***Information Note #1:***

# Introduction to the Riparian Areas Regulation

*This Information Note is a guide only. It is not a substitute for the federal Fisheries Act, the provincial Riparian Areas Regulation, or local government bylaws.*

## What are riparian areas and why are they important?

Riparian areas[1] are the areas adjacent to ditches, streams, lakes and wetlands. These areas, found in all regions of the province, support a unique mixture of vegetation, from trees and shrubs to emergent and herbaceous plants. The vegetation in riparian areas directly influences and provides important fish habitat. It builds and stabilizes stream banks and channels, provides cool water through shade, and provides shelter for fish. The leaves and insects that fall into the water are a source of food for fish[2]. Although they account for only a small portion of British Columbia's landbase, riparian areas are often more productive than the adjoining upland and are a critical component of the Province's biodiversity.

Good quality riparian habitat ensures healthy fish populations (see Figure 1). The protection of riparian areas is a vital component of an integrated fisheries protection program. The integrity of a riparian area depends on, and is influenced by, the upland area as well as the upstream environment. British Columbia has lost hundreds of kilometres of riparian habitat in the past decades in the Lower Mainland alone. To reverse this trend Section 12 of the *Fish Protection Act* was established to guide and facilitate urban development that exhibits high standards of environmental stewardship, while protecting and restoring riparian fish habitat.

Preventing damage to riparian fish habitat is simpler than restoring it once damage has occurred. Addressing riparian areas through watershed planning integrates a broad approach that ensures all aspects of the watershed are considered, including environmentally sensitive areas, stormwater management and riparian areas.

**Does the Riparian Areas Regulation apply?**

- Yes, to all streams, rivers, creeks, ditches, ponds, lakes, springs and wetlands connected by surface flow to a waterbody that provides fish habitat.
- No, not to marine or estuarine shorelines. These fish habitats are still subject to the federal *Fisheries Act*.
- No, not to watercourses that are disconnected from fish habitats.

[1] *Riparian area* is defined in section 1(1) of the Regulation as a streamside protection and enhancement area (SPEA).

[2] *Fish* is defined in section 1(1) of the Regulation as being all life stages of (a) salmonids, (b) game fish and (c) regional significant fish.

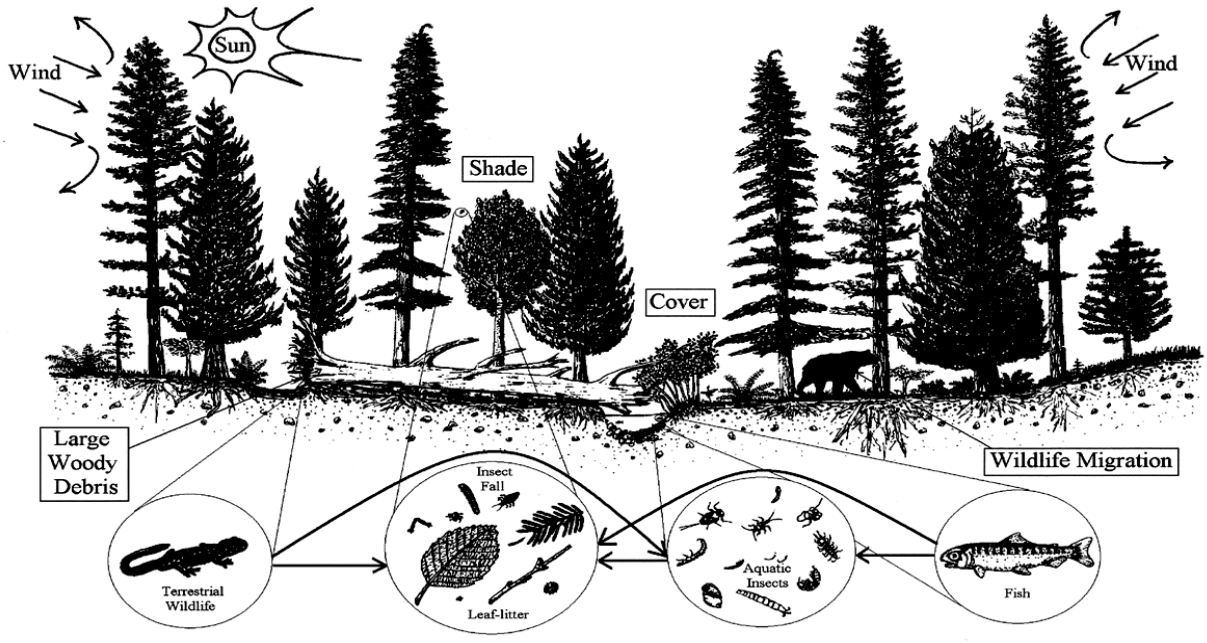


**Figure 1.** Ways in which healthy riparian areas help to ensure healthy fish populations.

> *Fish habitat* is defined 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. *Fish* under the Regulation include salmonids, game fish and "regionally significant" fish.

