

September 2001

**THE *STREAMSIDE*
PROTECTION
REGULATION AND
OPPORTUNITIES FOR
CITIZEN ADVOCACY**

Kathy Grant
West Coast Environmental Law



**THE *STREAMSIDE PROTECTION*
REGULATION AND OPPORTUNITIES
FOR CITIZEN ADVOCACY**

A BRIEFING GUIDE FOR STREAM
STEWARDSHIP ADVOCATES

CONTENTS

- EXECUTIVE SUMMARY 4**

- BACKGROUND 6**

- PROTECTION OF FISH HABITAT AND STREAMSIDE AREAS 8**
 - Why do streamside areas need protection?..... 8
 - Jurisdiction for Fish Habitat Protection 9
 - Federal Responsibilities 10
 - Provincial Responsibilities 10
 - Local Government Responsibilities..... 11
 - The Urban Referral System..... 11
 - Effect of the Streamside Protection Regulation on other Fish Protection Laws 11

- THE REGULATION: AN INTERPRETIVE REVIEW 12**
 - Overview..... 12
 - Section 1: Definitions 13
 - Section 2: Purpose of the Regulation 15
 - Section 3: Intergovernmental Cooperation Agreements 16
 - Promoting Efficiency 16
 - Clarifying Responsibilities and Support..... 17
 - Process for Amendments to Streamside Protection and Enhancement Areas 17
 - Compliance and Enforcement 18
 - Section 4: Application..... 18
 - Section 5: Establishment of Streamside Protection and Enhancement Areas 21
 - Section 6: Determination of the Width of Riparian Protection and Enhancement Areas.... 21
 - Section 7: Use of Local Government Powers for Protection and Enhancement of Areas..... 24

- WHAT’S NOT IN THE REGULATION?..... 28**
 - Provisions to Ensure Local Government Compliance..... 28
 - Provisions for Streamside Protection on Land other than “Residential, Commercial or Industrial” 28

- IMPLEMENTING THE REGULATION 28**
 - Stage 1: Mapping 29
 - Stage 2: Determining Streamside Protection and Enhancement Areas 29
 - Stage 3: Incorporating Streamside Protection and Enhancement Areas into Law 29
 - Stage 4: Monitoring and Enforcing Streamside Protection and Enhancement Areas..... 30

- STREAMSIDE PROTECTION BYLAWS 30**
 - Enforcing Bylaws 31
 - Development of Model Bylaws 32
 - Including Streamside Protection and Enhancement Areas in an Official Community Plan (OCP) 33

OTHER ISSUES	33
Will the regulation improve fish habitat protection?.....	33
Are the setbacks large enough?.....	35

SUMMARY: WHAT CAN CITIZENS DO TO PROMOTE STREAMSIDE PROTECTION AND ENHANCEMENT AREAS?	35
Advocacy to Local Government	35
Advocacy to the Provincial Government	36

LIST OF TEXT BOXES

Box 1: Fish Habitat	7
Box 2: Why West Coast Environmental Law is concerned about fish habitat	9
Box 3: Section 6 (1) and (2) of the Streamside Protection Regulation	24

LIST OF TABLES

Table 1: What land use activities are affected by the <i>Streamside Protection Regulation</i> ?.....	20
Table 2: Example Streamside Protection Area Setbacks	23
Table 3: Tools and regulatory powers for protecting SPEAs.....	26
Table 4: Example Elements of a Bylaw for Streamside.....	30

ACKNOWLEDGEMENTS

West Coast Environmental Law acknowledges the valuable comments provided by reviewers:
Mary Sue Atkinson, Jodi Dong, Melody Farrell and Erik Karlsen.



EXECUTIVE SUMMARY

In January 2001, the provincial government passed the *Streamside Protection Regulation* (SPR) pursuant to section 12 of the *Fish Protection Act* (FPA). The SPR outlines minimum setbacks of 5 to 30 m, called streamside protection and enhancement areas (SPEAs), for residential, commercial and industrial development around streams. It requires local governments to protect SPEAs through zoning bylaws, official community plans, development permit areas and other land use planning and regulatory tools by January 2006. Intergovernmental cooperation agreements (ICAs) will be used to facilitate the implementation of the SPR.

The SPR is a positive step forward for fish habitat protection in BC. The regulation is clear: local governments *must* protect SPEAs. The SPR attempts to proactively address the issue of habitat loss—something that the federal *Fisheries Act* and the urban referral system have not been able to adequately do. It also attempts to harmonize residential, commercial and industrial development setbacks from streams so that conflicts between federal, provincial and local laws are avoided and so that, when applied, the setbacks provide due diligence to fish habitat concerns under the federal *Fisheries Act*. The SPR promotes regulatory and administrative efficiency through ICAs. As well, when all levels of government cooperate and apply the same standards to development approvals, there is more certainty for developers and landowners. The SPR also gives local governments some flexibility in the choice of tools available to implement the regulation. This recognizes valuable habitat protection work already underway. Application of the SPR, with respect to determining SPEAs, is envisioned as an adaptive approach. SPEAs are placed where they serve the purpose of the regulation, i.e., protecting the features and functions of streams and streamside areas that contribute to fish habitat.

One of the controversial parts of the regulation is that it requires protection of “potential” fish habitat. This “potential” is limited by the availability of fish habitat, or the reasonable certainty of rehabilitation efforts (e.g., approved plans to daylight a stream). Once stream mapping is complete and areas of fish habitat are clearly outlined, some of the controversy will likely disappear with the uncertainty. The biggest reason for concern with the SPR is that there are no compliance and enforcement mechanisms to compel local governments to follow the regulation. As well, although the regulation encourages ICAs, neither the FPA nor the SPR requires local governments to implement the regulation through ICAs. In fact, the FPA rests final authority for implementation with local governments. While some flexibility in how to implement the regulation is a positive thing, it is a double-edged sword. Too much local government discretion around making allowances and amendments to SPEAs could defeat the purpose of the regulation and result in senior levels of government resorting to application of the habitat protection provisions under the federal *Fisheries Act*, with habitat damage in the interim.

The SPR is in year one of a five year implementation period. Many of the on-the-ground details of how the regulation will work are being currently developed. In fact, the provincial government is set to release a draft Implementation Guide for Local Governments sometime in October 2001. Stream stewardship advocates can anticipate (and participate to a degree) in mapping and documenting streamside conditions, determining SPEAs for streams threatened by residential, commercial and industrial development, incorporating SPEAs into law, and monitoring and enforcing compliance with SPEAs. Watchdogging and commenting on local government decisions, and expressing support for the regulation to the provincial government are two key ways that citizens can help to implement the SPR.



BACKGROUND

Finally, British Columbians have a provincial regulation to help stem the loss of critical fish habitat from residential, commercial and industrial development. Non governmental stewardship groups have been asking for this regulation for years. In January 2001, their efforts were answered with the passing of *the Streamside Protection Regulation*¹ (SPR or the regulation).

Habitat loss, particularly through the destruction of riparian areas, is one of the most serious threats to BC fish and BC fisheries. Yet, until recently, no provincial laws existed specifically to address this problem in areas facing residential, commercial or industrial development (i.e., primarily urban or urbanizing areas). While the federal *Fisheries Act*² provides stiff penalties for those convicted of the criminal offence of destroying fish habitat (without authorization), it alone cannot stop habitat loss. Despite the deterrent of penalties, the heavy burden of proof for criminal charges makes investigations costly, charges unlikely, and convictions even rarer. Furthermore, laying charges under the *Fisheries Act* means that the damage is already done: the habitat in question has been lost.

Local governments in BC have direct control over the planning and regulation of land use on private lands through the *Local Government Act*³. Some municipalities and regional districts have used their powers to provide protection for fish habitat, taking proactive measures not available under the federal *Fisheries Act*. However, the use of local government powers to protect fish habitat has been discretionary, underutilized, and inconsistent across developed areas.

The *Streamside Protection Regulation* strives to address this problem. It proactively provides protection for fish habitat—before the loss occurs—by directing local governments to use their powers to protect fish habitat. The regulation was established pursuant to section 12 of the *Fish Protection Act*⁴, which allows the provincial government, by regulation, to establish “policy directives” for protecting and enhancing riparian areas subject to residential, commercial or industrial development. The policy directives established through the *Streamside Protection Regulation* are a unique form of regulation that has never been used before in British Columbia.⁵

¹ *Streamside Protection Regulation*, B.C. Reg. 10/2001.

² *Fisheries Act*, R.S.C., 1985, c.F-14.

³ *Local Government Act*, R.S.B.C., 1996, c.323.

⁴ *Fish Protection Act*, S.B.C. 1997, c.21.

⁵ Ministry of Environment, Lands and Parks, “Regulatory Impact Statement in Support of the *Streamside Protection Policy Directives* developed under section 12 of the *Fish Protection Act*” (January 2001), online: Ministry of Environment, Lands and Parks <http://www.env.gov.bc.ca> (date accessed: 31 May 01).

Box 1: Fish Habitat

What is fish habitat?

Fish habitat is defined in the *Fish Protection Act*, s.1:

“Fish habitat” means the areas in and about a stream, such as spawning grounds and nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes.

This definition is almost identical to the definition for fish habitat given in the federal *Fisheries Act*, s.34. (The provincial definition provides a bit more detail with the inclusion of the words, “...the areas in and about a stream, such as...”.)

What does the *Streamside Protection Regulation* protect?

