

The Debris Provisions of the Fish Protection Act

A Backgrounder

The new Fish Protection Act and associated amendments to the provincial Water Act will provide important provincial tools to directly focus on the prevention and mitigation of the introduction of harmful debris, especially in those areas (e.g. riparian areas), which are presently not adequately addressed through existing provincial legislation.

The Fish Protection Act is designed to be proactive by ensuring that potential generators of debris, as defined under the Act, are better aware of their responsibility to control discharges or activities which may impact fish and fish habitat. This legislation is designed to complement and strengthen existing laws to ensure adequate protection of fisheries resources.

What Will Change

Upon proclamation, these amendments to the Water Act will:

- strengthen an existing provision of the Act;*
- define "debris" and "fish habitat";*
- prohibit the introduction of debris which causes harm or damage to: fish or fish habitat; the diversion and use of water or to works licensed under the Water Act; riparian land; and, the stream or stream channel;*
- empower the government to respond to debris incidents;*
- make the introduction of debris an offence if harm or damage is caused;*
- require the person responsible to remediate the impacts of the debris, where appropriate; and,*
- enable cost recovery when the province undertakes the remediation.*

Definition of Debris

Debris means (a) clay, silt, sand rock or similar material, or (b) any material, natural or otherwise, from construction or demolition.

Definition of Fish Habitat

Fish habitat has previously been defined under the Fish Protection Act as 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.

Potential Sources and Impacts of Debris

A wide range of human activities can cause debris to be introduced to streams, stream channels and the areas adjacent to streams if proper care is not taken. Debris may be introduced directly by humans into streams through dumping or other point discharges, and may be introduced indirectly as a result of land use activities, such as the erosion of agricultural soils or the failure of access roads, ditches or culverts which may in themselves introduce debris or which could result in slope failures and the movement of debris into streams. Some examples of potential contributors of debris include:

- *resource extraction (access roads, ground disturbance)*
- *energy supply (construction, flooding and reservoir operation, corridors)*
- *land development (clearing, filling, construction)*
- *transportation (road, rail, or bridge construction and maintenance, truck hauling)*
- *waste disposal (stockpiling and dumping)*
- *agriculture (drainage and watercourse maintenance)*
- *stream clearing (gravel removal, logjams)*
- *commerce and recreation (wharves, piers, loading facilities)*

Debris may also be intentionally introduced into streams or stream channels in an attempt to minimize haulage costs, to avoid existing approval processes, or to simply save time.

Fish and fish habitat can be affected by increased turbidity and alteration of substrate composition. Fine particles cement gravels and smother essential food organisms (e.g. benthic invertebrates and algae). Physiological damage can be caused to fish, as well as alteration of feeding and migration behaviour.

The storage, diversion or use of water or the operation of works authorised under the Water Act can be affected if debris deflects water away from an intake, if silt affects drinking water or irrigation systems, or if works such as pumps or valves are damaged or conveyance works such as pipelines and culverts are restricted or blocked.

The property of riparian (streamside) owners can be affected if land is lost due to slumping or erosion, if access to water becomes impeded due to shifting altered channel characteristics from accretion (sediment build-up), or if the value, use and enjoyment of the land is disrupted by the deposition or passage of debris.

The introduction of debris may harm or damage streams by substantially altering channel characteristics, and/or bringing about changes to water depth and natural flow regimes. In addition, excessive sedimentation and contaminants which may accompany debris could impact water quality and the aquatic life water supports. This may result in erosion or sedimentation within the channel which could impact on downstream facilities such as bridges or culverts, or increase the probability of flooding or stream avulsions.

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Filling the Gaps

The debris provisions of the Fish Protection Act are intended to fill the gaps found in other existing provincial and federal legislation, regulations, and policies. Therefore, these other regulatory tools will be utilized first, by the agency responsible for administering them, in response to incidents involving the introduction of debris into, or adjacent to, streams and stream channels. If another applicable regulatory tool does not currently exist, the debris provisions of the Fish Protection Act would then be applied. This approach will enable those agencies whose mandate includes managing the land use activity that may have generated the debris to work with their respective stakeholders and clients to alter and improve those operations.

