

**SUBMISSION PURSUANT TO ARTICLES 14 AND 15 OF THE
NORTH AMERICAN AGREEMENT
ON ENVIRONMENTAL COOPERATION**

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March 15, 2000

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EXECUTIVE SUMMARY

The Government of Canada is in breach of its commitments under NAAEC to effectively enforce its environmental laws and to provide high levels of environmental protection. Specifically, section 35 of the Fisheries Act, which prohibits the harmful alteration, disruption or destruction of fish habitat, and section 36 of the Fisheries Act, which prohibits the deposition of deleterious substances in waters frequented by fish, are routinely and systematically violated by logging activities undertaken in British Columbia and no effective and appropriate enforcement action is being taken.

The damage to fish and fish habitat that can result from logging activities has been well documented. Harmful consequences of logging activities can include sedimentation, streambank destabilization, landslides into streams, harmful changes in waterflow patterns and altered water temperature and quality.

The federal government is failing to enforce the Fisheries Act against logging on private land in British Columbia, even though private lands are not subject to any effective provincial logging regulation. Additionally, a substantial portion of the damage to fish and fish habitat is a direct result of logging activities on public lands permitted by British Columbia, which the Government of Canada knows (or should know) will cause harm to fish and fish habitat or result in the deposition of deleterious substances. Harmful activities which are routinely permitted include:

- 1. falling and yarding of timber across fish habitat: which causes the direct alteration, disruption or destruction of critical habitat features and causes the deposition of a deleterious substance (sediment);*
- 2. logging and road building on certain lands which are “highly likely” to suffer landslides: which causes the alteration, disruption and/or destruction of critical habitat features, the blockage of fish passage, and the deposition of deleterious substances (including sediment and other substances such as coarse woody debris); and*
- 3. clearcutting of areas next to fish habitat: which causes the harmful alteration, disruption and/or destruction of fish habitat through changes to water quality and quantity and elimination of critical habitat features, and also causes the deposition of deleterious substance.*

Under the Canadian Constitution Act, the Government of Canada has the responsibility to protect fish and fish habitat and has legislative authority to address the above instances on an anticipatory or remedial basis. In advance, Fisheries and Oceans Canada (the federal agency responsible for the enforcement of the Fisheries Act; formerly known as the Department of Fisheries and Oceans – “DFO”) may require the submission of relevant information if a proposed work or undertaking will, or is likely to, result in the alteration, disruption or destruction of fish habitat or the deposition of deleterious substance. If a review of the information submitted suggests that an offence is likely to be committed, DFO may require modifications or restrict the operation of the work or undertaking

Additionally, in advance, DFO could invoke its permitting procedures for issuing permits to allow the harmful alteration, disruption, or destruction of fish habitat or the deposition of deleterious substances. These permitting procedures could result in the consideration of environmental effects (the authorization of the alteration, disruption or destruction of fish habitat triggering an environmental assessment under the Canadian Environmental Assessment Act) and the imposition of conditions or mitigation measures to protect the environment.

After the prohibitions against the harmful alternation, disruption or destruction of fish habitat or the deposition of deleterious substances have been breached, DFO has the authority to bring prosecutions against the offenders.

In spite of the clear legislative authority to address damage to fish habitat from logging, the Government of Canada is not enforcing its laws against damage from logging on private lands and smaller streams on public lands.

Further, the individuals in British Columbia, including the Submitters, have been denied the right to bring private prosecutions against violators of the Fisheries Act, even though the Fisheries Act encourages citizen enforcement by granting a statutory right to one-half of all fines resulting from private prosecutions. The Submitters submit that this denial is in violation of Canada's obligation under Article 7 of NAAEC to comply with due process of law and ensure that judicial proceedings are open to the public.

ARTICLE 14(1) REQUIREMENTS

This submission meets the threshold requirements established under Article 14(1):

- Article 14(1)(a): The submission is presented in English;
- Article 14(1)(b): The submission is presented by the David Suzuki Foundation, based in Vancouver, British Columbia, Greenpeace Canada, based in Toronto, Ontario, the Sierra Club of Western Canada, based in Victoria, British Columbia and the National Resources Defence Council, based in Washington, D.C. and the Northwest Ecosystem Alliance based in Washington State.
- Article 14(1)(c): The assertions made in the submission are supported by extensive Exhibit evidence which does not include mass media reports. Additionally, numerous scientific studies are referenced, but not attached.
- Article 14(1)(d): The Submitting parties have a longstanding interest and involvement in the protection of the environment and, in particular, the effects of logging in British Columbia. The organizations do not have a financial interest in logging operations whether in British Columbia or elsewhere. The Submitting Parties are represented by the Sierra Legal Defence Fund in this submission.
- Article 14(1)(e): The issues raised in this submission have been communicated to both the provincial and federal governments on numerous occasions. Private prosecutions against logging activities have been brought (and stayed by government). Numerous studies, reports and audits by the Submitters, other organizations, and government agencies have demonstrated the damage to fish and fish habitat which may result from logging.
- Article 14(1)(f): The Submitting Parties are organizations based in Canada and the United States (see Article 14(1)(b) above)

INTRODUCTION:

Regulation of logging and fisheries in British Columbia is a complex jurisdictional issue. The federal government, pursuant to section 91(12) of the *Constitution Act*, has exclusive jurisdiction over “sea coast and inland fisheries”, while jurisdiction over most aspects of logging lies with the provincial government, pursuant to, *inter alia*, sections 92(5) (“the management and sale of the public lands belonging to the province and the timber and wood thereon”) and 92A(b) (“the development, conservation and management of non-renewable natural resources and forestry resources in the province”) of the *Constitution Act*. The jurisdictions of the federal and provincial government are concurrent, in that the legitimate exercise of one government’s jurisdiction does not oust the jurisdiction of the other (*i.e.*, there is no “covering of the field” doctrine in Canada).