The regulation is designed to protect fish habitat by protecting streamside areas from construction of buildings and structures, or uses requiring impervious surfaces. Streamside areas (or “riparian” areas) contribute essential ecosystem features and functions (see section 2 of the regulation) that provide fish habitat. It is these features and functions that can be damaged by development in riparian areas, and are thus afforded protection under the regulation.

This purpose of this brief is to provide:

- A plain language review of the *Streamside Protection Regulation* including discussion of what is missing from the regulation and an overview of responsibilities for implementing the regulation;
- Recommendations for citizen advocacy to help ensure speedy and effective implementation of streamside protection and enhancement areas; and
- Examples of opportunities for law reform at the local government level.

This brief is organized into the following sections:

Protection of Fish Habitat and Streamside Areas – provides an overview of why streamside areas and riparian habitat are important to fish and why this habitat needs to be protected from residential, commercial and industrial development. It also outlines the responsibility of different levels of government with respect to fish habitat protection.

The Regulation: An Interpretative Review – gives the low-down on what’s in the regulation along with commentary. Section 6 is the key section that outlines the setback requirements called “streamside protection and enhancement areas”, or “SPEAs”.



What's not in the Regulation? – discusses some of the omissions in the regulation (e.g., compliance mechanisms, limited application).

Implementing the Regulation – discusses the broad stages of work that will have to be completed to implement the regulation and identifies opportunities for citizen advocacy.

Streamside Protection Bylaws – outlines some elements that may be addressed in bylaws to implement the regulation and provides examples of work being undertaken by a few local governments.

Other Issues – raises issues such as whether the setback requirements provided in the regulation will actually provide better protection than the status quo.

Summary: What can citizens do to promote streamside protection and enhancement areas? – provides a summary of actions that local stewardship groups can take to promote fish habitat protection and implementation of the regulation.

PROTECTION OF FISH HABITAT AND STREAMSIDE AREAS

WHY DO STREAMSIDE AREAS NEED PROTECTION?

Streamside areas are threatened by land uses across the province. Land use activities such as logging, residential and commercial developments, agriculture, water diversions, and industrial uses and pollution all have an impact on fish habitat⁶. In developed areas, there are some alarming trends⁷:

- Only about 6 of the former 60 productive salmon streams remain in the Greater Vancouver area;
- Hundreds of kilometres of streamside habitat have been lost in the Lower Mainland this century due to unsustainable land development practices;
- Over 140 streams in the Georgia Basin are considered threatened by urban development;
- More than 11% of salmon and trout populations on larger streams in BC are extinct or at risk of becoming extinct; and
- 30% of all freshwater fish species are threatened or endangered.

⁶ T. Buck Suzuki Environmental Foundation, “Resource Manual for Salmon Habitat Protection Activities”, (1994).

⁷ These bullets are reproduced from MELP, *supra*, at 3.

If the status quo continues, more valuable fish habitat will be lost. The *Streamside Protection Regulation* is an important part of a new proactive regime to stem the loss of fish habitat in developed areas.

Besides the benefits that riparian areas provide to fish, they also provide significant value for communities and wildlife. Here are some examples:

- It has been estimated that 85% of all wildlife species use riparian areas⁸;
- Proximity to riparian greenways has a positive impact on residential property values in an order of magnitude of a 10-15 % increase in property values for lots near or adjacent to riparian greenways⁹; and
- Municipalities can save in infrastructure costs and property damage when they maintain riparian areas to help in naturally dealing with stormwater. Stormwater damage benefits were estimated at over \$2.5 million for one stream in the District of North Vancouver!¹⁰

Box 2: Why West Coast Environmental Law is concerned about fish habitat

West Coast Environmental Law's mission is to provide legal services to protect the environment and to foster public participation in environmental decision-making. Assisting stream stewardship advocates to understand and use the law to protect fish habitat helps us to fulfil our mandate. Fish are an integral part of BC's environment and economy, and provide a well-recognized indicator of the environmental health and vitality of our province.

JURISDICTION FOR FISH HABITAT PROTECTION

In BC, all levels of government have some jurisdiction for fish habitat, or activities that affect fish habitat. Constitutionally, legislative powers are divided between the federal and provincial governments. These senior levels of government can delegate some of their powers to other bodies such as local governments. As well, intergovernmental agreements (such as memorandums of understanding) can be used to clarify areas of overlapping jurisdiction.

⁸ Department of Fisheries and Oceans Canada, Fraser River Action Plan, (pamphlet) "Healthy Streams, Yours to Protect".

⁹ Quayle, M., and S. Hamilton, "Corridors of Green and Gold. Impact of Riparian Suburban Greenways on Property Values", (Fraser River Action Plan, Department of Fisheries and Oceans: April 1999), at 3 and 34.

¹⁰ Holman, G. and L. Adams, "Multiple Accounts Assessment of Proposed Streamside Protection Measures Under the Fish Protection Act", (May 1998), online: Ministry of Environment, Lands and Parks <http://www.env.gov.bc.ca> (date accessed: 31 May 01).



FEDERAL RESPONSIBILITIES

The constitutional responsibility for fisheries and the associated power to legislate rests with the federal government¹¹. The federal government can make and enforce laws regarding conservation, protection, enhancement and restoration of habitat that supports fish that can contribute to a fishery. Fisheries and Oceans Canada (FOC) is the federal department responsible for all matters relating to fisheries, fish habitat, the sea coast, recreational harbours, marine sciences, oceans, and the coordination of policies and programs with respect to oceans¹². FOC is responsible for implementing the federal *Fisheries Act*. The federal fisheries Minister may also, with the approval of the Governor in Council, enter into agreements with the government of any province or any agency thereof respecting the carrying out of programs for which the Minister is responsible¹³.

Section 35 of the *Fisheries Act* prohibits works or undertakings that may result in the harmful alteration, disruption or destruction of fish habitat, unless authorized by the Minister or by regulation¹⁴. Anyone seeking to do work that might damage fish habitat require an authorization from the department. Anyone, who contravenes section 35 of the Act by damaging fish habitat without the approval of FOC, is potentially subject to criminal charges with stiff penalties of up to \$1,000,000 for an indictable offence and the possibility of up to 3 years in jail for subsequent offences¹⁵.

Section 36 of the *Fisheries Act* prohibits the deposit of deleterious substances into waters frequented by fish, unless authorized by regulation. It's interesting to note that riparian areas can act as mitigating features, especially for non-point sources of pollution, since they can intercept, filter, detain or treat run-off and sediment discharges before they enter a stream.

PROVINCIAL RESPONSIBILITIES

The provincial government can regulate land use activities in BC as a result of its constitutional jurisdiction over public lands, property and civil rights, local works and matters of a local or private nature¹⁶. In matters where the provincial Crown or private citizens have a proprietary interest, the province can legislate on protection of the environment, including fish habitat. The provincial ministry responsible for implementation of laws, policies and programs to protect the environment is the Ministry of Water, Land and Air Protection (MWLAP), formerly the Ministry of Environment, Lands and Parks (MELP).

The province has a number of laws containing provisions that can be used to protect fish habitat (e.g., *Forest Practices Code*, *Water Act*, *Wildlife Act*, *Land Title Act*, and *Waste Management Act*). The BC Government passed the *Fish Protection Act* in 1997. This act included (among other things) a prohibition on new dams on rivers listed in the Act; consideration of fish habitat needs in licensing decisions under the *Water Act* and in water

¹¹ *The Constitution Act*, 1867 (U.K.), 30&31 Vict., c.3, s.91, reprinted in R.S.C. 1985, App.II, No.5. [hereinafter *The Constitution Act*, 1867].

¹² *Department of Fisheries and Oceans Act*, S.C., 1978-79, c.13, s.4 (1).

¹³ *Ibid.*, s. 5.

¹⁴ *Fisheries Act*, s.35.

¹⁵ *Fisheries Act*, s. 40 (1) and (2).

¹⁶ *The Constitution Act*, 1867, s.92.

management plans; and provincial directives to local governments on streamside protection in relation to residential, commercial or industrial development. The *Fish Protection Act* does not contain traditional enforcement provisions--an issue which is discussed further later in this brief.

LOCAL GOVERNMENT RESPONSIBILITIES

Local governments--that is, regional districts, municipalities, and the Islands Trust--derive their powers from delegation of the provincial government under the *Local Government Act*¹⁷. Under Part 26 of this Act, local governments have the power to regulate the use, development and servicing of land through a variety of tools described later in this brief. Since land use activities impact fish habitat, local governments have a key role to play in fish habitat protection.

THE URBAN REFERRAL SYSTEM

Currently, the Urban Referral System is the main mechanism through which authorizations are given for activities in urban areas that might damage fish habitat. It is a voluntary process, which varies in different regions of the province, depending on the local government approvals necessary for developments. Generally, a project proponent will submit an application to a local government for the necessary approval (e.g., a development permit or a change in zoning). The local government then forwards these applications to the appropriate provincial and federal agencies for comment. One of the strongest reasons for recommending that a project application be refused is that it will violate the federal *Fisheries Act*. Agencies can recommend conditions for the local government to include into its development approval.