## What is the Riparian Areas Regulation?

The provincial government passed the *Fish Protection Act* in July 1997 to help ensure fish have sufficient water and habitat as British Columbia continues to grow and develop. Section 12 of the Act authorizes the Province to establish "policy directives regarding the protection and enhancement of riparian areas that the Lieutenant Governor in Council considers may be subject to residential, commercial or industrial development." These policy directives are intended for local governments (municipalities and regional districts), which are the primary bodies responsible for planning and regulating these forms of development.

The Riparian Areas Regulation, enabled by the *Fish Protection Act*, provides the legislated direction needed by local governments to achieve improved protection of fish and fish habitat. The Regulation applies to riparian fish habitat *only in association with new residential, commercial and industrial development*[3] *on land under local government jurisdiction*.

[3] *Development* is defined in section 1(1) of the Regulation as being any of the following associated with or resulting from the local government regulation or approval of residential, commercial, or industrial activities or ancillary to the extent that they are subject to local government powers under Part 26 of the

This includes private land and the private use of the provincial Crown land.

### Key components of the Regulation

- Under the Regulation, local governments may allow development within 30 m of the high water mark[4] of a stream or top of a ravine bank[5] – provided the prescribed riparian assessment methods have been followed.
- The riparian assessment method requires a Qualified Environmental Professional[6] (QEP) to provide an opinion – in an Assessment Report – that the development will not result in a harmful alteration to the natural features, functions, and conditions that support fish life processes . The QEP can help plan any new development so that it will avoid any such impacts. The Assessment Report also identifies measures that will be required to maintain the integrity of the riparian area in the development project.
- The assessment methodology in the Schedule of the Regulation ensures that an assessment has been conducted to a standard level and that the standard reporting format is followed. The Assessment Report, submitted electronically to provincial and federal governments, facilitates monitoring and compliance. Based on a detailed assessment of the development area, the

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*Local Government Act*: (a) removal, alteration, disruption, or destruction of vegetation; (b) disturbance of soils; (c) construction or erection of buildings and structures; (d) creation of nonstructural impervious or semi-impervious surfaces; (e) flood protection works; (f) construction of roads, trails, docks, wharves, and bridges; (g) provision and maintenance of sewer and water services; (h) development of drainage systems; (i) development of utility corridors; (j) subdivision as defined in section 872 of the *Local Government Act*.

[4] *High water mark* is defined in section 1(1) of the Regulation as being the visible high water mark of a stream where the presence and action of the water are so common and usual and so long continued in all ordinary years, as to mark on the soil of the bed of the stream a character distinct form that of its banks, in vegetation, as well as in the nature of the soil itself, and includes the active floodplain.

[5] *Top of a ravine bank* is defined in section 1(1) of the Regulation as being the first significant break in a ravine slope where the break occurs such that the grade beyond the break is flatter then 3:1 for a minimum distance of 15 m measured perpendicularly from the break and the break does not include a bench within the ravine that could be developed.

[6] *Qualified Environmental Professional* (QEP) is defined in section 1(1) of the Regulation as being an applied scientist or technologist, acting alone or together with another QEP. He or she must be registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association. The applicable professionals include Professional Biologists, Geoscientists, Foresters, and Agrologists. To be able to certify that they are qualified to conduct the assessment methodology, the individual's area of expertise must be recognized in the assessment methods as one that is acceptable for the purpose of providing all or part of an Assessment Report in respect of the particular development proposal that is being assessed. The individual is considered a QEP only for that portion of the assessment that is within their area of expertise, as identified in the assessment methodology.

Regulation provides a mechanism for allowing site-specific determination of appropriate levels of protection.

- The Regulation is based on current science regarding fish habitat, while recognizing the challenges in achieving science-based standards in an urban environment.
- It is recommended that prior to any development, as defined in the Regulation, the local government responsible for land use decisions be contacted to determine what specific legislative requirements are in place.

**Where does the Riparian Areas Regulation apply?**

The Riparian Areas Regulation currently applies only to municipalities and regional districts in the Lower Mainland, on much of Vancouver Island, in the Islands Trust area, and in parts of the Southern Interior, as these are the regions of greatest population growth and development. The following regional districts and all municipalities within them are affected by the Regulation:

- Capital (except the City of Victoria and Town of Esquimalt)
- Central Okanagan
- Columbia-Shuswap
- Comox
- Strathcona
- Cowichan Valley
- Fraser Valley
- Greater Vancouver (except the City of Vancouver)
- Nanaimo
- North Okanagan
- Okanagan-Similkameen
- Powell River
- Squamish-Lillooet
- Sunshine Coast
- Thompson-Nicola
- the trust area under the *Islands Trust Act*

The Regulation may be phased in elsewhere in the province as the need arises. Other local governments outside these areas can use the approach set out in the Regulation as a way to prevent riparian disruption or disturbance. See also *Develop with Care* (sections 4 - 8) for guidelines on working in riparian areas: http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare/index.html

**What types of development does the Regulation apply to?**

As noted above, the Regulation applies to local government regulation or approval of residential, commercial or industrial activities or ancillary activities under Part 26 of the *Local Government Act* as "development" along streams.

