

Development Permit Area for Streamside Protection and Enhancement – SPEA

49

Category: “a” (Protection of the natural environment)

Area: **Development Permit Area SPEA**

Applies to all land within The Corporation of Delta that are partly or entirely located within 30 meters from the top of bank of a “stream” as defined in accordance with Schedule SPEA-2 of these Development Permit Area Guidelines and Requirements.

Justification:

The purpose of designating a Streamside Protection and Enhancement Development Permit Area (SPEA) is to preserve, protect, restore and enhance fish and wildlife, and their habitats, in and along streams. Stream systems that flow through the urban and rural portions of the municipality serve a productive habitat role for both aquatic and land-based wildlife species. However, encroachment by development or the alteration of lands adjacent to streams can cause the deterioration of these systems. Therefore, the primary function of the SPEA Development Permit Area is to ensure that decision makers can secure the necessary information and establish conditions for development or land alteration so that fisheries and wildlife resources located in streamside areas are protected and development impacts mitigated.

Definitions:

Terms used in relation to SPEA are defined in Schedule SPEA-2 of these Development Permit Guidelines and Requirements.

Application:

Development Permit Area SPEA applies to all lands within The Corporation of Delta that are partly or entirely located within 30 meters from the top of bank of a “stream”. For the purpose of this Development Permit Area, a “stream” is a watercourse or source of water supply, whether usually containing water or not, and includes ponds, lakes, rivers, creeks, brooks and ditches. Springs and wetlands are also included in the definition of a “stream” if they are integral to its functions and provide fish habitat. Streams to which the SPEA Development Permit Area applies include, but are not limited to, those shown on Delta’s in-house watercourse and drainage maps, as amended from time to time.

Development Permits are required for all forms of “development” occurring within the SPEA Development Permit Area, except for those forms of development exempted under Section 2 of the Development Permit Area Guidelines and Requirements. For the purpose of this Development Permit Area, “Development” shall have the meaning defined in Schedule SPEA-2 of these Development Permit Area Guidelines and Requirements.

Guidelines:

Development Permits issued in this area shall be in accordance with the following:

1. The distance that the development will be setback from the stream is equivalent to the width of the “Streamside Protection and Enhancement Area” as determined according to Schedule SPEA-1 of these Development Permit Areas and Guidelines.
2. To determine the appropriate setback distance, applicants will be required to confirm, through survey, the top of the stream bank in relation to the property lines and existing and proposed development. Additionally, it is the responsibility of the applicant to provide information regarding the stream, fish presence, streamside vegetation and other ecosystem conditions in the form of a report prepared by a qualified professional and to a standard of quality that is acceptable to The Corporation of Delta. The report shall outline all significant aquatic and terrestrial environmental features in relation to the site and proposed development, including significant features in relation to the stream and watercourse, as applicable. The report shall describe which design alternatives and mitigation options have been considered, and recommend natural site enhancements or other measures to mitigate and/or compensate for the impacts of the development as per Guidelines 3 through 9.
3. All existing tree cover should be preserved on the entire property except in areas proposed for buildings, structures and site accesses, all of which should be designed to minimize site coverage.
4. Planting of vegetation within the stream setback area should be provided to ensure that fish habitat are protected, restored and enhanced, and drainage and erosion impacts are mitigated. Federal and Provincial planting criteria and recommended species should be followed. The planting of vegetation native to the region is preferred over the planting of non-native vegetation, particularly species of an invasive nature. Prior to the planting of vegetation, a Vegetation Planting and Management Plan must be prepared to a professional standard and submitted for approval by The Director of Community Planning and Development.
5. Fencing or other such works will be provided by the applicant to preserve and protect natural watercourses, newly planted areas, or other specified natural features.
6. Where a net benefit for fish habitat can be demonstrated, The Corporation of Delta may consider proposals from applicants to enhance fish habitat, including in-stream works or the creation of wetland areas, as part of alternative design options for development projects. Such projects will be subject to approval from applicable Federal and Provincial government authorities.
7. Alteration of the natural drainage of the site and adjacent properties should be minimized. Applicants should provide an assessment, prepared by a qualified professional, of the predicted changes to site drainage and propose measures to manage drainage impacts. Before a Development Permit is issued, The Corporation of Delta’s Engineering Department will be required to review and approve the drainage measures.

8. Any development occurring within close proximity to a stream increases the risk of sediment, erosion and runoff. Therefore, applicants proposing to develop within this Development Permit Area shall provide a proposal, prepared by a qualified professional, for the management of sediment during construction. This sediment management proposal shall be subject to review and approval by The Corporation of Delta prior to commencement of any development, and must show how the stream and any associated drainages will be protected from sediment, erosion and runoff impacts that may result from construction or land clearing activities.