Historically in British Columbia, protection of fish and fish habitat from the effects of logging was accomplished through the *Fisheries Act*. *Fisheries Act* provisions against harming fish habitat and depositing deleterious substances were the primary tools used in these efforts. Habitat protection, in the form of current section 35, was introduced by Bill C-38 in 1977, and still remains in force. The legislative history of Bill C-38 reveals that regulating logging activities within the intent of Parliament:

*There are also other destructors of the environment...I refer to the polluters who damaged the environment by an inconsiderate destruction of our forest along our rivers and around our lakes. I have often witnessed destruction caused by the development of our forest resources, and even though this development provides employment for workers, it has disastrous consequences for the local environment: the fish disappear.*ⁱ (Excerpts from Parliamentary Debates attached as Exhibit 1).

In 1995, the Government of British Columbia introduced the *Forest Practices Code* (the “*Code*”), which is aimed at regulating forestry practices on public lands. The *Code*, if properly enforced, *could* address many of the aspects of logging that affect fish and fish habitat. However, even with proper enforcement, the *Code* fails to address a number of fisheries issues raised by logging under sections 35 and 36 on public lands, and has no application on private land. It is these areas which form the focus of this complaint.

After the introduction of the *Code*, DFO, the federal government agency responsible for the enforcement of the *Fisheries Act*, effectively withdrew from the regulation of logging activities. This occurred even though the federal government’s legislative mandate had not changed, and that logging activities are routinely permitted under the *Code* which violate the *Fisheries Act*. Furthermore, the Government of Canada is failing to enforce the *Fisheries Act* against damage occurring from logging on private lands where no effective provincial environmental protections apply.

The Submitters note that the focus of this Submission on only the most evident failures to enforce the *Fisheries Act* should not be interpreted as an indication that other problems with riparian management do not exist. There are significant enforcement problems with the *Code* and the Submitters are addressing those concerns in other fora (*e.g.*, reports, complaints under the *Code*, and other administrative and legal actions). Enforcement

failures under the *Code* are, in fact, exacerbating the damage to fish and fish habitat described in this Submission.

THE SUBMISSION

The Submission is presented as follows:

- I. FISH HABITAT AND LOGGING
- II. FEDERAL LEGISLATIVE FRAMEWORK
- III. LOGGING PRACTICES
- IV. FAILURE TO ENFORCE THE *FISHERIES ACT*
- V. GOVERNMENT INTERVENTION TO PRECLUDE PRIVATE PROSECUTIONS
- VI. CANADA'S CONFLICT OF INTEREST IN ENFORCING THE *FISHERIES ACT* AGAINST LOGGING

I. FISH HABITAT AND LOGGING

A. The Value of British Columbia's Fisheries

Fisheries have always played a crucial role in the lives of those living in the Canadian and US Pacific Northwest. Healthy fisheries are important from an ecological, aboriginal and economic perspective.

Ecologically, current forest practices are contributing to the decline of fisheries and the extinction of fish stocks. The extinction of fish stocks is an irreversible loss. Each stock possesses unique genetic information that determines the timing of its spawning runs, and that also dictates the stock's return to its original spawning bed. That genetic information is lost when a stock becomes extinct.

The decline in the fisheries has also had a significant impact on communities and individuals that depend on fisheries for their livelihoods and cultural identities. First Nations, who enjoy a constitutionally protected aboriginal right to fish in Canada, and fisheries dependent communities up and down the coast, have faced the severe decline, or loss, of a traditional livelihood.

Economically, the harmful alteration of fish habitat has reduced commercial and recreational fishing opportunities, and threatens the livelihoods of people working in the recreational fishing industry. Clearly, the preservation and enhancement of fish populations and habitat should be a top priority for the Federal Government.

B. The Relationship Between Fish Habitat and Forests

British Columbia's rivers, streams, lakes, wetlands, floodplains and surrounding forests or riparian zones support a high proportion of the region's biodiversity, including at least thirty species of fish and twelve amphibian species, as well as the many species of birds, mammals, insects and plants that are dependent on aquatic and riparian habitats.ⁱⁱ

There are numerous structural attributes of riparian areas that provide critical fish habitat. Structural attributes play central roles in providing cover, regulating water flows and the movement of sediment and increasing the carrying capacity of streams for fish.ⁱⁱⁱ Pools of deeper, stiller water provide important habitat for rearing juvenile fish and adults, while shallow, more turbulent sections of streams, known as riffles, provide spawning and summer rearing habitats for salmonids and are often important areas of benthic food production.

Stream or river banks confine water to the stream channel and provide important cover for rearing and feeding fish, while the vegetation and root systems along these banks act as a source for large woody debris such as downed trees, snags or rootwads, that naturally fall into streams and help to recruit and stabilize spawning gravel and provide important cover for rearing and feeding fish.

Gravel bars, situated at the inside of bends in rivers and streams, provide an important source of spawning gravel, while well-graded and uncompacted bed gravel provides spawning and incubation habitat for trout and salmon, and supports invertebrate and algae communities that feed fish. In addition to structural attributes, elements such as quality, quantity and timing of flow all contribute to fish habitat requirements.

C. Impacts of Logging on Fish Habitat

As more evidence is gathered from long-term studies in watersheds, a growing number of scientists note that clearcut logging and other land-use activities have profound, long-term impacts on streams, rivers and lakes and the fish populations that depend on them.^{iv} As noted by the American Fisheries Society, logging often alters “the spatial distribution of water and snow on the ground, the amount intercepted or evaporated by foliage, the rate of snowmelt or evaporation from snow, the amount of water that can be stored in the soil or transpired from the soil by vegetation, and the physical structure of the soil that governs the rate and pathways by which water moves to stream channels”.^v

Environmental damage caused by logging includes:

1. Loss of Streamside Vegetation

Streamside vegetation plays a key role in providing security from predation, maintaining channel structure and regulating temperature. It also provides nutrients to the water that become a major food and energy source for resident fish. Timber harvesting activities often result in the loss of streamside vegetation, particularly along smaller streams.^{vi} (This study is attached as Exhibit 2.)