That means:

- **activities**:
  - construction or erection of buildings and structures;
  - creation of nonstructural impervious or semi-impervious surfaces; and
  - subdivision, as defined in section 872 of the *Local Government Act;* and
- **ancillary activities that are done in a association with residential, commercial or industrial development**:
  - removal, alteration, disruption or destruction of vegetation;
  - disturbance of soils;
  - flood protection works;
  - construction of roads, trails, docks, wharves and bridges;
  - provision and maintenance of sewer and water services;
  - development of drainage systems; and
  - development of utility corridors.

**What types of development does the Regulation NOT apply to?**

The Regulation does not apply to activities that are NOT residential, commercial or industrial activities or ancillary activities regulated or approved by local government under Part 26 of the *Local Government Act*. The Regulation does not apply to the following:

- ***A development permit or development variance permit*** issued only for the purpose of enabling reconstruction or repair of a permanent structure described in section 911 (8) of the Local Government Act if the structure remains on its existing foundation. Section 911 (8) states: "If a building or other structure, the use of which does not conform to the provisions of a bylaw under this Division is damaged or destroyed to the extent of 75% or more of its value above its foundations, as determined by the building inspector, it must not be repaired or reconstructed except for a conforming use in accordance with the bylaw."
- ***Existing permanent structures, roads and other development*** within riparian protection areas are "grand parented." Landowners can continue to use their property as they always have even if a streamside protection and enhancement area is designated on it. The

Regulation also has no effect on any repair, renovation, or reconstruction of a permanent structure on its existing foundation. Only if the existing foundation is moved or extended into a streamside protection and enhancement area (SPEA) would the Regulation apply.

- ***Developments that have been approved*** but not yet built are honoured. Requests for changes to the approved development may, however, trigger a review with reference to the Regulation, depending on the significance of the proposed change (e.g., a request for a new zone, different land use, or larger structure than the one approved).
- ***Farming activities*** are not subject to the Regulation. Most of them are subject to the *Farm Practices Protection (Right to Farm) Act* or other provincial legislation or guidelines. A Farm Practices Guide is being developed that will address stream setbacks for farming activities. However, while the Regulation does not apply to some farming activities themselves,[7] it does apply to non-farming activities on lands that may otherwise be used, designated, or zoned for agriculture. For instance, construction of non-farming-related building or development of a golf course on Agricultural Land Reserve land would be regulated by local government bylaws and subject to the Regulation.
- ***Mining activities, hydroelectric facilities and forestry (logging) activities*** are also not subject to the Regulation, as these land uses are regulated by other provincial and federal legislation and not by local governments. However, a local government can regulate how and where mineral or forest products may be processed. For instance,

[7] The *Farm Practices Protection Act* defines "farm operation" as "any of the following activities involved in carrying on a farm business:
(a) growing, producing, raising or keeping animals or plants, including mushrooms, or the primary products of those plants or animals;
(b) clearing, draining, irrigating or cultivating land;
(c) using farm machinery, equipment, devices, materials and structures;
(d) applying fertilizers, manure, pesticides and biological control agents, including by ground and aerial spraying;
(e) conducting any other agricultural activity on, in or over agricultural land;
and includes
(f) intensively cultivating in plantations, any (i) specialty wood crops, or (ii) specialty fibre crops prescribed by the minister;
(g) conducting turf production (i) outside of an agricultural land reserve, or (ii) in an agricultural land reserve with the approval under the *Agricultural Land Reserve Act* of the Land Reserve Commission;
(h) aquaculture as defined in the *Fisheries Act* if carried on by a person licensed, under Part 3 of that Act, to carry on the business of aquaculture;
(i) raising or keeping game, within the meaning of the *Game Farm Act,* by a person licensed to do so under that Act;
(j) raising or keeping fur bearing animals, within the meaning of the *Fur Farm Act,* by a person licensed to do so under that Act;
(k) processing or direct marketing by a farmer of one or both of (i) the products of a farm owned or operated by the farmer, and (ii) within limits prescribed by the minister, products not of that farm, to the extent that the processing or marketing of those products is conducted on the farmer's farm;
but does not include
(l) an activity, other than grazing or hay cutting, if the activity constitutes a forest practice as defined in the *Forest Practices Code of British Columbia Act;*
(m) breeding pets or operating a kennel;
(n) growing, producing, raising or keeping exotic animals, except types of exotic animals prescribed by the minister".

processing activities are usually considered as industrial for the purposes of a zoning bylaw and thus fall within the definition of development that can be regulated under the Regulation. As for these resource extraction activities, the bottom line is that all such land uses are still subject to the federal *Fisheries Act*.