Most of the existing legislation and policies are focused on the management of particular sectors, activities and/or areas. Therefore, while aspects of the debris issue have been addressed along with many other parameters, the focus of the current body of legislation typically lies in managing a particular activity, in accordance with environmental considerations. The existing legislation is implemented for relevant sectors through planning processes, permitting and /approval processes, which and/or by regulation,. The plans or permits/approvals typically have clauses or sections which protect water quality and fisheries interests, or through regulation, or both. The regulations typically prescribe actions to either take or not take, to protect or not harm, water quality and fisheries interests.

The following is a list of the legislation, regulations and policies which currently apply to the generation of debris, or may be used to regulate those activities which might generate debris.

Provincial Legislation/Regulations/Policies

Federal Legislation/Regulations/Policies

Agriculture Watercourse Maintenance Guidelines Canada-US Boundary Waters Treaty

Dike Maintenance Act Canada Shipping Act

Ecological Reserve Act and Regulations -Garbage Pollution Prevention Regulations

Environment and Land Use Act -Pollutant Discharge Reporting Regulations

Environment Assessment Act -Pollutant Substances Regulations

Farm Practices Protection Act Canada Water Act

Fish Protection Act (not fully proclaimed) Canada Wildlife Act

Forest Land Reserve Act

Forest Practices Code of BC Act -Wildlife Area Regulations

-Forest Road Regulation Canadian Environmental Assessment Act

-Operational Planning Regulation -many Regulations

-Silviculture Practices Regulation Canadian Environmental Protection Act

-Timber Harvesting Practices Regulation -many Regulations

Geothermal Resources Act

Hydro and Power Authority Act Federal Policy on Wetlands Conservation

Health Act Fisheries Act

-Safe Drinking Water Regulations -Alice Arm Tailings Deposit Regulations

-Sanitary Regulations -British Columbia Gravel Removal Order

Land Act -British Columbia Logging Order

Land Development Guidelines Migratory Birds Convention Act

Land Title Act -Migratory Birds Sanctuary Regulations

Local Government Statutes Amendment Act,1997 -Migratory Birds Regulation

Mines Act Northern Pipeline Act

-Mineral Exploration Code

Municipal Act

Park Act

Petroleum and Natural Gas Act

Private Forest Land Practices Regulation

Soil Conservation Act

Strata Property Act

-Bare Land Strata Regulation

Utilities Commission Act

Vancouver Charter

Waste Management Act

-Agricultural Waste Control Regulation

-Land-based Fin Fish Waste Control Regulation

-Oil and Gas Waste Regulation

-Open Burning Smoke Control Regulation

-Placer Mining Waste Control Regulation

-Production and Use of Compost Regulation

Water Act

-Section 9 Regulation

Wildlife Act

Implementation of the Debris Provisions

Implementation of these provisions will be based on 5 components: planning/public education/awareness; monitoring; compliance/enforcement; remediation; and, cost recovery.

Initially, the focus will be on the first component in order to raise and enhance awareness of the potential impacts of debris. In addition, information will be provided to regulatory agencies, local governments, and stakeholders on the sources of the many guidelines and publications which outline approaches and techniques available to minimize the introduction of debris into streams from different land uses and other activities. For this proactive, preventative approach through education and awareness to be successful,

effective communication with industry, partner agencies and other key stakeholders is essential to ensuring that fish and water resources are adequately protected.

Operational policies are also being developed which will guide Ministry of Environment, Lands and Parks staff in: monitoring to determine whether harm or damage has occurred or might occur; achieving compliance and where necessary enforcement by first deferring to those other agencies which manage or regulate the specific activity involved; requiring remediation of the impacts of debris where practical; and, recovering the costs of remediation when undertaken by the province.