Evaluations of the Urban Referral System have found the referral process to be largely ineffective for protecting fish habitat and water quality¹⁸. Non-compliance with land development approval conditions issued by the WLAP (then MELP), and FOC was found to be significant: over 50% noncompliance in 4 out of 5 watersheds studied. Local governments have discretion over whether to include the conditions recommended by senior levels of government. There is no monitoring program in place to ensure that conditions are actually followed. And the whole process is very time consuming. MWLAP and FOC can't keep up with the referral workload, particularly in growth areas like the Lower Mainland. The *Streamside Protection Regulation* is intended to address some of these problems.

EFFECT OF THE STREAMSIDE PROTECTION REGULATION ON OTHER FISH PROTECTION LAWS

In situations where more than one level of government has the authority to regulate on a matter, more than one piece of legislation can apply to the situation, and complying with the law means complying with each piece of relevant legislation. If different laws are

¹⁷ In some cases, these powers are outlined in the *Islands Trust Act*, the *Resort Municipality of Whistler Act*, or the *Vancouver Charter*.

¹⁸ Coast River Environmental Services, "Urban Referral Evaluation – An Assessment of the Effectiveness of the Referral Process for Protecting Fish Habitat (1985-1995)", (Department of Fisheries and Oceans, Fraser River Action Plan, Urban Initiatives Series 10: March 1997).



inconsistent with one another (i.e., if it is impossible to obey both laws), then the federal law prevails and the other law is repealed to the extent of the inconsistency¹⁹. Conflicts between municipal bylaws and provincial or federal law have a similar effect on the bylaw: it is rendered inoperative by that conflict²⁰.

The *Streamside Protection Regulation* attempted to harmonize standards so that conflicts between federal, provincial and local laws would be avoided and so that the standard setbacks recommended in the regulation would, when applied, provide due diligence to fish habitat concerns under the federal *Fisheries Act*.²¹ However, compliance with the *Streamside Protection Regulation*, or any resulting bylaws at the local government level, does not provide immunity from prosecution under the federal *Fisheries Act* for violation of s. 35. But, it is less likely that violations of s.35 will occur if the setback provisions in the regulation for streamside protection and enhancement areas are followed. The standards set by the regulation would likely be considered by a court in determining whether or not the federal law forbidding the harmful alteration, damage or destruction of fish habitat was breached. Overall, this means better protection for streams, and more certainty for developers who abide by the standards.

In some cases, local governments already have bylaws in place to protect fish habitat. The *Streamside Protection Regulation* doesn't affect the validity and enforceability of these bylaws. However, the regulation does impose a time limit for local governments to be in compliance with the regulation. This means that local governments will have to update their bylaws to provide a level of protection that is, in their opinion, comparable to or exceeds the regulation.

THE REGULATION: AN INTERPRETATIVE REVIEW

OVERVIEW

The purpose of the *Streamside Protection Regulation* is

“...to protect streamside protection and enhancement areas from residential, commercial and industrial development so that the areas can provide natural features, functions and conditions that support fish life processes...”²².

The regulation was developed under the authority of the *Fish Protection Act*, s. 12, which allows the Lieutenant Governor in Council to establish “policy directives” for the protection

¹⁹ Hogg, P, “Constitutional Law of Canada”, 4th edition, (Carswell, 1997) at 16-17.

²⁰ The Supreme Court of Canada recently reviewed the law surrounding conflicts between bylaws and federal and provincials laws in *114957 Canada Ltee (Spraytech, Societe d'arrosage) and Services des espaces verts Ltee/Chemlawn v. Town of Hudson* (28 June 2001), 2001 SCC 40. File No.: 26937.

²¹ In other works, complying with the SPR standards would mean that one is also in compliance with the federal *Fisheries Act* habitat protection provisions.

²² *Streamside Protection Regulation*, s.2.

of riparian areas that may be subject to residential, commercial or industrial development. Under the *Fish Protection Act*, once a policy directive is developed, the local governments to which the directive applies must take actions to protect riparian areas in accordance with the directive. When using their land use planning and regulatory powers under Part 26 of the *Local Government Act*, local governments *must* ensure that they are providing riparian areas with a level of protection that “is comparable to or exceeds that established by the directive”²³.

The *Streamside Protection Regulation* provides local governments with these policy directives. The directives have three main components:²⁴

1. Firstly, they establish minimum streamside development setbacks of 5 to 30 meters, depending on whether the stream is fish bearing or not; permanent or seasonal; and whether there is existing or potential for streamside vegetation.²⁵ (Note that the minimum setback for fish bearing streams is 15 meters.)
2. Secondly, local governments are required to include the setbacks in zoning bylaws, Official Community Plans (OCPs), development permit areas (DPAs) and other land use planning and regulatory tools under Part 26 of the *Local Government Act*.²⁶
3. Thirdly, intergovernmental cooperation agreements between the province and local governments (and possibly including FOC) can be the mechanism by which streamside setbacks are implemented and modified.²⁷

Each section of the regulation is summarized and reviewed below.

SECTION 1: DEFINITIONS

Section 1 provides definitions of terms that are necessary to interpret the regulation. These definitions are specific to the regulation and may differ from common usage. While users of the regulation should be familiar with all the definitions, there are a few key definitions that are crucial to its understanding.

To begin with, “residential, commercial and industrial development” has a specific meaning that limits the purpose and scope of the regulation. “Residential, commercial and industrial development” refers to a number of activities that are regulated by local governments under Part 26 of the *Local Government Act*. For example, things such as constructing buildings, structures, roads or other transportation infrastructure, drainage systems, utility works, paved surfaces, or the removal or disruption of soil or vegetation all fall within this definition. “Residential, commercial and industrial development” does *not*—for the purpose of this regulation—include residential, commercial or industrial activities that fall outside local government jurisdiction (e.g., forestry activity, residential developments on Indian Reserves, or agricultural activities).

²³ *Fish Protection Act*, s.12(4)(b).

²⁴ MELP, *supra*, at 7.

²⁵ *Streamside Protection Regulation*, s.6.

²⁶ *Ibid.*, s.7.

²⁷ *Ibid.*, s.3 and s.6(5).



The definition of a “stream” includes a pond, lake, river, creek, brook, ditch, spring or wetland *if* it is integral to a stream and provides fish habitat. [The definition for “fish habitat” given in the *Fish Protection Act*, is brought into force by the *Streamside Protection Regulation*²⁸: see Box 1]. The key to this definition is the part about *providing fish habitat*. For example, a ditch would not be considered a stream under this regulation unless fish were clearly relying on it for their habitat needs.

The establishment of “streamside protection and enhancement areas”(SPEAs) is the main focus of the regulation. A SPEA is defined as

“an area adjacent to a stream that links aquatic to terrestrial ecosystems and includes both the riparian area vegetation and the adjacent upland vegetation that exerts an influence on the stream, the width of which is determined according to section 6.”²⁹

Basically, SPEAs are the setback (no build) areas that local governments must establish according to section 6 of the regulation.

As explained in section 6, these areas are determined predominantly according to three factors: whether the stream is permanent or non-permanent; the state of existing or potential vegetation; and whether the stream is fish bearing or not. Thus, these definitions are all integral parts of the regulation.

A “permanent stream” is one that typically flows for more than 6 months of the year whereas a “non-permanent stream” typically flows for less than 6 months of the year.

“Existing vegetation” includes all vegetation at a site whether it is native or non-native. “Potential vegetation” refers to areas that are not covered by permanent structures (i.e., buildings or other constructions) and that possess a reasonable ability to regenerate vegetation, either naturally or through enhancement (e.g., planting)³⁰.

The definitions for “fish bearing stream” and “non fish bearing stream” are more problematic. A “fish bearing stream” is one in which “fish are *present or potentially present* if introduced barriers or obstructions are either removed or made passable for fish [emphasis added]³¹”. A “non fish bearing stream” is not inhabited by fish *and* provides water, food, and nutrients to a downstream source (which might be fish bearing; might not). The problem lies in the possibility of a stream satisfying both definitions. A stream could be classified as both fish bearing and non fish bearing if (1) it had the potential to bear fish if current obstructions (like culverts) were removed; (2) that same stream currently was not inhabited by fish (due to the obstructions); and (3) the stream fed into another water source. Since the intention of the regulation is clearly to protect fish habitat where it exists, this problem could be addressed by modifying the definition of non fish bearing stream to expressly exclude any stream that also meets the definition of a fish bearing stream.

²⁸ *Ibid.*, preamble.

²⁹ *Ibid.*, s.1.

³⁰ Potential vegetation was explicitly included in the regulation to avoid situations where landowners might be tempted to clear their property of vegetation to avoid larger stream setbacks.

³¹ *Ibid.*, s.1.

The word “potential” in these definitions has been the subject of much discussion. In order for a non fish bearing stream to be upgraded to a fish bearing stream (based on “potential”), there needs to be—at a minimum—a ground-truthed stream and fish inventory plan in place, supported by capital programs to address the removal or replacement of artificial barriers to restore fish passage³². Otherwise, “potential” could become too unwieldy and unreasonable. For example, there is the potential that underground streams buried by past development might support fish if they were unearthed. However, unless there are approved plans in place to daylight these streams, it would be unreasonable to expect current landowners to abide by development setbacks as these underground streams have no reasonable potential to provide fish habitat.

SECTION 2: PURPOSE OF THE REGULATION

As noted above, the purpose of the regulation is to protect streamside protection and enhancement areas in order to provide fish habitat. Section 2 of the regulation provides a non-exhaustive list of the natural features, functions and conditions that the regulation is striving to protect:

- Large organic debris that can fall into the stream;
- Floodplains, side channels, and seasonal or intermittent streams;
- Forest and ground cover adjacent to streams that provide temperature moderation, food sources, streambank stabilization and pollution buffers;
- Natural sources of stream bed substrates; and
- Permeable surfaces that permit infiltration to moderate and maintain water flow to streams.

