General conditions and conditions specific to the activity as contained in the Regulation must be followed.

Works Not Requiring Notification

The following changes in and about a stream do not require notification before construction, providing they are carried out as specified by section 40 (3) of the Regulation:

- emergency erosion or flood protection works during a flood event by government or an agent of government;
- emergency clearing of an obstruction from a bridge or a culvert during a flood by government or an agent of government;
- installation or cleaning of drain tile outlets;
- repair or maintenance of the superstructure of a bridge, and
- installation, repair, or maintenance of fences provided that fencing materials are not in the stream channel, do not block debris and do not interfere with navigation.

What if I hold a Forestry agreement?

A person holding an agreement under the *Forest Act* or the *Range Act*, or allowed under the *Forest Practices Code of British Columbia Act*, may also carry out works and changes in and about a stream without notification (refer to section 44 (2) of the Regulation). However, such a person must comply with the *Forest Practices Code of British Columbia Act*, including the regulations and standards established under it, and any other applicable legislation (e.g., *Land Act* or *Fisheries Act*).

What if I hold a permit under the Mines Act to carry out exploration activities?

A person who holds a permit under section 10 of the *Mines Act* to carry out exploration activities does not have to file notification under the Regulation. The application for the permit constitutes the notification.

The permit holder, however, must comply with part 11 of the Health, Safety and Reclamation Code for Mines in British Columbia, and meet all conditions of the permit respecting changes in and about a stream. (Refer to section 44 (3) and (4) of the Regulation).

What about emergency work?

Works undertaken by government for flood protection or clearing obstructions during a flood emergency must be reported to a habitat officer within 72 hours of making the change (refer to section 40 (4) of the Regulation).

Enforcement of the Regulation

The person undertaking works must report incidents that result in non-compliance within 72 hours to the nearest Ministry of Environment, Lands and Parks regional office. To remedy the noncompliance, the person must take measures specified by the engineer and comply with terms and conditions specified by a habitat officer.

To ensure that changes occur in a way that protects water quality and quantity, and the aquatic and riparian environment, spot inspections and ongoing project monitoring will be conducted to ensure compliance with the requirements of the Regulation. Other enforcement measures, remedies or penalties (under the *Water Act*, the *Federal Fisheries Act* (Canada)) may also be exercised.

For Further Information

For more information about the Regulation for works in and about a stream under British Columbia's *Water Act*, contact the nearest BC Environment and Lands regional office listed below:

Cranbrook

205 Industrial Road G
Cranbrook BC V1C 7G5
Phone: (250) 489-8540
Fax: (250) 489-8506

Fort St. John

Room 400 10003 110 Ave
Fort St. John BC V1J 6M7
Phone: (250) 787-3411
Fax: (250) 787-3219

Kamloops

1259 Dalhousie Drive
Kamloops, BC V2C 5Z5
Phone: (250) 371-6200
Fax: (250) 828-4000

Nanaimo

2080 A Labieux Rd
Nanaimo, BC V9T 6J9
Phone: (250) 751-3100
Fax: (250) 751-3103

Prince George

Suite 325 3rd Floor, 1011 4th Avenue
Prince George, BC V2L 3H9
Phone: (250) 565-6135
Fax: (250) 565-6629

Nelson

#401 333 Victoria Street
Nelson, BC V1L 4K3
Phone: (250) 354-6333
Fax: (250) 354-6332

Penticton

#201 3547 Skaha Lake Road
Penticton, BC V2A 7K2
Phone: (250) 490-8200
Fax: (250) 492-1314

Surrey (Planning and Assessment)

10470 152nd Street
Surrey BC V3R 7P8
Phone: (604) 582-5235
Fax: (604) 660-8926

Williams Lake

Ste. 400 - 640 Borland Street
Williams Lake, BC V2G 4T1
Phone: (250) 398-4530
Fax: (250) 389-4214

Smithers

Bag 5000, 3726 Alfred Avenue
Smithers, BC V0J 2N0
Phone: (250) 847-7260
Fax: (250) 847-7728

Additional References

The following publications provide additional information on working near water. Further information may be obtained from Ministry of Environment, Lands and Parks regional offices.

Riparian Rights and Public Foreshore Use in the Administration of Aquatic Crown Land, Ministry of Environment, Lands and Parks, 1995.