Fallen logs and tree roots create pools of deeper and stiller water for fish to congregate in. The presence of large woody debris also affects upstream and downstream habitat by changing water flows. Over time, this can result in the buildup of gravel that is of use to spawning and rearing fish. The nature and frequency of large woody debris often changes after logging. In some areas studied, large woody debris continued to decline 70 years after harvesting in riparian forests.^{vii} Decreases in large woody debris following logging have been linked to coho salmon declines in southeast Alaska.^{viii}

2. Altered Water Temperature

Water temperature is a key factor influencing the metabolism, reproduction, development and activity level of fish.^{ix} Temperature also plays a vital role in a host of other processes that help to determine whether watercourses are suitable for fish. These include aquatic plant photosynthesis and respiration, chemical reaction rates, gas solubilities and microbial mediated processes including decomposition and nutrient cycling.

The removal of streamside vegetation can lead to increased temperatures. Water temperature may also increase in response to changes in sedimentation levels. Sediments in the water column attract heat, causing cloudy water to warm faster than clearer water. Water made shallower by the deposition of gravel and other debris also warms faster than deeper water.

3. Water Quality and Quantity

The presence of silts or fine sediments in the water column or on the stream floor can impact resident fish in a number of ways. It can clog or damage respiratory organs. It can affect the survival of salmonids during their intragravel incubation or in their alevin stages by depleting the availability of dissolved oxygen. It can also affect salmonids in both fingerling and adult stages by filling in pools and interstices between cobbles, thus reducing the amount of available habitat.^x Numerous studies have shown that fine sediment can enter streams during and after timber harvest.^{xi}

During spawning, adult salmon dig holes in gravel to deposit their eggs. The development and survival of these eggs is dependent, among other things, on the gravel being sufficiently porous to allow water to circulate and supply the embryos with oxygen.^{xii}

Several studies have shown that following logging in adjacent areas, the introduction of fine sediment led to reductions in the level of dissolved oxygen in important spawning and incubation sites.^{xiii} Levels of dissolved oxygen can also be reduced if water levels are low, temperatures are high, and the streams have been impacted by unusually large infusions of organic debris from surrounding lands.

Clearcutting and related road building often impact the infiltration capacity of soil, leading to increased levels of sediment entering stream channels. If the infiltration capacity of the soil is sufficiently reduced, water runs off over rather than through the soil resulting in higher peak flows and increased sediment transport. The deposition of these materials can result in expanded bars and riffles, infilled pools and destabilized stream banks. Changes in the nature of gravel composition can render stream reaches unsuitable for the incubation of fish eggs or for the survival of fish from their egg to fry stages.^{xiv}

Numerous studies have linked increased turbidity of streams and rivers with landslides and other mass wasting events. Often these are associated with logging activities on unstable slopes and with failed logging roads.^{xv} Frequent landslides and mass wasting events can also deliver increased volumes of larger sediments or coarse debris into

streams. Infusions of gravel can cause stream reaches to aggrade, which typically result in them becoming wider, shallower, and more prone to lateral movement and bank erosion.^{xvi}

4. Non-Fish Bearing Streams

Long-term riparian studies have confirmed that small, non-fish bearing streams are particularly prone to problems as a result of logging and that the risk associated with harvesting and road building adjacent to these streams is not always recognized or evaluated in a consistent fashion.^{xvii} Studies have also shown that forestry activities (e.g. clearcutting) adjacent to these streams results in a “reasonable potential” of affecting downstream fish resources.^{xviii}

Although these riparian ecosystems play an important role in maintaining water quality and quantity and preserving downstream fish habitat, they receive little or no protection under the *Forest Practices Code*. There are no reserve zones required on S5 or S6 streams, and intermittent or ephemeral streams receive no protection whatsoever.

The cumulative effect of logging-related stream damage to non-fish bearing streams can be significant, especially in coastal British Columbia where small streams are abundant. Increased sedimentation in non-fish bearing tributaries can lead to higher sedimentation in downstream fish bearing waters as silt and debris are transported downstream by moving water. While the impact of increased sedimentation or higher temperatures may be minimal in any one stream, the cumulative effect of all tributaries flowing into fish streams can have significant negative impacts on fish habitat.

D. The Legacy of Logging in British Columbia

In recent years, there has been a marked decline in salmon numbers and in salmon health throughout coastal British Columbia. Recent studies have identified that 142 distinct salmon populations in BC and the Yukon have been driven to extinction; another 624 stocks are considered at high risk of extinction; and another 308 are deemed to be at moderate risk of extinction or of serious concern.^{xix} Logging was one of the primary factors cited in this decline.^{xx}

Studies, including a number performed by federal and provincial government agencies, have documented specific harm caused by logging in British Columbia.

1. Carnation Creek

Twenty years of research in Carnation Creek, a small watershed on the west coast of Vancouver Island, has led scientists to conclude that there is a strong link between declining resident salmon stocks and the logging of the watershed.^{xxi} The number of coho fry rearing in Carnation Creek are at about fifty-seven percent of their pre-logging levels, while adult returns of chum salmon to the watershed are now only about thirty-nine percent of their pre-logging levels.^{xxii} Such declines are a result of the loss of rearing habitat associated with clearcut logging alongside streamsides and over steep-sloped terrain. In addition, debris torrents and landslides from clearcut hillsides have introduced

large volumes of sediment and woody debris into the stream channel, and this continues to cause pronounced changes to fish habitats eighteen years after forest harvesting was initiated.^{xxiii}

