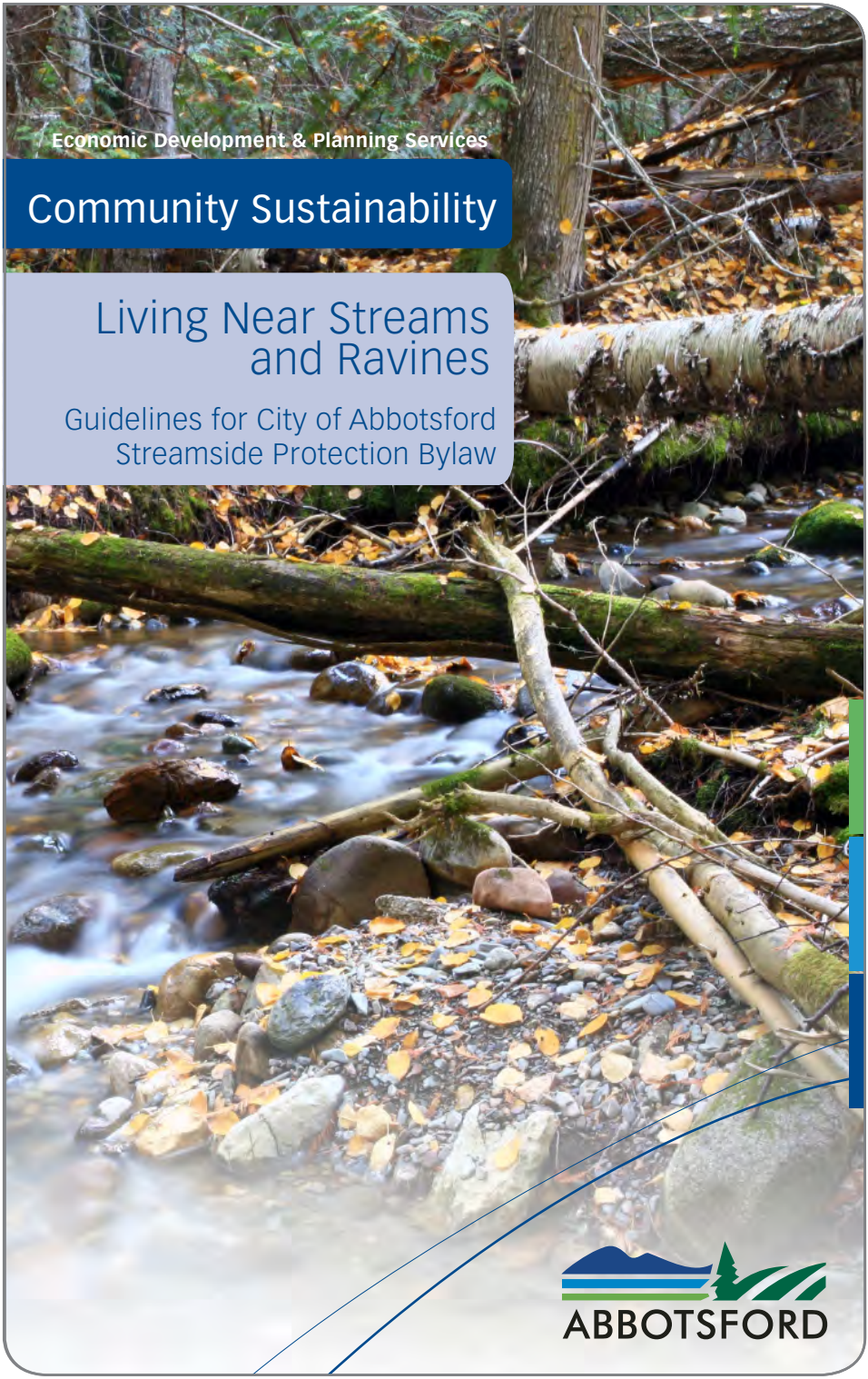
Economic Development & Planning Services

Community Sustainability

Living Near Streams and Ravines

Guidelines for City of Abbotsford Streamside Protection Bylaw



ABBOTSFORD

Community Sustainability

Living Near Streams and Ravines

This pamphlet provides information to landowners about living and building near streams and ravines. It explains what activities are permitted within Streamside Protection and Enhancement Areas (SPEAs, i.e. setback area/riparian area) and how the SPEA boundary is determined. It also explains how landowners can protect fish and wildlife habitat and reduce the risk of channel and ravine erosion.