A secondary purpose—unstated in the regulation, but clearly communicated in MELPs’ briefs supporting the regulation—is to develop a more effective regulatory regime for fish habitat protection. The Ministry stated in its *Regulatory Impact Statement*,

“The directives, once implemented, should allow staff to spend less time on time consuming, site-by-site referrals and more time in streamside protection planning and compliance activities...Experience has shown that reliance on referral-based activities has proven to be an ineffective way to ensure the long-term protection of fish habitat.”³³

The Union of BC Municipalities (UBCM) has also stated its support for this new regulatory regime. The UBCM’s June 2001 newsletter reported that

“The new process provides for regulatory certainty, as it provides clear rules as to what lands it applies to and the measures that are needed to protect urban fish habitat. The new system also allows for greater community control of the decision-making process and brings together federal, provincial and local government decision makers to deal with specific concerns that may arise. The

³² E-mail from Erik Karlsen (Ministry of Community, Aboriginal and Women’s Services) to K. Grant (WCEL), (30 July 2001).

³³ MELP, *supra*, at 15.



process provides a forum where these problems can be dealt with by the three levels of government in a more effective and efficient manner, providing for fewer delays in determining what types of developments can go ahead.³⁴

Whether the regulation is successful in protecting fish habitat through a more effective regulatory regime will depend on the strength of intergovernmental cooperation agreements to support the regulation (see below) and the willingness of local governments to comply with the regulation--something that local stream stewards can influence.

SECTION 3: INTERGOVERNMENTAL COOPERATION AGREEMENTS

Section three of the regulation deals with intergovernmental cooperation agreements (ICAs) between the Ministry of Water, Land and Air Protection with authorized representatives from local governments and possibly Fisheries and Oceans Canada. These agreements will support the implementation of the regulation by local governments. They might include provision for any of the following topics:

- “(a) financial and technical support for the implementation of this regulation;
- (b) a transition strategy to give effect to existing agreements and approved streamside protection measures;
- (c) the staged establishment of streamside protection and enhancement areas;
- (d) the confirmation of regionally significant fish by the appropriate regional director of the Ministry of Environment, Lands and Parks [now MWLAP];
- (e) the amendment of streamside protection and enhancement areas determined under section 6;
- (f) providing, sharing or confirming information on fish habitat conditions;
- (g) advice by qualified professionals with reference to the operation of this regulation;
- (h) describing roles and responsibilities with reference to applicable and appropriate use of authority and program mandates;
- (I) dispute resolution;
- (j) a compliance strategy, including education, training, monitoring, reporting, enforcement and auditing.”³⁵

PROMOTING EFFICIENCY

Clearly, having three levels of government involved in fish habitat protection, necessitates cooperation so that resources are used efficiently and so that developers and landowners don't have to deal with unnecessary bureaucracy. But what will these agreements actually do? They have the potential to revolutionize the way in which land use approvals that affect fish habitat are conducted. Adding yet another level of regulation (i.e., local government establishment of streamside setbacks) could be administratively ineffectual if it is done

³⁴ Union of BC Municipalities, “Streamside Protection Implementation”, *UBCM News* (June 2001) at 10.

³⁵ *Streamside Protection Regulation*, s. 3(1).

without consideration for other approval processes and compliance procedures for work around streams (e.g., provincial *Water Act* approvals, or federal *Fisheries Act* authorizations). ICAs could provide a one-window approach for development approvals within SPEAs. For example, *Fisheries Act* authorizations could be considered at the same time as a landowner's application for a local government development permit to allow him/her to build near a streamside area.

The urban referral system will still operate during the regulation's 5 year implementation period, and in a modified form thereafter. A modified referral process will still be required to deal with the following³⁶:

- Urban developments that have impacts beyond the riparian zone. These developments still need to be reviewed for possible federal or provincial authorizations; and
- Provision of a review process for development applications that meet local government criteria for exemptions or relaxation of setbacks set out in the regulation.

If ICAs are to be effective, they must address the nitty gritty how-to's that will replace the current urban referral system.

CLARIFYING RESPONSIBILITIES AND SUPPORT

Clarifying responsibilities within these agreements is also important to avoid buck-passing between governments. The regulation imposes an obligation on local governments to protect streamside areas. The ICAs should outline the financial and technical support that local governments will receive from senior levels of government to help fulfill that obligation, and how local efforts will be dovetailed with federal and provincial initiatives.

PROCESS FOR AMENDMENTS TO STREAMSIDE PROTECTION AND ENHANCEMENT AREAS

Another important point raised in this section of the regulation is that ICAs are the mechanism by which amendments of SPEAs may be addressed. In other words, these agreements will explain how/when/why local governments can make allowances for smaller SPEAs than outlined in the regulation, or to amend SPEAs once they are established. Local governments will inevitably be faced with situations in which they are asked to grant a board of variance, modify a zoning bylaw, etc. At a minimum, it is important for intergovernmental agreements to explicitly outline the conditions under which local governments will grant allowances (since this was not done in the regulation) so that councils that want to promote development don't do so at the expense of fish habitat, and so that developers are not given a false sense of protection from violating s. 35 of the federal *Fisheries Act*. Too much discretion in this area could defeat the purpose of the regulation. Local government discretion has been identified as one of the problems in the urban referral system resulting in continued loss of fish habitat.

³⁶ Email from Melody Farrell (FOC) to Kathy Grant (WCEL), (23 August 2001).



Unfortunately, neither the *Fish Protection Act* nor the *Streamside Protection Regulation* requires that local governments *must* make amendments according to ICAs. In fact, the *Fish Protection Act* section 12(4)(b) places the final authority for application of the streamside protection directives squarely on the shoulders of local government. It is local governments that determine whether or not the level of protection—including that protection that is provided through amendments to SPEAs—is comparable to or exceeds the regulation.³⁷ If a situation arose in which there was no ICA, or in which senior levels of government disagreed with a SPEA amendment, FOC could resort to applying the *Fisheries Act* and possibly laying criminal charges against the landowner if serious damage to fish habitat resulted from the amendment. In the interim, damaging work may proceed and there are few, if any, consequences to the local government.

COMPLIANCE AND ENFORCEMENT

Finally, this section of the regulation is the only place where compliance and enforcement is mentioned. The ICAs can (and should) include provisions for a compliance strategy that deals with education, training, monitoring, reporting, enforcement and auditing. Since neither the regulation nor the *Fish Protection Act* contains traditional enforcement provisions, MWLAP will focus its compliance efforts on partnership building, stewardship activities, training opportunities and auditing local government implementation efforts³⁸. Thus, it is crucial that these agreements address the compliance issues—who will oversee local government implementation? What mechanisms will fall into place if a local government falls behind in implementation? Since the law is silent on these issues, and since it is unlikely that the provincial government will take on a heavy enforcement role, this may well be one area where public oversight is critical.

There are no intergovernmental cooperation agreements in place yet under the regulation (though some ICAs do exist to deal with environmental protection, including the protection of streams). The provincial government is, however, currently developing an implementation guide for the *Streamside Protection Regulation*. The guide is expected to be released for comment by non-government interests in October 2001.

SECTION 4: APPLICATION

Section 4 states that the regulation applies to “the use of local government powers under Part 26 of the *Local Government Act* by local governments”. Part 26 of the *Local Government Act* sets out local government land use planning and regulatory powers. It provides for official community plans (OCPs), public hearings on bylaws, public information and advisory committees, boards of variance, zoning bylaws, other land use regulations such as development permits or tree cutting permits, development cost charges, and subdivision and development requirements.

The regulation (and its subsequent application at the local level) applies to all new development, including re-development scenarios. This is a good thing because it provides an opportunity to correct mistakes of the past.

³⁷ *Fish Protection Act*, s. 12(4)(b).

³⁸ MELP, *supra*, at 20-21.

Section 4 of the *Streamside Protection Regulation* also explicitly states that the regulation does not apply to the circumstance of a building or structure described in section 911(8) of the *Local Government Act* if a local government issues a permit for reconstruction or repair of a permanent structure on its existing foundation.³⁹ For example, this means that if a landowner's house burns down, the local government can grant a building permit to rebuild on that same site, even if the site is within a streamside protection and enhancement area. Similarly, local governments can authorize repairs for nonconforming buildings and structures within SPEAs.

The pre-ambule to the regulation states that the definition for "local government" in the *Fish Protection Act*, is brought into force for the trust area under the *Islands Trust Act*, and the following regional districts:

- Capital
- Central Okanagan
- Columbia-Shuswap
- Comox-Strathcona
- Cowichan Valley
- Fraser Valley
- Greater Vancouver
- Nanaimo
- North Okanagan
- Okanagan-Similkameen
- Powell River
- Squamish-Lillooet
- Sunshine Coast
- Thompson-Nicola

The *Streamside Protection Regulation* applies only within those areas.

In summary, the regulation applies to local government land use regulation within the regional districts listed in the preamble and within the Islands Trust. The regulation's application is restricted to land that is under the regulation of local governments. In other words, it does *not* apply to land use activities that are regulated provincially, federally, or under First Nations' control. Examples of land uses and whether or not the regulation applies are given in Table 1.