The effect of increased levels of sediment in streams can persist for several years. According to studies in coastal BC, increased levels of suspended sediment from disturbed soils and roads persist for 6-10 years in coastal watersheds and can last longer if the roads are still being used and maintained.^{xxiv} Channel erosion was still accelerating in Carnation Creek a decade after adjacent areas were logged, while sands and fine gravel from debris torrents and bank erosion were still being transported into spawning gravel 1-2 km downstream, 10 years after logging.^{xxv} Scientists predict that incubation success of salmonid eggs will be reduced for decades because of this streambed instability and increased sand.^{xxvi}

2. Haida Gwaii

In areas prone to heavy rain such as BC's Haida Gwaii (the Queen Charlotte Islands), there is a documented increase in damages to streams by logging-related landslides. Studies have shown the amount of landsliding to be directly related to the proportion of a basin area logged, and in some cases the effect of logging was to increase landsliding frequency by 34 times.^{xxvii} The frequency of debris torrents increased by about 40 times in logged areas compared to unlogged areas, and increased by 76 times in roaded areas compared to unlogged areas without roads.^{xxviii} In streams on Haida Gwaii affected by debris torrents, the average pool depth declined between 20 and 24 percent, while the total pool area fell by 38 to 45 per cent.^{xxix}

3. San Juan Study^{xxx}

This 1994 study by the Ministry of Environment which examined the effects of logging in the San Juan watershed found that the fish habitat in the watershed had been effectively destroyed and it was uncertain whether fish habitat could even be restored. The loss of fish habitat was due to factors including: the widening and straightening of the San Juan River; the disappearance of secondary stream channels due to erosion and logging debris; the loss of streamside vegetation; and excess sediment that choked spawning beds.

4. Chapman and Gray Creeks^{xxxi}

A 1995 joint government and industry task force study examined the cumulative effects of logging on two watersheds, Chapman and Gray creeks, on BC's Sunshine Coast. This study found that 85% of the landslides in Chapman Creek (202 total landslides) and 100% of the landslides in Gray Creek (37 total landslides) were related to logging. Of these landslides, 76% originated from within clearcuts and the remaining 24% were related to road building.

E. Extra-Territorial Effects of Logging in BC

The failure to provide habitat protection in BC has significant “downstream” effects on neighboring jurisdictions, just as other jurisdictions failures impact BC. Logging activities in BC are having negative effects on conservation efforts in neighboring jurisdictions, including efforts to protect bull trout.

Bull trout are one of the largest native salmonids in the Pacific Northwest. (Declaration of James C. Bergdahl, Jan. 4, 2000, Attached as Exhibit 3). Their geographic distribution includes British Columbia and western Alberta, as well as Oregon, Washington, Idaho, and Western Montana.^{xxxii} Bull trout are extremely sensitive to and intolerant of significant habitat change, and their current range is greatly decreased from their historic range. Important habitat elements including water temperature, channel and stream-flow stability, streambed composition, instream cover, aquatic productivity, and migration corridors can all be limiting factors for bull trout survival.^{xxxiii}

In the United States, bull trout have been extirpated across much of their former range and are currently listed as endangered under the U.S. Endangered Species Act (“Endangered and Threatened Wildlife and Plants: Determination of Threatened Status for Bull Trout in the Coterminous United States”, US Dept. of the Interior, attached as Exhibit 4). In Montana, bull trout are considered at risk of extinction in 98% of its remaining range in the state.^{xxxiv} To spawn, hatch, and rear successfully, bull trout need very cold, clear streams with cover supplied by logs and deep pools.^{xxxv} By removing streamside shade, clearcut logging with small or no buffers, increases water temperatures above those that are optimum or suitable for bull trout needs.^{xxxvi} Clearcut logging and associated roadbuilding cause landslides, runoff, channel instability, and other structural stream changes that decrease bull trout survival.^{xxxvii}

In Canada, the federal Committee on the Status of Endangered Wildlife in Canada has designated bull trout as a species vulnerable to extinction. British Columbia has classified bull trout as a "species of special concern." However, neither designation protects the habitat needed for bull trout survival.^{xxxviii} Logging and associated roadbuilding are among the most significant threats to the long-term survival of wild bull trout populations in British Columbia.^{xxxix}

British Columbia is the last major stronghold for bull trout in terms of both sheer numbers and genetic diversity of the remaining populations.^{xl} Unfortunately, these remaining populations are at risk from logging, roadbuilding, and other habitat-degrading activities.^{xli} Transboundary populations, which receive significant legal protections in the US, are put at risk by BC logging practices. At least 12 BC/US rivers are believed to host bull trout populations.^{xlii}

II. FEDERAL LEGISLATIVE FRAMEWORK

In Canada, by virtue of section 91 of the *Constitution Act, 1867*, the federal government has the exclusive jurisdiction over sea coast and inland fisheries. Pursuant to this jurisdiction, the federal government has enacted the *Fisheries Act*, a broad legislative framework addressing the protection, management and exploitation of Canada’s fisheries.

The *Fisheries Act* contains several provisions which protect fish and fish habitat from activities including logging:

Section 35: Prohibits any person from carrying out any work or undertaking that results in the “harmful alteration, disruption or destruction of fish habitat” in the absence of a permit issued under subsection (2). The issuance of the permit under subsection (2) cannot be undertaken without first completing an environmental assessment under the *Canadian Environmental Assessment Act*.

Section 36(3): Prohibits any person from depositing a deleterious substance (as defined in section 34) into waters frequented by fish without a permit issued pursuant to subsection (4).

Section 37: Empowers DFO to obtain information from the proponent of a work or undertaking which will allow DFO to determine if the work or undertaking will result in a harmful alteration, disruption or destruction of fish habitat, or if the work or undertaking will result in the deposit of a deleterious substance. If the information obtained indicates that a harmful alteration, deposition, or destruction of fish habitat, or the deposition of a deleterious substance is likely to occur, DFO may require modifications to the work or undertaking or restrict its operation.