In 2005 the City adopted the Streamside Protection Bylaw, which regulates activity within the SPEA and provides SPEA widths for various categories of fish habitat. SPEAs vary from 15-30m for fish-bearing watercourses, to 5-30m for non-fish-bearing watercourses. More detailed information can be found on the City's website at www.abbotsford.ca.

Note: This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal codes, laws, or permits (e.g. Provincial Water Act, Contaminated Sites requirements, Canadian Environmental Assessment Act approvals, Wildlife Permits, etc). It is your responsibility to ensure that any existing or proposed construction or other works complies with any applicable Bylaws, Codes, laws or permits.

Photo courtesty of Fisheries and Oceans Canada

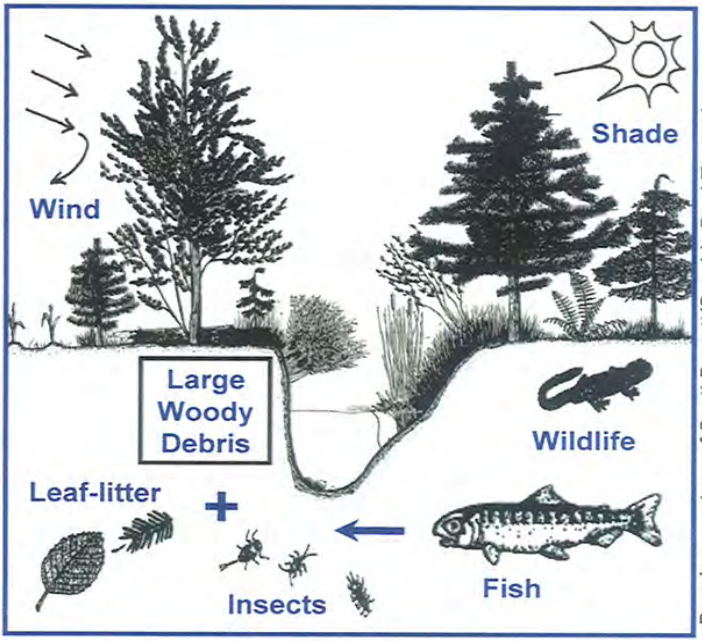
What is a Stream?

A stream includes a watercourse or source of water supply, whether usually containing water or not, a pond, lake, river, creek, brook, ditch, and a spring or a wetland that is integral to a stream and provides fish habitat

What is a Streamside Protection and Enhancement Area (SPEA)?

A SPEA (also called a riparian area/setback area) is an area adjacent to a stream that links aquatic (stream channel) to terrestrial (land) ecosystems and includes both existing and potential streamside vegetation and existing and potential upland vegetation that influences the stream. **SPEAs are "no disturbance" areas** (i.e. no development activity of any kind is permitted within them).

Streamside Protection Area



Drawing courtesy of Scott Barrett/Graphic Dani Tarangle

Why Protect Streamside Vegetation?

Streamside vegetation is critical for healthy streams and to protect neighbouring properties:

- Streamside vegetation drops food and nutrients into streams for fish.
- Tree roots and shrubs along the banks provide fish with hiding places away from predators and moderate the water temperature during the hot summer months.
- Dense vegetation stabilizes stream banks and prevents excessive erosion.
- The SPEA protects water quality by filtering rainwater runoff and slowing flow from heavy rains. The spongy soils soak up excess water and release it slowly, protecting people and property from floods and sudden bank erosion.
- SPEAs are also critical for wildlife, as the majority of wildlife in BC use these streamside areas at some point in their life cycles. The SPEAs also act as corridors that wildlife can use to move from one area to another.