³⁹ Section 911(8) of the *Local Government Act* says that if a nonconforming structure (such as a house that no longer--due to a change in zoning bylaws--meets the provisions of the bylaw) is destroyed or damaged to the extent of 75% of its value above its foundation, it must not be repaired unless the new structure conforms with the current bylaw.



Table 1: What land use activities are affected by the *Streamside Protection Regulation*?

DOES THE <i>STREAMSIDE PROTECTION REGULATION</i> APPLY TO...	YES/NO	REASON
Industrial forestry activities on Crown Land	No	- does not fall within local government jurisdiction under Part 26 of the <i>Local Government Act</i> - provincially regulated under <i>Forest Practices Code</i> and associated regulations or policies
Industrial forestry activities on privately owned land	No	- does not fall within local government jurisdiction under Part 26 of the <i>Local Government Act</i> - provincially regulated under the <i>Land Forest Practices Regulation</i> under the <i>Forest Land Reserve Act</i>
Agricultural land	No	- agricultural land was not included in the regulation; however, it wasn't explicitly excluded either - the Partnership Committee on the Environment and Agriculture is reviewing agricultural guidelines for building setbacks next to streams with an objective of looking for similarities with the <i>Streamside Protection Regulation</i> ⁴⁰
New residential subdivision developments	Yes	- regulated by local governments under Part 26 of the <i>Local Government Act</i>
Re-development of privately owned land	Yes	- regulated by local governments under Part 26 of the <i>Local Government Act</i>
Federally owned land such as airports or ports	No	- does not fall within local government jurisdiction under Part 26 of the <i>Local Government Act</i>
Development on Indian Reserves	No	- does not fall within local government jurisdiction under Part 26 of the <i>Local Government Act</i> - under federal jurisdiction and may be subject to Band bylaws - on provincial post-settlement treaty lands, the province will encourage inclusion of the regulation's standards in negotiation of individual treaties ⁴¹
Gravel Pits	No	- does not fall within local government jurisdiction under Part 26 of the <i>Local Government Act</i> - provincially regulated under the <i>Mines Act</i>
Hospitals, schools and other government institutions	No	- institutional land was not included in the regulation; also not explicitly excluded
Industrial lands within a municipality	Yes	- regulated by zoning bylaws under Part 26 of the <i>Local Government Act</i>

⁴⁰ Personal Communication with Erik Karlsen (MCAWS), (30 July 2001).

⁴¹ Email from Jodi Dong (MWLAP) to Erik Karlsen (MCAWS), (27 August 2001).

SECTION 5: ESTABLISHMENT OF STREAMSIDE PROTECTION AND ENHANCEMENT AREAS

The regulation gives local governments five years (until January 2006) to comply with the directives⁴². There are no details describing what will happen if local governments are not in compliance at that time, however, the *Fish Protection Act*, s. 12(6) allows the Minister of Water, Land and Air Protection to extend this time period at the request of a local government.

SECTION 6: DETERMINATION OF THE WIDTH OF RIPARIAN PROTECTION AND ENHANCEMENT AREAS

Section 6 is the heart of this regulation. It prescribes the widths of streamside protection and enhancement areas according to current vegetation conditions, the presence or absence of fish, and whether the stream is permanent or seasonal. Measurements for SPEAs are made from the “top of bank” or the “top of ravine” (see subsections (3) and (4)), both of which are defined in section 1. Subsections (1) and (2) of section 6 must be carefully considered to determine the width of a SPEA for a particular stream. These subsections have been reproduced in Box 3. Examples of streamside conditions and the resulting *minimum* SPEAs are given in Table 2. The definitions for fish bearing stream, non fish bearing stream, existing vegetation, potential vegetation, permanent stream and non permanent stream are used in determining these widths.

In all cases, the minimum width for fish bearing streams is 15 metres.

When a stream is located within a ravine, if the width between the tops of the ravine banks on each side of the stream is less than 60 metres (excluding the width of the actual stream channel and floodplain), streamside protection and enhancement areas are to be calculated from the top of the ravine as per subsections (1) and (2)⁴³ (provided in Box 3). However, if the ravine width exceeds 60 metres, the minimum streamside protection and enhancement area width is 10 metres from the top of the ravine⁴⁴.

While section 6 describes the widths of SPEAs, it doesn't describe the process for determining which streams are subject to these set-back provisions, though s. 6 suggests that SPEAs need to be determined on all streams in developed areas. Referring back to the *Fish Protection Act*, section 12(1) states that the Lieutenant Governor in Council (i.e., the provincial cabinet by convention) may establish directives that protect riparian areas subject to residential, commercial or industrial development. This limits the scope of the regulation to streams that are at imminent risk of impacts due to development. Thus, establishing SPEAs is likely to be done on a priority basis, and ICAs will focus on those streams in most need of protection.

An issue that needs to be addressed, and which may be incorporated into ICAs, is the establishment of criteria to determine whether or not a streamside area is a priority for

⁴² *Streamside Protection Regulation*, s.5.

⁴³ *Ibid.*, s.6(3).

⁴⁴ *Ibid.*, s.6(4).



protection because it is subject to residential, commercial or industrial development. Criteria might include⁴⁵:

- Whether or not a stream is located in an area of a municipality facing the greatest development pressure;
- Whether or not a stream is located in an area of great re-development pressure (and hence enhancement or restoration opportunities exist);
- Whether sufficiently detailed information on stream locations, fish use, riparian and streamside development and stream flows exist to permit designation and protection of SPEAs⁴⁶; and
- Whether there are land use conflicts or community concerns about streamside protection.

Furthermore, the purpose of the regulation, particularly the list of features and functions provided in section 2 (but not limited to those listed) provide the rationale for whether or not a SPEA will be applied to a particular stream. That is, would placing a protected area on stream X protect features and functions necessary for fish habitat? If yes, the streamside area will be protected.

Streamside areas on non-fish bearing streams with no existing or potential riparian vegetation and intermittent flows might, at least initially, be exempted from SPEAs. Examples of the obvious candidates for exclusions include disconnected roadside stormwater infiltration swales or ditches which do not provide fish habitat. In many municipalities where stream mapping and classification has occurred, these types of streams have already been classified as non fish habitat.⁴⁷

Local governments can exceed the minimum level of protection outlined for SPEAs. As well, local governments can grant allowances for smaller areas *if supported by an intergovernmental cooperation agreement*⁴⁸. Section 6(5) lists some of the situations in which a local government may be able to make allowances:

- Where there is potential to provide more protection and enhancement than would be achieved through application of the streamside protection and enhancement areas outlined in section 6. Or,
- Where existing obstacles such as biophysical conditions; existing parcel sizes; existing roads, works or services; proposed roads, works and services needed to provides services to otherwise developable land; or the existence of artificial controls on the water level of a stream, limit the ability of the government to designate streamside protection and enhancement areas. This provision allows local governments to protect landowners who, because of the shape of their land and/or

⁴⁵ Summarized from email from Melody Farrell (FOC) to Kathy Grant (WCEL), (23 August 2001).

⁴⁶ While information is required to made good decisions about the application of SPEAs, lack of information should not be used as an excuse for inaction. Immediate efforts should be made to collect appropriate information in areas facing development pressures.

⁴⁷ Email from Melody Farrell (FOC) to Kathy Grant (WCEL), (23 August 2001).

⁴⁸ *Streamside Protection Regulation*, s.6(5).

the location of streams on their land, would have their land “sterilized” from new development if streamside protection and enhancement areas were applied.

Table 2: Example Streamside Protection Area Setbacks

EXAMPLE CONDITIONS	MINIMUM STREAMSIDE PROTECTION AND ENHANCEMENT AREA
<ul style="list-style-type: none"> - Fish in stream - Continuous vegetation along stream of approximately 40 metres width - Streams contains constant year-round flow of water 	30 metres
<ul style="list-style-type: none"> - no fish but potential for fish if barrier removed - discontinuous vegetation of between 10 and 25 metres - stream flows from April to August, emptying into a downstream fish bearing stream 	15 to 25 metres. Where the riparian vegetation is 25 metres wide, the setback will be 25 metres. Where the vegetation is 10 metres, the setback will be the minimum width of 15 metres. (The boundary will not be a straight line.)
<ul style="list-style-type: none"> - no fish in stream - little or no vegetation along stream and little or no potential for vegetation - permanent stream 	5 metres
<ul style="list-style-type: none"> - fish in stream - little existing vegetation, but potential vegetation of 15 to 20 metres - stream flows all year round 	15 to 20 metres



Box 3: Section 6 (1) and (2) of the Streamside Protection Regulation

- (1) Streamside protection and enhancement areas are those areas determined with reference to the following existing or potential vegetation conditions by measuring perpendicularly away from the top of the bank or top of the ravine bank on either side of a stream:
- (a) intact and continuous areas of existing or potential vegetation equal to or greater than 50 metres wide;
 - (b) limited but continuous areas of existing or potential vegetation equal to 30 metres wide or discontinuous but occasionally wider areas of existing or potential vegetation between 30 and 50 metres wide;
 - (c) narrow but continuous areas of existing or potential vegetation equal to 15 metres wide or discontinuous but occasionally wider areas of existing or potential vegetation between 15 and 30 metres wide;
 - (d) very narrow but continuous areas of existing or potential vegetation up to 5 metres wide or discontinuous but occasionally wider areas of existing or potential vegetation between 5 and 15 metres wide interspersed with permanent structures.
- (2) With reference to vegetation conditions in subsection (1), streamside protection and enhancement areas must be:
- (a) if subsection (1) (a) or (b) applies, at least 30 metres wide measured perpendicularly away from the top of the bank for all fish bearing streams or for non fish bearing streams that are permanent;
 - (b) if subsection (1) (a), (b) or (c) applies, at least 15 metres wide measured perpendicularly away from the top of bank for non fish bearing streams that are non-permanent;
 - (c) if subsection (1) (c) applies, at least 15 metres wide measured perpendicularly away from the top of bank for non fish bearing streams that are permanent;
 - (d) if subsection (1) (c) or (d) applies, the greater of the widths determined under subsection (1) (c) or (d) or at least 15 metres wide measured perpendicularly away from the top of the bank for all fish bearing streams;
 - (e) if subsection (1) (d) applies, at least 5 and up to 15 metres wide measured perpendicularly away from the top of the bank for all non fish bearing streams.”