Section 40: Provides that contravention of section 35(1) or section 36(3) is punishable by a fine up to \$1,000,000 and imprisonment not exceeding three years. A person who refuses to provide information requested under section 37, or fails to abide by DFO direction concerning modification or restriction of operation of a work or undertaking.

(The full text of the provisions addressed in this section appears in Appendix A.)

These section, taken together, empower DFO to address the damage to fish and fish habitat resulting from activities permitted under provincial legislation or undertaken on private lands. The powers of DFO are, thus, both preventative and remedial.

III. LOGGING PRACTICES

A. Private Land Logging

Neither the Government of Canada, nor the Government of British Columbia effectively regulates logging on private lands in British Columbia, particularly with respect to practices such as clearcutting to the streambanks of small streams and clearcutting landslide prone-lands.

One particularly troubling example of private land logging is that of TimberWest’s logging of its private land in the Sooke watershed, a major fish-bearing stream on Vancouver Island. On the Sooke River, TimberWest left an inadequate buffer (one tree wide), felled trees on the banks below the high water mark, and harvested trees from an island within the river. On the Leech River, a known fish stream, TimberWest harvested a buffer strip that was left by a previous landowner to protect fish habitat. Additionally, TimberWest built roads without culverts across Demanuelle Creek, Sooke’s most

important salmon stream. TimberWest also stacked woody debris within the stream channel of Demanuelle Creek. Although DFO has been made aware of these activities, it has taken no action against TimberWest. (Relevant documents are attached as Exhibit 5.)

When the *Forest Practices Code* was introduced, the BC government promised that it would eventually apply to private land. However this promise was never kept as the BC government lacked the political will to impose even the limited and meager provisions of the *Code* on private lands. In place of the *Code*, the BC Government has proposed the *Private Land Forest Practices Regulation* (“*Private Land Regulation*”), which is sorely inadequate given its lack of enforceable standards. More disturbingly, the approach taken under the *Private Land Regulation* sets a dangerous precedent in environmental regulation (the *Private Land Regulation* is attached as Exhibit 6).

The *Private Land Regulation*, which comes into force on April 1, 2000, lacks any protection for small streams. Only streams which are larger than 1.5 metres wide receive any protection against clearcutting, and those streams only receive the nominal protection of the retention of one tree along every 10 metres of stream. There are no restrictions or standards which prevent the clearcutting fish bearing streams which are less than 1.5 metres wide (a stream which would be classified as a “S4” stream under the *Code*). Similarly, there are no protections against clearcutting landslide prone lands under the *Private Land Regulation*. The problems posed by landslides are nominally acknowledged in the vague and unenforceable requirement, under section 9(1)(b) that those undertaking forest-harvesting activities ensure that “soil erosion into streams is minimized”. A summary of private land standards proposed for Washington State is attached as a comparison (Exhibit 7).

However, what is most disturbing about the *Private Land Regulation* is not its weak and ineffectual provisions, but its overall regulatory approach. The *Private Land Regulation* does not apply to all logging on private lands, but rather applies where owners of private land have selected to take advantage of certain beneficial tax classes that have been set up as an incentive. In other words, private landowners volunteer to abide by the *Private Land Regulation* in exchange for beneficial tax treatment (i.e., tax subsidies). There is no regulation of private lands where a landowner foregoes government subsidies. Indeed, the provincial government has created a situation where it appears to acknowledge that private property rights include the right to undertake any activity regardless of the environmental consequences, and even the weakest form of environmental regulation cannot be imposed without the provision of financial compensation to the landowner. One can only expect that the next group who may be adversely financially affected by environmental regulation will demand compensation as well. It is abundantly clear that little, if any, environmental regulation will be undertaken if compensation must be paid for every minor incursion upon property (or statutory) rights. Even in the United States, where private property rights are *Constitutionally* protected, a landowner is only entitled to compensation if a regulation leaves the land without “any economically beneficial use”.^{xliii} Other fields of regulation have never been subject to such a strict compensation requirement; for example, a municipality could never engage in zoning, thereby benefiting the overall community, if it had to pay each landowner for prohibited uses. In this sense, the *Private Land Regulation* is far worse than having no regulation at all.

B. Activities Permitted Under the *Code* on Public Lands

The following are examples of activities that are routinely permitted under the *Code* that frequently result in damage to fish and fish habitat. However, even though this damage is foreseeable, DFO is not enforcing the *Fisheries Act* in these instances.

1. Falling and yarding across fish habitat:

Falling trees across fish habitat (cutting down trees such that they will fall across fish bearing streams) and yarding trees (dragging trees that have been cut down across fish bearing streams) causes immediate and direct damage to fish and fish habitat. Falling and yarding causes the erosion and de-stabilization of streambanks, transport of sediment and wood downstream, and the disruption or destruction of critical habitat features. Thus, the practice is contrary to both section 35 of the *Fisheries Act* (prohibiting the harmful alteration, disruption or destruction of fish habitat), and also contrary to section 36(3) (prohibiting the introduction of deleterious substances). However, despite the damaging nature of the practice, falling and yarding across streams is routinely allowed across fish habitat.

The *Forest Practices Code* classifies streams according to a scheme that considers stream size and whether the stream is fish bearing. Fish bearing streams are ranked from “S1” to “S4” in descending order of size (S4 streams are less than 1.5 metres across). Falling and yarding across S4 streams is permitted under the *Forest Practices Code*, at the discretion of the approving officer, and is routinely allowed when logging plans are approved. A 1997 Report of the Sierra Legal Defence Fund, comprised of paper and field audits, found that logging plans for 79% of S4 streams reviewed allowed falling and yarding across the streams.

Intact riparian areas on even the smallest streams are crucial to stream health. The areas help stabilize streambanks by moderating erosion and the rate of water movement through the soil. Many fish, such as coho salmon, spawn and rear in the habitat provided by smaller streams. Habitat destruction on smaller streams has a particularly pronounced effect on these species.