Where does the Streamside Protection Bylaw apply?

These regulations apply to any landowner seeking to develop within 30m of a watercourse, although some types of development have been excluded because of their scale or because other processes are in place to address environmental impacts. The Bylaw does not apply in the following circumstances:

- Regular maintenance of a property, but NOT including tree/plant removal, or construction of any sort (i.e. patios, fences, retaining walls, gazebos, etc);
- Interior renovations, and non-structural exterior renovations (i.e. those renovations that do not expand the footprint of the building);
- Streamside enhancement activities (i.e. planting native species, removing invasive species such as Himalayan Blackberry, Japanese Knotweed, Scotchbroom, etc); or
- Agricultural uses and farm practices (NOTE: the Bylaw does apply to non-farm uses within the ALR)

What is the required setback?

Streamside Protection and Enhancement Areas (SPEAs) vary from 15-30m for fish-bearing watercourses, to 5-30m for non-fish-bearing watercourses, as per the following matrix:

Summary Matrix of Streamside Protection and Enhancement Area Widths:

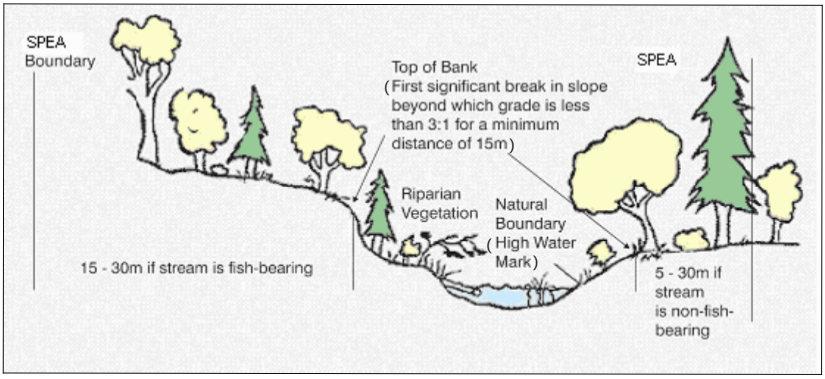
<table>
<tr><th rowspan="3">Existing or potential** streamside vegetation conditions</th><th colspan="4">Streamside Protection and Enhancement Area Width*</th></tr>
<tr><th rowspan="2">Fish Bearing</th><th colspan="2">Non-Fish Bearing</th><th rowspan="2">Ravines >60m in width***</th></tr>
<tr><th>Permanent</th><th>Non Permanent</th></tr>
<tr><td>Continuous areas >30m or discontinuous by occasionally >30m to 50m</td><td colspan="2">At least 30m</td><td>At least 15m</td><td rowspan="4">10m</td></tr>
<tr><td>Narrow by continuous areas =15m or discontinuous by occasionally >15m to 30m</td><td rowspan="2">Greater of:
-existing width,
or
- potential width,
or -15m</td><td colspan="2">15m</td></tr>
<tr><td>Very narrow by continuous areas up to 5m or discontinuous but occasionally <5m to 15m</td><td colspan="2">At least 5m & up to 15m</td></tr>
</table>

* Measured from the top of the bank

**Potential vegetation is considered to exist if there is a reasonable ability for regeneration either with assistance through enhancement or naturally, and is considered to not exist on that part of an area covered by a permanent structure

***Measured from left top of bank to right top of bank, excluding the stream channel (left high water mark to right high water mark)

NOTE: Adequate space should be provided from the edge or the SPEA to buildings and structures. The City typically requires an additional 5m setback of the building envelope to the SPEA boundary in order to ensure adequate space for a formal yard area and/or to ensure space for building maintenance.