Emphasis will be placed on responding to activities or incidents which may have actually caused harm or damage. Alleged or potential infractions will be followed up with an appropriate investigation to the extent possible. This monitoring and the resultant investigative reports and any other technical evaluation will determine the regulatory response.

Compliance and enforcement would be undertaken as an additional tool implemented under existing water management policies. Any enforcement which may occur will do so in consideration of other existing legislation or agency jurisdiction on a case by case basis.

Potential remediation of the impacts of the harm or damage caused by debris, including the most effective and beneficial method of remediation, is site and incident specific. For activities which are regulated by other agencies, remediation is the responsibility of those agencies first. The Ministry of Environment, Lands and Parks will work co-operatively with those other agencies and the responsible person to ensure the necessary remediation is performed, as appropriate.

The development of a regulation is not considered necessary for the successful implementation of the debris provisions of the Fish Protection Act. However, a Regulatory Impact Statement will be prepared for Cabinet, based in part on the information, comments and suggestions provided by other agencies, stakeholders and the public.

The debris provision does not apply to operations regulated by the Forest Practices Code of British Columbia Act.

Debris-related Questions and Answers

Aren't there existing laws and/or legislation already to address these problems?

Yes, for example under the Federal Fisheries Act, existing Provincial Water and Waste Management Acts there are provisions addressing the introduction of "debris" into fish habitat. However these laws are reactive in nature. Other laws are focused on specific activities. Implementation of the debris provisions of the Fish Protection Act is designed to be proactive by ensuring that enhancing the awareness of generators of debris as defined under the Act are better aware of their responsibility to control discharges or activities which may impact fish and fish habitat. This legislation is designed to compliment and strengthen existing laws to ensure adequate protection of fisheries resources, thereby filling any gaps which currently exist.

Can I be charged under this legislation and existing pollution prevention laws?

Yes, the Fish Protection Act will dovetail with existing legislation and can be used in concert with these laws when applied to violations or offences. The ultimate goal of this provision is to protect fish and their habitat, property adjacent to streams, the diversion and use of water and the associated works, and the stream and stream channel themselves. Therefore any or all means could be utilized to address impacts resulting from the introduction of debris. However, as the intent of this provision is to fill the regulatory gaps which may exist, those other statutes will be used first in response to debris incidents.

What existing provincial and federal legislation addresses the debris issue?

Many pieces of provincial and federal legislation contain provisions related to the management of debris for their particular sectors and activities carried out in the province. Such legislation tends to address specific aspects of the introduction of harmful debris for the particular sector or activity.

What does the existing provincial legislation address?

Sectors or activities presently managed under provincial legislation include: agriculture; usage of Crown land; dikes; energy (light and power); forest practices; geothermal resources; health; highways; land development; local government areas; mining; oil and gas industry; parks; private forest land; public health; subdivisions; changes in and about a stream; water use; and wildlife management.

What does the existing federal legislation address?

Sectors or activities presently managed under federal legislation include: boundary waters; environmental quality; federal projects; fisheries; migratory birds; northern pipeline; shipping; water management; and wildlife.

How is the existing legislation implemented?

The legislation is implemented for these sectors through planning processes, permitting/approval processes and/or by regulation. The plans or permits/approvals typically have clauses/sections, which protect water quality and fisheries interests. The regulations typically prescribe actions to either take or not take, to protect or not harm, water quality and fisheries interests. Since this legislation is designed for known and planned activities, unplanned or wanton actions are not readily addressed.

What are the shortcomings of the existing legislation?

Most of the existing legislation and policies are focused on the management of particular sectors, activities and/or areas. Therefore, while aspects of the debris issue have been addressed along with many other parameters, the focus of the legislation typically lies in managing a particular activity, in accordance with environmental considerations.

How does the Water Act currently manage debris?