Falling and yarding across non-fish bearing streams, which is allowed under the *Code*, may also harm fish and fish habitat. Non-fish bearing streams, which are classified as either S5 (greater than three metres wide) or S6 (less than three metres wide), are routinely felled and yarded across. These activities can lead to the introduction of sediment into water that ultimately flows into fish bearing stream sections.

2. Logging Landslide-Prone Lands:

Landslides can prove highly destructive to fish habitat. Those landslides that do reach fish habitat introduce silt and sediment and other woody debris while also damaging habitat features and blocking fish habitat. And even those landslides that do not reach fish streams can have detrimental impacts as sedimentation is often increased and waterflow patterns in a watershed may also be altered. Logging that causes landslides may therefore violate both sections 35 and 36(3) of the *Fisheries Act*.

Under the *Code*, lands proposed for logging are classified according to the potential risk of landsliding. There are five classes of terrain, which are based upon a number of factors including slope. Class III terrain includes a risk of landslides of up to 30%. Class IV indicates a landslide risk between 30 and 70%. Class V terrain is that terrain for which the landslide risk is 70% or greater.

Under BC's *Forest Practices Code*, logging Class V terrain (highly likely to landslide) ostensibly occurs only in exceptional circumstances. Section 248 of the *Code* prevents logging Class V terrain unless a district manager determines that clearcutting "will adequately manage and conserve the forest resources of the area". In practice however, the application of this provision has been significantly different. For example, the Queen Charlotte Forest District is one of the most prone to landslides of any terrain in British Columbia, yet the district manager issued a blanket exemption allowing clearcutting on all Class V terrain by all licensees.^{xliv} In some districts, the logging of steep slopes is required. For example, the Lillooet Forest District requires that 40% of cutblocks be located on terrain in excess of 50% slope.^{xlv}

A Sierra Legal Defence Fund review of 13 Forest Development Plans showed that 28% of all logging planned was scheduled for the unstable Class V terrain and that 97% of that Class V terrain was scheduled for clearcutting, the logging method most likely to cause landslides (this report is attached as Exhibit 8)

3. Clearcutting Riparian Areas:

The clearcutting of riparian areas has significant negative effects on fish and fish habitat. The removal of trees and vegetation in riparian areas leads to bank destabilization and increased streambank erosion, alterations in water temperature (particularly increased warming of streams which can be lethal to fish), greater fluctuations in water flows (which can cause water levels to be both dangerously high, during storm events and snowmelt periods, and dangerously low, during periods of low precipitation such as summer), decreased water quality (through introduction of sediment and logging debris) and the removal of sources of large woody debris.

Under the *Code*, only S1 – S3 streams, the largest streams in British Columbia, receive mandatory riparian buffers ("reserve zones"). Other stream classes, S4 – S6, which are by far the most numerous in British Columbia, are afforded only discretionary protection, in the form of a riparian "management zone"; S4 streams are fish-bearing while S5 and S6 streams are not. (Although the mandatory riparian protection for S1 – S3 streams is significantly less than that recommended by scientists or provided in other jurisdictions, only the treatment of S4 streams is raised by this Submission.)

Unfortunately in British Columbia, only a fraction of S4 streams receive a management treatment other than "clearcutting". A study of forest development plans in British Columbia showed that 79% of S4 streams were clearcut to both banks – which is entirely permissible under the *Code*. This finding is consistent with logging currently being proposed in new forest development plans. The "basal area retention" table of a Forest Development Plan recently submitted by MacMillan Bloedel shows that zero percent of

S4 management zone cover is required to be retained, and that only 30% of S4 management zone cover is expected to be retained. (Relevant documents are attached as Exhibit 9) Even more telling, a Forest Development Plan prepared by the Ministry of Forests (the provincial agency responsible for enforcing the *Code*) does not require that any S4 management zone cover be retained and that, in fact, a *maximum* of 60% may be retained (i.e., 40% of the S4 management zone cover *must* be harvested. (Relevant documents are attached as Exhibit 10).

IV. FAILURE TO ENFORCE THE *FISHERIES ACT*

Even though the functioning of the *Forest Practices Code* does not assure compliance with the *Fisheries Act*, the Government of Canada seems to have simply left the protection of fish and fish habitat to the provincial government which has no jurisdiction over fisheries. A January 31, 1996, letter of DFO reflects this change in approach:

The Department of Fisheries and Oceans is changing its logging referral procedures in view of the increased stream protection provided by the Forest Practices Code...In view of this enhanced protection for fish streams detailed block by block responses will no longer be provided on Forest Development Plans. (This letter is attached as Exhibit 11.)

However, this approach is questionable given that even DFO's own staff consider the *Code* ineffective, as excerpts from both government and industry reports reveals:

The Forest Practices Code is widely perceived by DFO staff as not providing an adequate level of protection for fish and fish habitat.^{xlvi} (An excerpt of this report is attached as Exhibit 12.)

MacMillan Bloedel's assertion that adherence to the Forest Practice Code will fulfill their commitment to maintain fish, fish habitat and riparian attributes is not the Department of Fisheries and Ocean's position, particularly with regard to small streams. The best-management practices set out in the Code are not adequate to deal with the issues of falling and yarding away, and retaining non-merchantable and deciduous trees, especially in old-growth forests. (An excerpt of this report is attached as Exhibit 13.)

Not only has DFO stopped active involvement in the planning process, it is failing to take remedial action after damage has occurred. DFO statistics for the last three years in BC show that only one prosecution (Dale Tortorelli of Coast Lumber) for the type of activities outlined in this complaint has been brought. That prosecution was abandoned by DFO due to delay in pursuing the charges.

However, a review of charges brought outside the logging context shows that DFO can, and does, bring charges against the removal of trees from riparian areas. A number of charges have been brought against homeowners who have removed riparian vegetation, or where riparian vegetation has been removed as part of an industrial project.