Stream Stewardship: A Guide for Planners and Developers, Ministry of Environment, Lands and Parks, Ministry of Municipal Affairs and Department of Fisheries and Oceans, 1994.

Obtaining Crown Lands for Private Use, Ministry of Environment, Lands and Parks, 1993.

Land Development Guidelines for the Protection of Aquatic Habitat, Ministry of Environment, Lands and Parks and Department of Fisheries and Oceans, 1992.

Note: This is not the official version. The printed version issued by the Queen's Printer remains the official version. Copies may be obtained from Crown Publications Inc., 521 Fort Street, Victoria, B.C. V8W 1E7.

The Regulation

Changes in and about a Stream

(Part 7 - Water Regulation, includes amendments up to B.C. Reg. 45/2000)

Definitions

36 In this Part:

“acid generating rock” means rock that when ground to paste has a paste pH of less than 4.5;

“changes in and about a stream” means changes in and about a stream defined in section 1 of the *Water Act*;

“clear span bridge” means a single span structure without piers which spans a stream channel from top of bank to top of bank with the bridge abutments outside the stream channel;

“culvert” means one or more pipes, pipe arches, or structures covered with soil and lying below the road surface, used to carry water, but does not include log structures;

“embankment” means a structure of earth, gravel or similar material raised above the surrounding land surface;

“engineer” means an engineer defined in section 1 of the *Water Act*;

“erosion” means the wearing away, by water, of the banks or bed of a stream or of the materials used in any works;

“fish bearing waters” means a stream having a fish population present at some time during the year;

“habitat” means the areas in and about a stream including:

- (a) the quantity and quality of water on which fish or wildlife depend directly or indirectly in order to carry out their life processes, and
- (b) spawning grounds and the nursery, rearing, food supply and migration area;

“habitat officer” means a public service employee designated in writing by the regional director for the regional office of the Ministry of Environment, Lands and Parks where the public service employee is employed;

“municipality” means a municipality or regional district incorporated under the *Municipal Act* or the City of Vancouver;

“natural state” means as close as possible to the state that existed before the change in and about the stream began;

“professional engineer” means a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia;

“public utility” means a public utility defined in section 1 of the *Utilities Commission Act* or a federally regulated public utility;

“scour” means the removal of stream bed material by water action;

“stream” means a stream defined in section 1 of the *Water Act*;

“stream channel” means a stream channel defined in section 1 of the *Water Act*;

“works” means works defined in section 1 of the *Water Act*;

“worksite” means the area required for the construction of works in and about a stream;

[en. B.C. Reg. 241/95.]

Authority to make a change in and about a stream

37 (1) A change in and about a stream must not proceed unless it is

- (a) authorized by an approval, licence or order, or
 - (b) made in compliance with this regulation.
- (2) If a change in and about a stream is authorized by an approval, licence or order, this regulation, except subsection (3), does not apply to the change in and about the stream.
- (3) If the engineer is of the opinion that a proposed change in and about a stream may have a significant detrimental impact on the nature of the stream or stream

channel, the engineer may require that an application for an approval or a licence be made in connection with the proposed change in and about a stream.

- (4) The fact that a change in and about a stream meets the requirements of subsection (1) does not relieve the person carrying out the change in and about the stream from
- (a) the requirement to comply with all applicable federal, provincial or municipal enactments, and
 - (b) if the change in and about a stream will occur on Crown land or land owned by another person, from the requirement to obtain the approval of the owner before proceeding.

[en. B.C. Reg. 241/95.]

Limits on the authority to make a change in and about a stream

- 38** (1) A person must not make a change in and about a stream unless that person
- (a) provides, on request, information that the engineer, officer or habitat officer requires to assess the impact on the nature of the stream or stream channel, and
 - (b) once commenced, completes the change without delay except if a delay is necessary to preserve the nature of the stream or stream channel.
- (2) A change in and about a stream must be designed, constructed and maintained in such a manner that the change does not pose a significant danger to life, property or the environment.

[en. B.C. Reg. 241/95.]

Failure to comply with this regulation when making a change in and about a stream

- 39** In addition to other remedies or penalties that may be imposed on a person who makes a change in and about a stream that does not comply with this regulation, the person must
- (a) within 72 hours report the non-compliance to the closest regional office of the Ministry of Environment, Lands and Parks, and
 - (b) to remedy the non-compliance,
 - (i) take the measures the engineer specifies, and

- (ii) comply with the terms and conditions described in section 42 that a habitat officer specifies.