Variance Requests

The City encourages all development to comply with the Streamside Protection Bylaw. However, there may be occasions when a variance to the SPEA is required due to limited site developability (i.e. the lot will otherwise be sterilized, no ability to re-configure the development due to irregular lot configuration, etc.) and where all options to minimize encroachment into the SPEA have been exhausted (i.e. zoning bylaw variances, relaxations to road standards, density bonusing, etc).

In these circumstances, a variance to the SPEA may be requested at the Habitat Review Panel (HRP) in accordance with the guidelines found in the information package for Developing Near Streams and Ravines in Accordance with the Streamside Protection Bylaw, available at the City's website: **www.abbotsford.ca**.

Redevelopment/Infill Sites

On older, previously developed properties, it may very difficult to locate building envelopes while still respecting the SPEA. Sometimes buildings are already located within the SPEA. In these situations the landowner/builder should work on a site layout that attempts to maximize the SPEA. Each of these redevelopments is unique and will require review through the City Habitat Review Panel (HRP).

The HRP will typically look favourably on applications where:

- the building extends away from top of bank;
- the SPEA boundary has been "bent", so that the averaged setback remains the same (i.e. in some areas the SPEA exceeds the bylaw requirement in order to off-set any intrusions into the SPEA); and
- streamside enhancement planting is included in the site plan

Replacing a building that was damaged or destroyed

An owner applying to replace a building or structure that had been located within a SPEA is required to obtain a variance; however, the building or structure generally would be allowed to be reconstructed at the same location subject to other guidelines being met and subject to DFO review to ensure there are no impacts to fish and fish habitat. Notwithstanding the above, preference would be for the replacement building or structure to be set back from the stream as much as feasible on the property. This applies only to legally-constructed buildings damaged to the extent of 75% or more of its value above the foundation. Undamaged buildings or illegally constructed buildings may not allowed to be reconstructed in the same location.

Hazard Trees

Hazard trees include standing dead trees that are vertical or lean towards the work area, as well as some live trees with large dead branches or tops. Danger trees located within the SPEA should be assessed by a Certified Arborist with appropriate training to determine if they pose a high risk to the adjacent development (i.e. a Certified Tree Risk Assessor). If a tree is determined to be unsafe, the Certified Arborist should provide recommendations to reduce or eliminate the threat to safety. Trees felled within a SPEA are to be left as coarse woody debris. Any trees that are felled should be replaced with native trees. If you are concerned about the safety of any trees in the SPEA, contact the City Arborist at 604-853-5485 to advise on Tree Permit requirements. Hazard tree removal from within the SPEA also requires approval from DFO.

How can you protect fish habitat and reduce risk of erosion/instability?

Landowners living near streams and ravines play an important role in protecting environmental and geotechnical values. Here are some tips:

Native Planting: In landscaped areas, use native plants as much as possible, as they are well-adapted to local weather, and provide food and nutrients for fish, birds, and other wildlife. Within the SPEA, do not disturb any native plants. If invasive species are growing, these can be removed and replaced with native plants. If the SPEA is vegetated with turf grass, consider re-planting with native shrubs and trees. Turf grass is not good in streamside areas as it provides little shade or cover, and its short roots don't hold soil well so the stream banks are more susceptible to erosion.

Use of SPEAs: SPEAs are no disturbance zones and trails, gazebos, or other structures are not permitted within them. If these uses cannot be moved outside of the SPEA, a variance is required.

Composting: Do not dispose of yard waste or lawn clippings into SPEAs. Yard waste takes a long time to decompose, may smother vegetation, and can destabilize stream and ravine banks. Instead use the City's Curbside Yard Waste Collection program or bring yard waste to Abbotsford Mission Recycling Depot located at 33670 Valley Road.

Natural Forest Debris: Leave natural forest debris in place. If you are concerned that debris is blocking water flow and threatening to flood the creek, contact Engineering Operations at 604-853-5485.

Rainwater run-off: Manage runoff from paths and downspouts by dispersing it over a vegetated area in your garden, not close to the watercourse. **DON'T** discharge your storm drain to the top of a ravine or stream bank because it can cause erosion and slumping.

For more information contact:

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