The following comment appears on DFO's internet site relating to a homeowner charged (and who later pleaded guilty) with removing vegetation from a streambank while constructing his house:

Conservation Officer Greg Hoyer said that many people do not realize how streamside vegetation or riparian vegetation is part of fish habitat. Trees and vegetation provide shade that cools the water temperature, insects that are food for fish, roots that stabilize the banks, and cover from predators. Fish do not live in barren ditches, just as people do not live in open roadways. (emphasis original; this document is attached as Exhibit 14.)

The Submitters are in full agreement with these sentiments and take the position that there is no justifiable reason for DFO to distinguish between homeowners and forestry companies. That BC "regulates" forestry under the *Code* makes no difference. Under Canadian law, the fact that an activity is also subject to provincial regulation does not justify a reduction in the enforcement of federal legislation:

The fact that the E.R.C.B. (Energy Resources Conservation Board) regulates the oil and gas industry in this province does not, in my view, diminish the necessity or importance of the enforcement of provisions of statutes such as s. 36 of the Fisheries Act, which has been enacted to protect the environment and public welfare.

R. v. Amoco Canada Petroleum Co. 13 C.E.L.R. (N.S.) 317 (Alta., Prov. Ct.)

V. GOVERNMENT INTERVENTION TO PRECLUDE PRIVATE PROSECUTIONS

In Canada, any person has the right to lay charges against individuals, governments or companies citing alleged violations of law. The individual takes these charges through to trial and conducts a prosecution. Such prosecutions, termed private prosecutions, are similar in most respects to Crown prosecutions, in which lawyers representing the Crown proceed with charges on the public's behalf. Private prosecutions may result in convictions and penalties such as fines or incarceration.

However, despite the right of individuals to bring private prosecutions, the policy of the Government of British Columbia's Attorney General's Office (which has authority to prosecute violations under the *Forest Practices Code* and, by agreement with the Federal Government, the *Fisheries Act*) is to intervene in all prosecutions and to stay virtually all environmentally related private prosecutions. According to the information in the Submitters' possession, there have been 12 private prosecutions in British Columbia in the last 19 years, at least nine of which included charges under the *Fisheries Act*. Eleven of these private prosecutions have been stayed. For example, a private prosecution of a municipal agency for dumping raw sewage into fish habitat (depositing a deleterious substance in contravention of section 36(3) of the *Fisheries Act*) was stayed by the government prosecutor despite his admission that there was "impeccable evidence" and "the fact that there is no doubt that a crime has been committed". Thus, it appears that

environmental private prosecutions are being stayed as a matter of course, rather than after the reasonable exercise of discretion.

These private prosecutions have been stayed despite the entitlement of those bringing private prosecutions to one-half of the proceeds of any penalties. This consistent intervention and staying of environmental prosecutions is clearly in violation of Canada's commitments under the NAAEC. Article 6, section 2 states:

Each Party shall ensure that persons with a legally recognized interest under its law in a particular matter have appropriate access to administrative, quasi-judicial or judicial proceedings for the environment of the Party's environmental laws and regulations.

Further, Article 6, section 3, states:

Private access to remedies shall include rights, in accordance with the Party's law, such as...

(b) to seek sanctions or remedies such as monetary penalties, emergency closures or orders to mitigate the consequences of violations of its environmental laws and regulations.

VI. CANADA'S CONFLICT OF INTEREST IN ENFORCING THE *FISHERIES ACT* AGAINST LOGGING

Forest products are the largest net contributor to Canada's trade balance. Canada is the world's largest individual forest products exporter, accounting for 19% of the total value of world exports. Increasingly however, Canadian forest products are being subjected to close scrutiny from international buyers, due to the environmentally damaging nature of Canadian forest practices, to which the Government of Canada has mounted a powerful and aggressive response. To combat this perceived economic threat, Canada has expended considerable time and money undertaking activities such as the following:

- sponsoring visits by foreign delegations under the International Forestry Partnership Program;
- committing millions of dollars to Cooperative Overseas Market Development Program to "maintain and expand" markets for Canadian forest products;
- the commitment of another \$6 million dollars for overseas marketing in 1993; and
- sponsoring a European office of the Canadian Pulp and Paper Association to "increase customers' knowledge of Canada as a leader in developing environmentally friendly forest products".

(Source: *Broken Promises: The truth about what's happening to British Columbia's forests*, attached as Exhibit 15)

All told, the federal government, provincial government, and private forestry companies have spent at least \$68 million dollars to tell the world of the "sustainable forest practices

underway at home”.^{xlviii} From this perspective, Canada is motivated to not bring charges against BC forest companies for violations of the *Fisheries Act*, as those charges would undermine Canada’s carefully cultivated message that Canadian forest products are “sustainable” and “environmentally friendly” – a message Canada has spent considerable amounts of time, energy and tax dollars spreading.

CONCLUSION:

This Submission meets the criteria identified in Article 14(2) as guiding the CEC’s decision regarding requesting a response from the Federal Government. The Submitting Parties have already identified the harm caused to each of them by Canada’s failure to enforce its own laws. The Submission also raises issues that advance the goals identified in Article 1 of NAAEC, including:

- its purpose is to foster the protection of an important environmental resource for the benefit of present and future generations (1(a));
- it promotes sustainable development based on the enforcement of mutually supportive environmental laws to protect fish and fish habitat in Canada and the U.S. (1(b));
- it promotes cooperation between governments, regulatory agencies and industry groups in Canada and the U.S. to protect and conserve a shared fisheries resource (1(c));
- it seeks to enhance compliance with, and enforcement of, environmental laws (1(e)).

The Submitting Parties have pursued all available “private remedies”. Various Parties have urged DFO to enforce the *Fisheries Act*, to no effect. Canadian citizens also possess the common law right to initiate private proceedings to prosecute offences under the *Fisheries Act* (and other legislation) where the Federal or Provincial Government fails to act. The Submitters, and others, have brought prosecutions under the *Fisheries Act* and in each instance, the Provincial Attorney General took over and stayed the proceedings without going to trial and securing a conviction.