[en. B.C. Reg. 241/95]

Notification

- 40** (1) A person must not make a change in and about a stream unless that person
- (a) notifies a habitat officer of the region of the Ministry of Environment, Lands and Parks in which the change in and about a stream will be located, by providing the information specified in the notification form available from the ministry, of the particulars of the proposed change at least 45 days prior to commencing to make the change, and
 - (b) obtains from a habitat officer the terms and conditions described in section 42 on which the change can proceed prior to commencing to make the change.
- (2) Despite subsection (1), if a habitat officer has not contacted the person giving Notice under subsection (1) (a) within 45 days of the receipt of the notice by a habitat officer, the person may proceed to make the change.
- (3) A person who makes a change in and about a stream under section 44 (1) (o) to (s) or (2) does not have to comply with subsection (1).
- (4) A person who makes a change in and about a stream under section 44 (1) (o) or (p) must
- (a) within 72 hours report the change to a habitat officer, and
 - (b) take the measures the engineer specifies and comply with the terms and conditions described in section 42 that a habitat officer specifies respecting the change.

[en. B.C. Reg. 241/95; am. B.C. Reg. 134/98, s. 1.]

Protection of water quality

- 41** A person making a change in and about a stream must ensure that
- (a) no substance, sediment, debris or material that could adversely impact the stream is
 - (i) allowed or permitted to enter or leach or seep into the stream from an activity, construction, worksite, machinery or from components used in the construction of any works, or

- (ii) placed, used or stored within the stream channel,
- (b) no standards or objectives published under section 2 (e) of the *Environment Management Act* by the Ministry of Environment, Lands and Parks for the protection of ambient water quality are exceeded or not attained now or in the future due to the change,
- (c) there is no disturbance or removal of stable natural materials and vegetation in and about a stream that contribute to stream channel stability except as authorized under this regulation and in accordance with the terms and conditions specified by the habitat officer,
- (d) temporary material, fill, bridge, culvert, pump, pipe, conduit, ditch or other structure used to assist in the construction of any works are constructed and maintained only during the period of construction, and are removed on completion of the works,
- (e) all cast-in-place concrete and grouting is completely separated from fish bearing waters for a minimum of 48 hours,
- (f) rock from acid-generating rock formations is not used for construction, and
- (g) the stream is restored to its natural state on completion of the change in and about a stream.

[en. B.C. Reg. 241/95.]

Protection of habitat

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 or 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 federal Department of Fisheries and Oceans in connection with the change.
- (2) In addition to other remedies or penalties that may be imposed on a person who makes a change in and about a stream that damages habitat, the person must
- (a) within 72 hours report the damage to a habitat officer, and
 - (b) restore and repair the habitat to its natural state or as directed by the habitat officer.

[en. B.C. Reg. 241/95; am. B.C. Reg. 134/98, s.2.]

Protection of other water users

- 43** (1) A person making a change in and about a stream, other than a change under section 44 (1) (o) to (s) or (2), must ensure that persons who are lawfully diverting or using water under the *Water Act* will not be adversely affected.
- (2) Despite subsection (1), if persons who are lawfully diverting or using water under the *Water Act* may be adversely affected, a person proposing to make a change in and about a stream, other than a change under section 44 (1) (o) to (s) or (2), must give 3 days notice to those persons prior to commencing to make the change and must provide an adequate supply of water to those persons, if required by those persons.

[en. B.C. Reg. 241/95; am. B.C. Reg. 134/98, s. 3.]

Authorization for changes in and about a stream

- 44** (1) For the purposes of section 9 of the *Water Act*, the following changes in and about a stream may be made without the necessity of obtaining an approval or licence for that change, provided that the change is made in accordance with this regulation and in accordance with the terms and conditions, described in section 42, specified by a habitat officer:

- (a) the installation, maintenance or removal of a stream culvert for crossing a stream for the purpose of a road, trail or footpath, provided that
- (i) equipment used for site preparation, construction, maintenance or removal of the culvert is situated in a dry stream channel or operated from the top of the bank,
 - (ii) in fish bearing waters, the culvert allows fish in the stream to pass up or downstream under all flow conditions,
 - (iii) the culvert inlet and outlet incorporate measures to protect the structure and the stream channel against erosion and scour,
 - (iv) if debris cannot safely pass, provision is made to prevent the entrance of debris into the culvert,
 - (v) the installation, maintenance or removal does not destabilize the stream channel,
 - (vi) the culvert and its approach roads do not produce a backwater effect or increase the head of the stream,
 - (vii) the culvert capacity is equivalent to the hydraulic capacity of the stream channel or is capable of passing the 1 in 200 year maximum daily flow without the water level at the culvert inlet exceeding the top of the culvert,
 - (viii) the culvert has a minimum equivalent diameter of 600 mm,
 - (ix) a culvert having an equivalent diameter of 2 metres or greater, or having a design capacity to pass a flow of more than 6 cubic metres a second, is designed by a professional engineer and constructed in conformance with that design,
 - (x) the culvert is installed in a manner which will permit the removal of obstacles and debris within the culvert and at the culvert ends,
 - (xi) the stream channel, located outside the cleared width, is not altered,
 - (xii) embankment fill materials do not and will not encroach on culvert inlets and outlets,
 - (xiii) the culvert has a depth of fill cover which is at least 300 mm or as required by the culvert manufacturer's specifications,
 - (xiv) the maximum fill heights above the top of the culvert do not exceed 2 m, and

- (xv) the culvert material meets the standards of the Canadian Standards Association;
- (b) the construction, maintenance or removal of a clear span bridge, provided that
- (i) the bridge and its approach roads do not produce a back water effect or increase the head in the stream,
 - (ii) the equipment used for construction, including site preparation, maintenance or removal of the bridge is situated in a dry stream channel or is operated from the top of the bank,
 - (iii) the hydraulic capacity of the bridge is equivalent to the hydraulic capacity of the stream channel, or is capable of passing the 1 in 200 year maximum daily flow, and the height of the underside of the bridge is also adequate to provide free passage of flood debris and ice flows, and
 - (iv) the bridge material meets the standards of the Canadian Standards Association, as applicable;
- (c) the construction or maintenance of a pipeline crossing, provided that
- (i) the pipeline and associated works are installed in a dry stream channel at a depth so that the top of the pipe is at least 1 metre below the lowest elevation of the bed of the stream, and
 - (ii) in the case of an aerial crossing, the crossing is constructed in accordance with the requirements prescribed in paragraph (b) for clear span bridges;
- (d) the construction, maintenance or removal of a pier or wharf in a stream, provided that the ebb and flow of water and movement of material under the influence of waves or currents is not obstructed and that the requirements under section 37 (4) are met;
- (e) the construction, maintenance or removal of a flow or water level measuring device in a stream by the Crown in right of either Canada or British Columbia, or their agents;
- (f) the construction or removal of a fish fence, screen or fish or game guard across a stream by the Crown in right of either Canada or British Columbia, or their agents, provided that it is designed, constructed, maintained or used so as not to obstruct the flow of water in the stream;

- (g) the restoration or maintenance of a stream channel by British Columbia or its agents;
- (h) the restoration or maintenance of a stream channel by a municipality;
- (i) the mechanical or manual cutting of annual vegetation within a stream channel;
- (j) the restoration or maintenance of fish habitat by the Crown in right of either Canada or British Columbia, or their agents;
- (k) the repair or maintenance of existing dikes or existing erosion protection works to their original state, provided that the dikes or works were functional during the previous year;
- (l) the construction or maintenance of storm sewer outfalls, provided that the storm sewer outfall is designed by a professional engineer, and constructed, maintained and used so as not to obstruct the flow of water in the stream or to cause erosion or scour in the stream;
- (m) the mechanical or manual control of Eurasian watermilfoil and other aquatic vegetation by a landowner, a municipality or a local authority;
- (n) the construction or maintenance of ice bridges, winter fords or snowfills provided that,
 - (i) the materials used are removed from the stream channel before ice breakup and that only clean ice and snow are used, and
 - (ii) in the case of ice bridges, any logs, timber and other structural materials used can be removed in a safe manner;
- (o) the construction or placement of erosion protection works or flood protection works during a flood emergency, but not including restoration works, declared under the *Emergency Program Act*, under the direction of the Crown in right of British Columbia, or its agents, or by a municipality;
- (p) the clearing of an obstruction from a bridge or culvert by the Crown in right of British Columbia, or its agents, or by a municipality during a flood event when there exists a potential danger to life or property;
- (q) the installation or cleaning of drain tile outlets;