The provincial Water Act regulates "changes in and about a stream" which modify and may impact the stream (see attached excerpts). The protection of water quality, habitat and other water users, is carried out through the issuance of a license or approval, or for certain classes of changes, under Part 7 of the Water Act Regulation, Changes in and about a Stream.

The introduction of debris is controlled since it typically adversely affects water quality, habitat and/or other water users. The Act applies to all streams and stream channels in the province. The stream channel includes the bed and the banks of a stream but does not include riparian land outside these areas.

Works carried out under the provincial Forest Practices Code of BC Act and the Mineral Exploration Code also satisfy the provisions of the Water Act Part 7 Regulation.

How does the federal Fisheries Act manage debris?

The federal Fisheries Act applies only to fisheries, and has two mechanisms for the protection of fisheries and their associated streams and fish habitat from the harmful effects of debris. The Act prohibits the harmful alteration, disruption or destruction of those fish habitats unless the activity is authorized by the Department of Fisheries and Oceans. It also prohibits the introduction of deleterious substances that may harm a fishery except if authorized by regulation. Deleterious substances include harmful or toxic substances; for example, silt that clogs gills is a deleterious substance to fish. The Act applies to all fish and fish habitat, which means that, practically speaking, it should apply to most streams in the province

How will the new debris provision of the Fish Protection Act help?

The new Fish Protection Act will provide an important provincial tool to directly focus on the prevention and management of the introduction of harmful debris, especially in those areas, e.g. riparian areas, which are presently not adequately addressed through existing provincial legislation.

How will B.C. Hydro Operations (other than not maintenance or construction activities) that re-suspend or move 'debris', be impacted by the debris provision of the Fish Protection Act? (Examples of these activities include; raising/lowering reservoir water elevations, spilling water, turbine discharge etc.)

Operations that are consistent with existing or amended water licences under Water Use Plans approved by the Comptroller of Water Rights (B.C. Environment, Water Management Branch), and that specifically address the introduction of debris, would be considered to have authorization by or under the Fish Protection Act or another enactment.

Why doesn't the provision apply to forest practices regulated by the Forest Practices Code of British Columbia Act?

The Forest Practices Code of British Columbia contains many provisions that deal with debris. The Ministry of Environment, Lands and Parks is a partner in the development and administration of the Forest Practices Code.

How will the "acceptable farm practices" of cultivation and crop harvesting be affected, if as a result of adverse weather conditions, these operations result in the deposition of debris in the watercourse or the riparian area adjacent to the stream?

Adverse weather conditions cannot be predicted. If "acceptable farm practices" have been followed, as confirmed by the Ministry of Agriculture, then enforcement would not be appropriate.

Will normal maintenance of farm ditches be covered by the debris provisions?

The maintenance of ditches and streams on or adjacent to agricultural lands are currently regulated via authorizations or approvals under the federal Fisheries Act and the provincial Water Act, respectively. In addition, the Partnership Committee on Agriculture and the Environment is preparing Agricultural Watercourse Maintenance Guidelines.

Let Us Know What You Think!

If you have any information, comments or suggestions regarding implementation of the Debris provisions of the Fish Protection Act and associated policies we would like to hear from you.

- 1. Do you agree with the intent of the debris provisions of the Fish Protection Act as described? Why? Why not?*
- 2. In what ways will the proposed approach to implementing the debris provisions benefit you/your community/your activities? (please describe)*
- 3. In what ways will the proposed approach to implementing the debris provisions have negative effects on you/your community/your activities? (please describe)*
- 4. Are you satisfied with the approach being proposed to implement the debris provisions of the Fish Protection Act?*

Here are three ways to let us know your views and comments:

Write us at:

Debris Consultation Team

Water Management Branch

Ministry of Environment, Lands & Parks

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Fax us at: (250) 751-3103

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This, and other Fish Protection Act documents can be viewed

on the Ministry of Environment, Lands & Parks' website at:

www.elp.gov.bc.ca/fsh/papers.html