Finally, the submission is not based primarily on “mass media reports”. The Submission is supported by extensive evidence that does not include media reports.

The Submitters seek to have the Federal Government enforce its own laws in order to ensure the protection and enhancement of fish habitat and populations.

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- ⁱ *House of Commons Debates* (16 May 1977) 5667, at 5676.
- ⁱⁱ Establishing Fisheries Management and Reserve Zones in Settlement Areas of Coastal British Columbia. John Millar, Nick Page, Melody Farrell, Barry Chilibeck, and Matthew Child. Department of Fisheries and Oceans, Canada, 1997.
- ⁱⁱⁱ Timber Harvesting, Silviculture, and Watershed Processes. T.W. Chamberlin, R.D. Harr, and F.H. Everest. In *Influences of Forests and Rangeland Management on Salmonid Fisheries and Their Habitats*. American Fisheries Society Special Publication, 19. 1991.
- ^{iv} Carnation Creek and Queen Charlotte Islands Fish/Forestry Workshop: Applying 20 Years of Coastal Research to Management Solutions. British Columbia Ministry of Forests, Research Program. 1998. *Stream Channel Morphology and Recovery Process*. By D.L. Hogan, S.A. Bird and S. Rice.
- ^v *Supra*, note iii.
- ^{vi} Sierra Legal Defence Fund, *Stream Protection Under the Code: The Destruction Continues*, Vancouver, 1997.
- ^{vii} Carnation Creek and Queen Charlotte Islands Fish/Forestry Workshop: Applying 20 Years of Coastal Research to Management Solutions. British Columbia Ministry of Forests, Research Program. 1998. *An Introduction to the Ecological Complexity of Salmonid Life History Strategies and of Forest Harvesting Impacts in Coastal British Columbia*. J Charles Scrivener, Peter J. Tschaplinski, and J. Stevenson-Macdonald.
- ^{viii} *Habitat Requirements of Salmonids in Streams*. T.C. Bjornn and D.W. Reiser, in *Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats*. American Fisheries Society Special Publication, 19. 1991.
- ^{ix} *Salmonid-Habitat Relationships in the Western United States: a Review and Indexed Bibliography*, Michael Marcus et al. United States Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. February, 1990.
- ^x *Id.*
- ^{xi} *Long-Term Changes in Streamflow Following Logging in Western Oregon and Associated Fisheries Implications*. Water Resources Bulletin, American Water Users Association, Vol 27, No. 2, April, 1991. By Brendan J. Hicks, Robert L. Beschta, and R. Dennis Harr.
- ^{xii} *Supra*, note viii.
- ^{xiii} *Supra*, note viii.
- ^{xiv} Carnation Creek and Queen Charlotte Islands Fish/Forestry Workshop: Applying 20 Years of Coastal Research to Management Solutions. British Columbia Ministry of Forests, Research Program. 1998. *Overwintering Habitats and Survival of Juvenile Salmonids in Coastal Streams of British Columbia*. Gordon Hartman, Derek B. Tripp, and Tom G. Brown.
- ^{xv} *Supra*, note xi.
- ^{xvi} *Supra*, note xi.
- ^{xvii} *Supra*, note xiv.
- ^{xviii} Tripp 1998
- ^{xix} *Supra*, note ii.
- ^{xx} T.L. Slaney, et. al, *Fisheries Journal*, “Status of Anadromous Salmon and Trout in B.C. and the Yukon” *American Fisheries Society*, Vol. 21 Number 10, p. 20 – 35.
- ^{xxi} *Supra*, note vii.
- ^{xxii} *Supra*, note vii.
- ^{xxiii} *Supra*, note vii.
- ^{xxiv} *Supra*, note vii.
- ^{xxv} *Supra*, note vii.
- ^{xxvi} *Supra*, note vii
- ^{xxvii} *Supra*, note xi.
- ^{xxviii} *Supra*, note xi
- ^{xxix} *Supra*, note xiv.

^{xxx} Northwest Hydraulic Consultants for Ministry of Environment, Land and Parks, Vancouver Island Region 1, Impact of Forest Harvesting on Terrain Stability, Stream Channel Morphology and Fisheries Resources of the San Juan River Watershed, 1994.

^{xxxi} Hudson, Robert, Chatwin, S., and Chapman, A., Chapman and Gray Creeks Watershed Cumulative Effects Analysis: Chapman and Gray Creeks Integrated Watershed Management Plan Background Report #6. May 1996.

^{xxxii} Declaration of James Bergdahl, Civil Action No. 98-3003 (United States District Court, District of Columbia) sworn January 4, 2000.

^{xxxiii} *Id.*, para . 9.

^{xxxiv} *Id.*, para . 16.

^{xxxv} *Id.*, paras . 10 – 13.

^{xxxvi} *Id.*

^{xxxvii} *Id.*, paras 11 – 13.

^{xxxviii} *Id.*, para . 18

^{xxxix} *Id.*, paras 20 – 23.

^{xl} *Id.*, para . 19.

^{xli} *Id.*, paras 19 – 23.

^{xlii} *Id.* para. 25.

^{xliii} See, e.g., *Lucas v. South Carolina Coastal Commission*, 505 U.S. 1003 (1992).

^{xliv} Sierra Legal Defence Fund, *Going Downhill Fast: Landslides and the Forest Practices Code*, Vancouver, 1997.

^{xlv} *Id.*

^{xlvi} Dovetail Consulting, “An Evaluation of DFO Involvement in Land and Resource Management Planning in British Columbia”, prepared for the Habitat and Enhancement Branch, Fisheries and Oceans Canada (March 5, 1999), p. 73.

^{xlvii} Greenpeace, *Broken Promises: The truth about what’s happening to British Columbia’s forests*, Vancouver, 1998.