- (r) the repair or maintenance of the superstructure of a bridge, excluding its foundation, made in accordance with this regulation, particularly the terms and conditions specified in this regulation for the protection of water quality, habitat and water users;
- (s) the installation, repair, maintenance or removal of fences, provided that the fencing materials
 - (i) are not in the stream channel,
 - (ii) do not block debris in the stream channel, and
 - (iii) do not interfere with navigation of the stream;
- (t) Repealed. [B.C. Reg. 134/98, s.4]
- (u) the maintenance of a minor and routine nature by a public utility of its works;
- (v) the removal of a beaver dam under section 9 of the *Wildlife Act*, provided that the removal is carried out in such a manner the downstream flooding and erosion do not occur;
- (w) the construction of a temporary ford across a stream, provided that
 - (i) the construction occurs at a time in the year during which the construction can occur without causing harm to fish, wildlife or habitat,
 - (ii) the 1 in 10 year maximum daily flow over the ford is accommodated without the loss of the ford and without scouring the stream,
 - (iii) a stream culvert, if used, is designed and installed to pass the average low flow during the period of use,
 - (iv) the channel is protected against any anticipated erosion
 - (A) during the period of construction and use of the ford, and
 - (B) after the ford crossing is removed,
 - (v) sediment from approach ditches does not enter the stream,
 - (vi) the driveable running surface is erosion-free,

- (vii) the stream remains in its channel and cannot be diverted down the road,
 - (viii) the ford will pass channel debris, and
 - (ix) the ford is removed at the end of the period of use at a time, before the next freshet, when the removal can proceed without causing harm to fish, wildlife or habitat;
- (x) the construction of a temporary diversion around or through a worksite for the purposes of constructing or maintaining bridge abutments, constructing or maintaining piers other than bridge piers, or maintaining bridge piers or constructing works authorized under this section, provided that the worksite is no larger than the minimum area required, and
- (i) if pumps, pipes or conduits are used to divert water around or through the worksite,
 - (A) pumps, pipes or conduits are sized to divert the 1 in 10 year maximum daily flow for the period of construction, and
 - (B) any pump or intake withdrawing water from fish bearing waters is screened in accordance with the Fish Screening Directive of the Department of Fisheries and Oceans (Canada),
 - (ii) if cofferdams are used to isolate successive parts of the construction at the worksite,
 - (A) the cofferdams are designed by a professional engineer and constructed in accordance with that design, and
 - (B) the natural channel remaining outside of the coffer-dams is adequate to pass the 1 in 10 year maximum daily flow during the period of construction, or
 - (iii) if ditches are used to divert flow around the worksite,
 - (A) the flow of water diverted remains within the stream channel,
 - (B) ditches are designed and constructed to divert the 1 in 10 year maximum daily flow around or through the worksite and are protected from any anticipated erosion during the period of construction and use of the ditch, and

- (C) the ditches are completely backfilled and the area returned as closely as possible to the natural state on completion of the works.
- (2) Subsection (1) does not apply to a change in and about a stream to which a standard or regulation under the Forest Practice Code of British Columbia Act applies if the change is carried out
 - (a) by a person
 - (i) holding an agreement under the *Forests Act* or the *Range Act* or holding a special use permit under the *Forest Practice Code of British Columbia Act*, or
 - (ii) referred to in section 58 (2) (c) of the *Forest Practice Code of British Columbia Act*, in the construction, modification, maintenance or deactivation of a road under the Act, or
 - (b) by the Crown in the right of British Columbia or by someone under contract to the Crown in right of British Columbia, provided that the person carrying out the change complies with the *Forest Practice Code of British Columbia Act*, including the regulations and standards established under it.
- (3) Subsection (1) does not apply to a change in and about a stream that is carried out by a person who holds a permit under section 10 of the *Mines Act* if the person carrying out the change complies with
 - (a) Part 11 of the Health, Safety and Reclamation Code for Mines in British Columbia, and
 - (b) all conditions in the permit respecting changes in and about the stream.
- (4) For the purposes of section 40, an application for a permit to carry out exploration activities under section 10 of the *Mines Act* constitutes notice of the change.