SECTION 7: USE OF LOCAL GOVERNMENT POWERS FOR PROTECTION AND ENHANCEMENT OF AREAS

Section 7 of the regulation requires that local governments protect streamside protection and enhancement areas while exercising local government powers with respect to residential, commercial and industrial development (i.e., powers under Part 26 of the *Local Government Act*). It is a strong statement: local governments *must* protect streamside protection and enhancement areas.

The regulation itself does not provide local governments with any new powers. Rather, it directs local governments to use the powers they already have to ensure that the setbacks are locally implemented. Local governments can choose the tools that they want to use to implement the regulation, provided that the level of protection is comparable to or exceeds that outlined in the directives, *in the opinion of the local government*.⁴⁹ While this flexible approach recognizes that some municipalities and regional districts have already put significant and varied efforts into protecting fish habitat, it also means more uncertainty about the impacts of actions taken as a result of the regulation⁵⁰, both environmentally and administratively. While the standard for SPEAs has been set by the province, it is the local governments themselves who will determine if they have met the standard. This is unusual and without provincial oversight, this could lead to a patchwork of inconsistent protective areas across the province.

There may well be situations in which senior levels of government disagree with local governments. In these situations, section 35 of the *Fisheries Act* provides a “check” against unfettered local government discretion. It is hoped that the ICAs (discussed above) will provide mechanisms to deal with these types of disputes before they result in damage to fish habitat and charges under the *Fisheries Act*.

It is also important to note that local governments can exceed the level of protection. In fact, if they desire to protect all stream functions—not just those most crucial to fish—exceeding the minimum setbacks in some areas is desirable! Developers and landowners must comply with the local bylaws, regardless of whether they include setbacks that are greater than the provincial standards listed in the regulation.

There are a variety of regulatory powers and tools outlined in Part 26 of the *Local Government Act* that can be used by local governments to protect streamside protection and enhancement areas. Local governments will likely use a combination of these and other tools, listed in Table 3.

⁴⁹ *Fish Protection Act*, s. 12(4). Note: The phrase “in the opinion of the local government” should not be interpreted as allowing the whims or unfettered discretion of a local government. “In the opinion of” has meaning in Canadian law. For example, the phrase “in the opinion of the assessor” appearing in Newfoundland’s *St. John’s Assessment Act*, R.S.N. 1990, c.S-1, in relation to the assessment of fair market value for property, was held not to give the assessor unfettered discretion to use any assessment standards of his or her choosing. Instead, the assessor’s opinion must be justifiable with reference to the criteria of “fair market value”, *Re: Murphy* (1994), 117 Nfld. & P.E.I.R. 243, 365 A.P.R. 243 (Nfld.T.D.). Similarly, a local government’s opinion on the level of protection provided to local streams would have to be justifiable with reference to the criteria outlined in the *Streamside Protection Regulation*.

⁵⁰ Holman, G. and L. Adams, “Multiple Accounts Assessment of Proposed Streamside Protection Measures Under the Fish Protection Act” (May 1998), online: Ministry of Environment, Lands and Parks <http://www.env.gov.bc.ca> (date accessed: 31 May 01).



Table 3: Tools and regulatory powers for protecting SPEAs⁵¹

METHOD (SECTION NUMBERS REFER TO THE <i>LOCAL GOVERNMENT ACT</i>)	HOW IT CAN BE USED TO PROTECT FISH HABITAT
Official Community Plans (ss.875-885)	Local governments can write policies indicating they will meet or beat the regulation's standards and will apply these standards to all affected streams in their municipality. They can also establish streamside protection and enhancement areas as environmentally sensitive development permit areas (DPAs) within their OCPs.
Development Permit Areas (ss.920-922)	Local governments require developers to obtain a permit before conducting work in DPAs. Conditions such as no-build protected areas can be listed in the permit. Development approval information may also be required.
Zoning bylaws (s.903)	Local governments can prohibit building in zones and limit land uses in zones.
Zoning bylaw amendments and development approvals (ss.895-902)	Local governments need to protect streamside enhancement and protection areas while exercising all their powers under Part 26 of the <i>Local Government Act</i> . This includes protecting these areas when making decisions on re-zoning applications.
Tree protection bylaws (s. 923)	Local governments may prohibit the cutting down of trees or require landowners to obtain a permit for cutting down trees in a designated area that may be subject to flooding, erosion, land slip or avalanche.
Landscaping bylaws (s.909)	Local governments can require or set standards for and regulate landscaping for the provision of preserving, protecting, restoring and enhancing the natural environment.
Run-off controls (s.907) or Stormwater Management Plans	Local governments can impose limits to the allowable impermeable surfaces in developments and these limits can be met by application of the regulation's standards to exclude streamside areas from the developable area and keeping them pervious.
Floodplain construction requirements (s.910)	Local governments can require setbacks from building in floodplains.

⁵¹ The shaded part of this table lists tools that may be used although they are not from Part 26 of the *Local Government Act*.

METHOD (SECTION NUMBERS REFER TO THE LOCAL GOVERNMENT ACT)	HOW IT CAN BE USED TO PROTECT FISH HABITAT
Parkland dedication (s. 941)	Local governments can require 5% of proposed subdivisions be set aside as parks. Parkland can also be designated under OCPs.
Subdivision Approvals (ss. 938-946)	Section 941 of the <i>Local Government Act</i> requires developers to provide a certain amount of parkland with developments. These parks could be designed to protect streamside protection and enhancement areas.
Watercourse Protection Bylaws (ss. 540 – 550)	Local governments can make watercourses part of their municipal drainage systems and make bylaws that protect water flow in streams, including the prohibition of certain work in riparian areas.
Protection of Trees (ss.708 – 715)	Local governments can make bylaws for the purpose of protecting trees including a prohibition on cutting trees in various areas of a municipality.
Soil removal and deposit bylaws (s. 723)	With the approval of the Minister of Energy and Mines, local governments can pass bylaws to regulate the removal or deposit of soil.
Conservation Covenants and Tax Incentives for Landowners (s. 343.1)	Under BC's <i>Land Title Act</i> ⁵² , landowners can voluntarily agree to conservation covenants on their property to protect ecologically significant features of the land. If a conservation covenant is held by a municipality, the municipality can exempt all or part of the eligible riparian property from property tax.
Greenways planning	While there are no provisions to force a local government to specifically plan for greenways, planning for green infrastructure (parks, waterways, wildlife corridors) is used as a tool by local governments that often provides the necessary technical information to inform other legal bylaw processes.

The implementation guide for the *Streamside Protection Regulation* is expected to aid local governments in using these discretionary powers to comply with the regulation. The guide is expected to be released for comment later this year.

⁵² *Land Title Act*, R.S.B.C., c. 250, s. 219.



WHAT'S NOT IN THE REGULATION?

PROVISIONS TO ENSURE LOCAL GOVERNMENT COMPLIANCE

Although the regulation sets a deadline of January 2006 for local governments to be in compliance with the regulation, this time period can be extended by the Minister at the request of the local government.⁵³ There are no actual provisions (in terms of penalties or enforcement mechanisms) in either the *Fish Protection Act* or the *Streamside Protection Regulation* to ensure local government compliance with the regulation. And, as mentioned above, it is the opinion of the local government that determines whether or not a particular local government has met or exceeded the regulation.

PROVISIONS FOR STREAMSIDE PROTECTION ON LAND OTHER THAN “RESIDENTIAL, COMMERCIAL OR INDUSTRIAL”

As noted above in the discussion of section 4, the regulation does not apply to land that does not fall under local governments' regulatory powers. The regulation does not protect agricultural land (because local government powers are limited in these areas), crown land, institutional land (e.g., hospitals, schools) or federally controlled land (e.g., Indian Reserves, airports). In some cases, other provincial laws (e.g. the *Forest Practices Code*) or voluntary guidelines (e.g., Riparian Self Audit Guides or Watershed Stewardship Guide for Agriculture) may apply to the land in question. However, the *Streamside Protection Regulation* does not apply, and there are no direct provisions in the regulation or the *Fish Protection Act* to expand its application to additional land uses.

Currently, there is a federal-provincial working group reviewing how the building setback standards in the “Guide for Bylaw Development in Farming Areas” might be made more consistent with the *Streamside Protection Regulation's* setback requirements. Stream stewards who want to encourage this process can write to the Minister of Agriculture, Fisheries and Food (the Hon. John van Dongen).