- ***Federal lands and First Nations reserve lands*** would be exempt from the Regulation but only to the extent that they are already exempt from local government bylaws. However, activities on these lands are still subject to the federal *Fisheries Act*. With regard to treaty Settlement Lands, compliance with the Regulation and local government bylaws will be negotiated in each treaty.
- ***Parks and parkland*** are subject to other legislation and may, in some cases, be exempt from the Regulation. In other cases, activities such as commercial development within them may still be subject to the Regulation. As well as activities that are ancillary to residential, commercial, or industrial development may be subject to the regulation. For example if as part of a residential development an area was designated as park, then a trail within the park would be subject to the regulation as it is ancillary to the residential development. In all cases it will depend on the individual circumstances. Therefore, review on a case by case basis would be necessary.
- ***Institutional developments*** are exempt from the RAR, but are subject to the Federal Fisheries Act and Provincial Water Act. Where an institutional development includes development activities within the riparian area, it is recommended that the developer seek advice from a qualified environmental professional(s) and secure the necessary approvals for meeting applicable regulatory requirements.

### Activities Permitted within a SPEA

**The vegetation in the SPEA provides the natural features, functions and conditions that support fish life processes. In this regard, the vegetation in the SPEA must be left in a natural, undisturbed state and activities that have the potential to damage it are not permitted in the SPEA. Where a SPEA has been previously disturbed by development activities the objective is to allow regeneration of the vegetation either naturally or through enhancement efforts.**

#### Instream works

Often, in undertaking instream works such as pipeline crossings, road crossings, foot bridges, bank repairs and stormwater outfalls, a proponent

is required to enter a SPEA or make some modification to a SPEA. These works and their impact on riparian vegetation are to be considered together in the context of instream works.

#### Fish habitat enhancement works

Fish habitat enhancement activities, including riparian planting, are an acceptable practice within SPEAs if they are done to an appropriate standard. Removal of invasive plant species and garbage is also acceptable as long as care is taken to minimize impacts on the fish habitat and creation of sediment. These are activities that a QEP can provide an opinion on as per section 4(2)(a)(i) of the Regulation. While the involvement of a QEP in planning and overseeing these activities is preferred, the need to involve a QEP will depend on the nature and extent of enhancement works being proposed. For example, planting of native plants by a Streamkeeper group can be undertaken without a QEP but activities that require large machinery to work within the SPEA should involve a QEP or other suitably qualified professional.

#### Siting of Small Out-buildings

As stated above, the goal for SPEAs that have been previously disturbed by development activity is to restore the vegetation that would naturally occur on the site, either actively by planting or passively by natural recruitment processes. Some local governments review proposals for the construction of small structures (defined as a maximum of 100 square feet) such as sheds. Every effort should be made to locate these structures outside the SPEA. However, where this type of structure must be located in a historically damaged SPEA, the local government may approve it as long as the structure has no permanent foundation, no native vegetation will be damaged during construction, and the structure is located as far from the watercourse as possible. For Greenfield development sites, these structures cannot be located within the SPEA.

### Activities not permitted within a SPEA

Development as defined in the RAR is not allowed within SPEAs except as described above. The following activities that have historically occurred within SPEAs are no longer allowed.

#### Trails

The construction of formal trail networks within the SPEA are not supported as the construction and maintenance of such a trail systems often causes erosion, compaction of root systems, loss of trees and understory plants. In addition, trail development requires a high standard of hazard tree mitigation all of which significantly

impact the form and function of the SPEA. However, some passive activities are compatible with protection of the SPEA including: hiking; nature viewing; access to water, and fishing.

#### Landscaping

Activities such as landscaping (to create lawns and formal gardens, for example) are not acceptable within a SPEA. Where historic damage to SPEAs has occurred though landscaping or other means, education programs should be considered for landowners. The goal is to provide awareness of the importance of riparian vegetation to fish, and to provide suggestions for replanting the areas to appropriate standards. Local environmental groups can assist or provide these education programs to the community and to link to current replanting and other enhancement initiatives. When planning any landscaping works within the SPEA it is essential that only native plant species specific to the region are selected for use.

Sources of information for planning successful riparian planting projects include:

- *Living by Water* - www.livingbywater.ca
- *Revegetation Guidelines for Brownfield Sites* – (https://www2.gov.bc.ca/gov/topic.page?id=FB284A0570084959BEBF55B9D4D4AEC2)

#### Stormwater management

Stormwater treatments ponds and wetlands cannot not be located within SPEAs.