[en. B.C. Reg. 369/97; am. B.C. Reg. 134/98, s.4.]

Appendix 1

Figure 2 - Map of Provincial Fisheries Zones



Table 1 - Instream Reduced Risk Windows for Provincial Fisheries Zones*

The dates in the table below are periods when instream work is least likely to adversely impact fish. It is provided for general guidance only.

A habitat officer will consider the change you are proposing and may set different timing windows.

Species **	Area 1	Area 2	Area 3	Area 4
Chinook Salmon	Jul 15 - Sep 15	Jun 15 - Jul 31	N/A	Jun 15 - Jul 15
Coho Salmon	Jun 15 - Sep 15	Jul 1 - Sep 30	N/A	Jun 15 - Sep 30
Pink Salmon	May 1 - Aug 15	Jun 1 - Aug 31	N/A	Jun 15 - Aug 31
Chum Salmon	May 15 - Sep 15	N/A	N/A	N/A
Sockeye Salmon	Jun 1 - Sep 15	Jun 1 - Jul 31	N/A	Jun 15 - Jul 15
Kokanee	Jun 15 - Jul 31	May 15 - Aug 31	Jun 15 - Aug 15	Jun 1 - Aug 31
Steelhead	Aug 1 - Nov 15	Jul 15 - Oct 30	N/A	Aug 1 - Apr 30
Rainbow Trout	Aug 15 - Nov 15	Aug 15 - Sep 30	Jul 15 - Mar 31	Jul 15 - Apr 15
Cutthroat Trout	Aug 1 - Sep 30	Aug 15 - Apr 15	Sep 15 - Apr 30	N/A
Dolly Varden	Jun 1 - Sep 15	N/A	Jun 15 - Aug 15	Jul 15 - Aug 31
Whitefish	Jun 1 - Sep 15	Jun 1 - Sep 15	Apr 1 - Oct 31	Jun 1 - Sep 15
Arctic greyling	N/A	N/A	N/A	N/A
Walleye	N/A	Jul 30 - Apr 1	N/A	N/A
Pike	N/A	N/A	N/A	N/A
Bull trout	N/A	Jul 1 - Jul 31	Jun 15 - Aug 15	Jun 15 - Aug 15

* Instream reduced risk windows are approximations for a particular species over an entire specified area and should be considered time periods of reduced risk only.

** Not a complete list of species of concern. Consult with regional fisheries staff for information on species not listed here.

Area 5	Area 6	Area 7	Area 8	Area 9
Jun 15 - Jul 31	Jun 1 - Jul 31	N/A	N/A	May 1 - Jul 31
Jul 1 - Aug 31	Jun 15 - Aug 15	N/A	N/A	Apr 1 - Aug 15
May 15 - Aug 15	May 15 - Aug 15	N/A	N/A	Mar 15 - Jul 31
May 15 - Aug 31	May 15 - Aug 31	N/A	Jul 1 - Aug 15	Apr 1 - Sep 15
Jun 15 - Jul 15	Jun 15 - Jul 31	N/A	N/A	Apr 1 - May 31
Jun 15 - Jul 15	Jun 15 - Jul 31	Jun 1 - Aug 31	N/A	N/A
Aug 15 - Dec 31	Aug 15 - Nov 15	N/A	N/A	Aug 15 - Nov 15
Aug 15 - Jan 31	Aug 15 - Jan 31	Jul 15 - Mar 31	Jul 15 - Mar 31	Sep 1 - Apr 30
Aug 15 - Dec 31	Aug 15 - Dec 31	N/A	N/A	Sep 1 - Apr 30
Jul 15 - Aug 31	May 15 - Aug 31	Jun 1 - Aug 31	Jun 1 - Aug 31	Jun 15 - Aug 31
Jun 1 - Sep 15	N/A	Jun 15 - Aug 31	Jun 15 - Aug 31	Jun 1 - Aug 31
N/A	N/A	Jul 15 - Mar 31	Jul 15 - Mar 31	Jul 15 - Mar 31
N/A	N/A	Jul 1 - Apr 30	Jul 1 - Apr 30	N/A
N/A	N/A	Jul 1 - Apr 30	Jul 1 - Apr 30	N/A
Jun 15 - Aug 15	N/A	Jun 15 - Aug	Jun 15 - Aug 15	Jun 15 - Aug 31