IMPLEMENTING THE REGULATION

As noted earlier, the regulation's Implementation Guide is not yet available for comment by stream stewardship advocates. There are, however, implementation stages that can be predicted and roles for stream stewards to play during each stage. These stages are: mapping, determining streamside protection and enhancement areas, incorporating streamside protection and enhancement areas into local government bylaws, and monitoring and compliance.

⁵³ *Fish Protection Act*, s. 12(6).

STAGE 1: MAPPING

The first stage of implementation will be gathering the appropriate information to apply the regulation. That is, obtaining on-the-ground information about streamside conditions and mapping these conditions. This involves both technical and local knowledge and the participation of senior levels of government, local governments and citizens. Stream stewardship activists can positively contribute to this process in the following ways:

- Lobby the provincial and federal governments for adequate funding to complete mapping of urban streams;
- Lobby local governments to undertake this work as soon as possible. Tell them you're supportive of it and tell them it's important; and
- Carefully review maps and plans that are produced. Many stream stewardship groups have a wealth of knowledge about the conditions of their local streams and riparian areas. Use this knowledge to verify that the maps being produced are an adequate reflection of real streamside conditions and that they show all the important features that are worthy of protection.

STAGE 2: DETERMINING STREAMSIDE PROTECTION AND ENHANCEMENT AREAS

Once the technical information is in place, sections 2 and 6 of the regulation can be applied to determine streamside protection and enhancement areas. This is not envisioned as a blind application of the setbacks in section 6. It is an adaptive management approach in which setbacks are applied to areas where they serve the purpose of the regulation (i.e., to protect fish habitat)⁵⁴. For example, in areas where no fish habitat exists due to existing development (e.g., streams are culverted for significant distances) and there is no realistic potential to restore fish habitat, applying a 15 meter setback wouldn't serve the purpose of the regulation and could cause undue hardship for landowners.

This stage is the "big" job that will require the input of MWLAP and FOC with local governments. Intergovernmental cooperation agreements will outline the agreements reached on streamside protection and enhancement areas.

Stream stewardship groups can keep an eye on this process by:

- Making sure that the streamside protection and enhancement areas accurately reflect the on-the-ground conditions; and
- Providing comments when draft streamside protection and enhancement areas are released.

STAGE 3: INCORPORATING STREAMSIDE PROTECTION AND ENHANCEMENT AREAS INTO LAW

Once streamside protection and enhancement areas are agreed upon, local governments must protect them through their land use regulatory powers⁵⁵. As outlined above in the discussion

⁵⁴ Personal communication with Erik Karlsen (30 July 2001).

⁵⁵ *Streamside Protection Regulation*, s.7.



of section 7, there are several ways local governments can do this. Stream stewardship advocates should keep abreast of proposed bylaws to implement the regulation. If the local government decides to amend or pass new zoning bylaws or an OCP, a public hearing must be held after the first reading of the bylaw and before the third reading⁵⁶. These hearings provide an opportunity for all persons who believe that their property interests are affected by the bylaw to speak out. In addition to providing comment through public hearings, stream stewardship advocates can:

- Attend regular council meetings and speak on issues if invited by council;
- Ask to meet and/or provide comments to advisory committees drafting the bylaws; and
- Discuss issues of concern with local government staff who advise councillors.

STAGE 4: MONITORING AND ENFORCING STREAMSIDE PROTECTION AND ENHANCEMENT AREAS

Methods of ensuring landowner compliance with the local bylaws that protect SPEAs are another important component of implementing the regulation. This could be done either through enforcement mechanisms (e.g., ticketing, fines, loss of permits, etc.) or through incentive based programs such as offering tax relief in return for riparian protection. Local governments can also educate landowners about the law and the importance of compliance. It is important to point out that compliance shouldn't be an after-thought. Compliance mechanisms need to be built into local government bylaws and policies for implementing SPEAs from the get-go.

Senior governments have a role in monitoring impacts of the regulation, and in ensuring that habitat protection measures meet the requirements of the federal *Fisheries Act*.

Citizen groups have a role in watchdogging local government decisions. The job doesn't stop when the bylaws are in place. Local governments must continue to protect streamside protection and enhancement areas in subsequent decisions concerning re-zoning, etc., so there is an ongoing role for citizen advocacy. Citizens can also keep an eye on the actual streams and report landowners who don't comply with local bylaws or who are violating the *Fisheries Act*.

STREAMSIDE PROTECTION BYLAWS

Stream stewardship advocates can help to verify whether a proposed bylaw will protect fish habitat by asking tough questions about what the bylaw will achieve. Here are some suggestions about what advocates should look for.

Table 4: Example Elements of a Bylaw for Streamside Protection

⁵⁶ *Local Government Act*, s. 890(2).

ELEMENT OF BYLAW	POTENTIAL CONTENT	THINGS TO CHECK
Purpose of bylaw	<ul style="list-style-type: none"> - Protect fish habitat - Protect stream flow and hydrology - Create/preserve green space for wildlife, recreation, enhancement of urban scenery - Regulating development so that it meets multiple community goals 	<ul style="list-style-type: none"> - If the bylaw has multiple objectives, do any of them conflict with the protection of fish habitat? - Is the purpose of the bylaw as comprehensive as the <i>Streamside Protection Regulation</i>?
Adoption of Streamside Protection and Enhancement Areas	<ul style="list-style-type: none"> - Defines streamside protection and enhancement areas in relation to a map, greenways plan or OCP 	<ul style="list-style-type: none"> - Are the areas an adequate reflection of what is on-the-ground? - Do the areas serve to protect existing or potential fish habitat? - Are there any areas excluded? - Have the areas been reviewed by other government agencies (FOC and MWLAP)? Were there any concerns raised by these agencies? If so, how have they been addressed?
Obligations and Restrictions Placed on Landowners	<ul style="list-style-type: none"> - Prohibition on building or creating impermeable surfaces within streamside protection and enhancement areas - Possible additions of tree protection bylaws and soil removal or deposit bylaws 	<ul style="list-style-type: none"> - Are the restrictions clearly articulated? - Are there potential “loopholes” for getting around setback areas? Are there any provisions to limit the use of loopholes--e.g., requirements for senior agency approval?
Compliance Mechanisms	<ul style="list-style-type: none"> - May establish a body to oversee the bylaw and to recommend charges against bylaw offenders - May outline tax relief or other incentives for compliance 	<ul style="list-style-type: none"> - How will the bylaw be enforced? - Does the local government have sufficient capacity in terms of education programs and/or bylaw enforcement officers?
Penalties	<ul style="list-style-type: none"> - Outlines fines applicable for breaching the bylaw - Opportunity for creative penalties that go beyond fines (e.g. provisions that require habitat to be restored and the damage repaired) 	<ul style="list-style-type: none"> - Do penalty provisions contain remedies for repairing damage? - Do penalties serve as a sufficient deterrent?

ENFORCING BYLAWS

Once the directives have been incorporated into local government bylaws, legal obligations to adhere to the setback requirements in those bylaws will be imposed upon landowners. Enforcement of bylaws is a matter of local government discretion. However, in order to avoid being negligent, local governments do need to at least consider enforcement. If after considering whether or not to enforce a bylaw, the local government decides to not enforce it



due to such factors as budgetary constraints, they are legally entitled to do so. This is another reason why it is important for senior levels of government to make sure that local governments have the resources in hand to carry out enforcement activities.

Bylaws can contain enforcement and penalty provisions. For example, the City of Burnaby Tree Bylaw states that:

“Any person who violates any of the provisions of this Bylaw or who suffers or permits any act or thing to be done in violation of any of the provisions of this Bylaw is guilty of an offence punishable on summary conviction and is liable to a fine of not less than Two Thousand (\$2,000.00) Dollars for each violation.”⁵⁷

Creative penalty provisions can also serve to reduce some of the damage done. For example, the Burnaby Tree Bylaw also contains a provision whereby a person who cuts down a protected tree can be given notice by the Director of Planning to immediately replace the tree with one of the same species in approximately the same location.⁵⁸ These types of penalty provisions can help to restore some of the damage done by infractions. As well, imposing a non-monetary penalty may be more appropriate in situations where a developer considers a fine as just another cost of doing business.

DEVELOPMENT OF MODEL BYLAWS

Regional Districts can develop model bylaws for adoption by municipalities within the district. This is one way to develop consistency within regional districts and to save resources by centralizing work on bylaw development. For example, the Capital Regional District is doing this with their Enhanced Model Storm Sewer and Watercourse Protection Bylaw.

While this model bylaw was not drafted specifically to address the protection of fish habitat protection (and used local government powers other than those outlined in Part 26 of the *Local Government Act*), the intent was to harmonize the enhanced model bylaw with the *Streamside Protection Regulation* to avoid confusion or conflict with the regulation⁵⁹. The model bylaw includes the *Streamside Protection Regulation*'s definition of “streamside protection area” and uses the widths from section 6 of the regulation in section 5 of the bylaw. The model bylaw states that,

“No person shall, without the prior written approval of the Manager...cut or remove a tree, cut or remove vegetation, remove or deposit soil, construct or build structures, or install drainage works within a streamside protection area of a watercourse or portion of a watercourse listed in Schedule “B” where the proposed activity or work is likely to impair the quality of stormwater or alter stormwater flow patterns or flow rates in a manner that is likely to increase the risk of flooding

⁵⁷ Burnaby Tree Bylaw 1996. City of Burnaby Bylaw No. 10482, s. 19.

⁵⁸ *Ibid.*, s. 15.(1).

⁵⁹ Carley Environmental Inc., “Enhanced CRD Model Storm Sewer Bylaw Discussion Paper”, (10 April 2001) at 3.

or environmental damage or interfere with the proper functioning of the municipal drainage system.’⁶⁰

The model bylaw proposes that a person who contravenes it is liable for a fine of \$2,000. This model bylaw has been received by the regional district and member municipalities have been invited to adopt the enhanced model bylaw⁶¹.

INCLUDING STREAMSIDE PROTECTION AND ENHANCEMENT AREAS IN AN OFFICIAL COMMUNITY PLAN (OCP)

Since the Streamside Protection Regulation specifically applies to local government powers under Part 26 of the *Local Government Act*, the designation of streamside protection and enhancement areas through development permit areas in OCPs seems to be the most logical implementation procedure. An example of where this type of OCP designation has been done in the past is in the City of Nanaimo⁶².

Under Nanaimo’s OCP, watercourses and their leave strips are designated as “Development Permit Areas for Environmental Protection”. The widths of actual leave strips are defined in schedule G of the City’s zoning bylaw (Bylaw 4000) and range from 7.5 meters to 30 meters.⁶³

One of the advantages of having streamside protection and enhancement areas designated in DPAs is that fish habitat protection is considered up front, proactively *before* any development takes place. Development permits can be denied if appropriate measures are not proposed by developers to protect streamside protection and enhancement areas, or the protected areas can be made a specific condition of the permit.

OTHER ISSUES

WILL THE REGULATION IMPROVE FISH HABITAT PROTECTION?

The establishment of consistent minimum setbacks for all urban areas facing development pressures is a good move. The directives raise the level of protection for streamside areas. Those regions or municipalities that exceed the standard reap the benefits of even greater

⁶⁰ Capital Regional District, “Model Bylaw: A bylaw to regulate the discharge of waste into storm sewers and watercourses”, (received by the board 04 July 2001), s.4.

⁶¹ Email from Rob Miller (Supervisor Stormwater Quality Program, Capital Regional District) to Kathy Grant (WCEL), (13 July 2001).

⁶² Note: this work was not done in response the *Streamside Protection Regulation*. Like other local governments, the City of Nanaimo will have to ensure that it is in compliance with the new regulation. Nanaimo’s designation of riparian leave strips as DPA’s serves as an example of how local governments might establish streamside protection and enhancement areas under the *Streamside Protection Regulation*.

⁶³ Information about the City of Nanaimo’s efforts can be found on their website:
<http://www.city.nanaimo.bc.ca>.



protection. As well, consistent minimum standards mean a new level of certainty for developers who are working around streams in BC's urban areas.

Prior to the *Streamside Protection Regulation*, the 1992 *Land Development Guidelines*, jointly published by the Ministry of Environment, Lands and Parks and Fisheries and Oceans Canada⁶⁴ advocated minimum setbacks of 15 meters from either the high water mark or the top a ravine in residential or low density areas, and minimum setbacks of 30 meters from either the high water mark or the top of ravine in commercial or high density areas. The incentive for compliance was that developers would be less likely to violate s. 35 of the federal *Fisheries Act*, and face charges as a result of those violations. These guidelines were used in conjunction with the urban referral system. Compliance was, however, voluntary, and conditions were frequently ignored by developers⁶⁵. Even if noncompliance resulted in charges under the federal *Fisheries Act*, the damage was already done.

In the *Streamside Protection Regulation*, set-backs for streams facing residential, commercial and industrial development are determined by vegetation conditions, presence or absence of fish, and whether the stream is permanent or seasonal. Some fish bearing streams in commercial/high density areas could receive less protection under the *Regulation* than was recommended in the *Land Development Guidelines*. Similarly, however, some fish bearing streams in residential areas could receive greater protection than was recommended in the *Land Development Guidelines*. The change, reflected in the regulation, represents a move to a functional science based approach to determining setbacks, rather than a land use based approach.

Once minimum setbacks are established in local government bylaws, they can be enforced whereas the *Land Development Guidelines* could not. Furthermore, section 7 of the regulation states, "When exercising its powers with respect to residential, commercial and industrial development, a local government must protect streamside protection and enhancement areas." This is a broad statement that requires local governments to protect the setback areas in all the government's undertakings related to land use--from planning to enforcement and compliance. Essentially, this pre-empts the on-the-ground compliance issue of developers obeying setbacks and shifts the focus onto local government decision-making practices. If the local government has effectively integrated the directives into their regulatory mechanisms, developments that would violate minimum setbacks don't get the green light. [Sections 4(2) and 6(5) of the regulation do allow local governments to grant variances or make allowances in cases of reconstruction on an existing foundation, hardship cases (e.g., where setbacks in combination with existing parcel size preclude any development), or where other biophysical conditions limit the advantages to be gained from streamside protection.] Local government compliance with the regulation is, of course, of particular interest. Overall, these pro-active measures to keep fish habitat intact are an improvement over the status quo.

⁶⁴ Chilibeck, B., G. Chislett and G. Norris, "Land Development Guidelines for the Protection of Aquatic Habitat", (Department of Fisheries and Oceans, and Ministry of Environment, Lands and Parks, 1992) [hereinafter *Land Development Guidelines*].

⁶⁵ Coast River Environmental Services, "Urban Referral Evaluation – An Assessment of the Effectiveness of the Referral Process for Protecting Fish Habitat (1985-1995)", (Department of Fisheries and Oceans, Fraser River Action Plan, Urban Initiatives Series 10, March 1997).

ARE THE SETBACKS LARGE ENOUGH?

In one of the most comprehensive studies done to date on streamside protection, the Washington Department of Fish and Wildlife recommended minimum riparian habitat areas (i.e., setbacks) of 46 to 76 meters, depending on stream conditions and the presence/absence of fish⁶⁶. The authors noted a range of recommendations in the scientific literature from 3 to 200 meters for various purposes. The intent of the Department's recommendations was to provide habitat for both fish and other wildlife in all areas of Washington: rural, urban and forested. The authors noted that negative consequences to fish result when the structural and functional integrity of riparian habitat and associated aquatic systems is neglected and the resulting land use practices do not accommodate all riparian habitat functions.

Obviously, as the setbacks required in the *Streamside Protection Regulation* are well below 46 to 76 meters, they are unlikely to be sufficient to protect *all* stream functions⁶⁷. Given existing development and the demand for new developments in urban areas, these setbacks are a compromise between the ideal situation (protecting all stream functions) and other social and economic interests. Nonetheless, if they are consistently applied they will represent an improvement over the status quo.

SUMMARY: WHAT CAN CITIZENS DO TO PROMOTE STREAMSIDE PROTECTION AND ENHANCEMENT AREAS?

ADVOCACY TO LOCAL GOVERNMENT

Stream stewardship advocates can get directly involved in local government advocacy to promote the implementation of the *Streamside Protection Regulation*:

1. Participate in OCP development and reviews. Lobby for the inclusion of streamside and protection enhancement areas (that meet or exceed the regulation) in development permit areas in your community's OCP.
2. Lobby for streamside protection bylaws and provide comments on proposed bylaws. Ask for appropriate compliance mechanisms and penalties to ensure that developers follow the recommended setbacks.

⁶⁶ Knutson, K., and V. Naef, "Management Recommendations for Washington's Priority Habitats. Riparian", (Washington Department of Fish and Wildlife: December 1997), at 87.

⁶⁷ It could be argued that these larger setbacks are appropriate only for undeveloped areas where functions such as stream channel migration are able to operate. In developed areas these types of functions are not possible due to current development, and larger setbacks may not be an improvement over the 15-30 metre setbacks recommended in the regulation, with respect to the ecosystem features and functions that are important to fish habitat.



3. “Watchdog” municipal decisions to ensure streamside protection and enhancement areas *are* being protected. A local government must not only establish streamside protection and enhancement areas, but, they must also protect these areas while exercising their powers with respect to residential, commercial and industrial development (s.7). This means all local government activities related to development must give consideration to these areas. For example, a local government faced with a rezoning application must protect streamside protection and enhancement areas when deciding on that re-zoning application.
4. Familiarize yourself with local bylaws. Call the local bylaw enforcement officer if you think an infraction is taking place.
5. Respond to and correct biased media reports, newspaper articles and/or editorials that are unbalanced or present misleading, incomplete or misinformation. For example, while the regulation may reduce the number of lots that could traditionally be developed on parcels with streams, it’s also an impetus for more sustainable, sensitive, desirable and less expensive subdivision developments of the future.

ADVOCACY TO THE PROVINCIAL GOVERNMENT

Stream stewardship advocates should also make their opinions know to the BC Government. Write a letter to the Minister of Water, Land and Air Protection, the Hon. Joyce Murray, expressing your support for the regulation. You may want to consider the following for your letter:

1. Ensure that implementation efforts are well financed by the province. Encourage the province to provide technical support, mapping, etc.
2. Demand the government’s continued support for implementing the regulation.
3. Ask for local government compliance measures and provincial oversight to be included in intergovernmental cooperation agreements.
4. Ask the government to ensure that streamside protection and enhancement areas apply to all streams threatened with development.
5. Encourage the provincial government to use the regulation as a means to achieve a more efficient, one-window approach to development approvals.