9. Dedication of the natural watercourse may be a requirement of the Development Permit, in accordance with the provisions of Section 920 (7) (c) of the Local Government Act. In addition, The Corporation of Delta encourages applicants to consider registering a restrictive covenant on the title of their lands to further protect all or a portion of the streamside protection and enhancement area. The covenant, which should be registered prior to any development, should ensure that the streamside protection and enhancement area remains in as natural a state as possible with no or limited encumbrances. The covenant should be registered in favour of The Corporation of Delta, other public agencies, including the Province, or a non-governmental organization such as a private land trust committed to the management of watercourses and streamside areas. Dedication of such land is not required but may be considered by the applicant as an alternative to a restrictive covenant.

10. Adequate financial security, as determined by The Corporation of Delta, should be provided prior to the onset of any development, as defined by this Development Permit Area. Prior to any development occurring, a cost estimate of the proposed enhancement work prepared by a qualified professional must be submitted to The Corporation of Delta. The value of the financial security should be equal to the amount plus inflation that would be required to pay for re-vegetating and protecting (e.g., through fencing) the riparian area if it is damaged as a consequence of a contravention of a condition contained in the Development Permit.

11. Notwithstanding any of the above guidelines, The Corporation of Delta may, as part of the Development Permit, allow “development” within the Streamside Protection and Enhancement Area defined in Schedule SPEA-1 of these Development Permit Area Guidelines and Requirements where it can be demonstrated in a less than desirable existing situation that a “net positive improvement” for fish habitat will result, or, in a more desirable existing situation that “no net loss” will result, subject to Provincial and or Federal agency review and comment.

12. Notwithstanding Section 911 of the Local Government Act, if an existing legally constructed building within a streamside protection and enhancement area is damaged or destroyed, to the extent of 75% or more of its value above the foundation, it will be considered for a variance to permit reconstruction on its existing foundation where it can be demonstrated that the reconstruction would result in no impacts to fish and fish habitat.

Conflicting Guidelines:

If any of the Development Permit Guidelines for SPEA conflict with a guideline associated with another Development Permit Area, the more stringent guideline shall apply except that guidelines addressing public safety will take precedent.

Schedules

Schedule SPEA-1

Determination of Width of Streamside Protection and Enhancement Areas*

Existing or potential streamside vegetation conditions	Width of Streamside Protection and Enhancement Area (measured perpendicular to the top of stream bank or top of ravine bank)		
	Fish bearing Stream	Non-Fish bearing Stream	
		Permanent	Non Permanent
Continuous areas ≥ 30 m or discontinuous but occasionally > 30 m to 50 m	At least 30 m		At least 15 m
Narrow but continuous areas = 15 m or discontinuous but occasionally > 15 m to 30 m	Greater of: existing width or potential width or 15 m	15 m	
Very narrow but continuous areas up to 5 m or discontinuous but occasionally > 5 m to 15 m		At least 5 and up to 15 m	
Exception for wide ravines			
Stream within ravine that is > 60 m in total width from top of ravine bank to top of ravine bank, not including the stream channel within its active floodplain boundaries	At least 10 m		

* See Schedule SPEA-2 for definitions.

Schedule SPEA-2

Definitions

“Agricultural use” means a “farm operation” or “normal farm practice” as defined in and protected by the Farm Practices Protection (Right to Farm) Act.

“Development” means any activity referred to in Section 920 (1) of the Local Government Act and includes alteration or development of land for residential, commercial, industrial, institutional, service, or utility uses or activities, or ancillary uses or activities, to the extent that these uses or activities are subject to local government powers under Part 26 of the Local Government Act. Examples of activities that will require a Development Permit are:

- removal, alteration, disruption or destruction of vegetation;
 - removal, deposit or disturbance of soils, as defined in The Corporation of Delta’s Soil Deposit and Removal Bylaw;
 - construction or erection of buildings and structures as defined by Delta’s Building and Plumbing Bylaw;
 - creation of non-structural impervious or semi-impervious surfaces;
 - flood protection works;
 - construction of roads, trails, docks, wharves and bridges;
 - provision and maintenance of sewer and water services;
 - development of drainage systems;
 - development of utility corridors;
- and
- subdivision, as defined in the Local Government Act.

“Existing vegetation” means native and non-native vegetation.

“Fish” means all life stages of salmonids, game fish, and regionally significant fish as defined by Federal or Provincial agencies.

“Fish bearing stream” means a stream in which fish are present or potentially present if introduced barriers or obstructions are either removed or made passable for fish.

“Non fish bearing stream” means a stream that: (a) is not inhabited by fish; and (b) provides water, food and nutrients to a downstream fish bearing stream or other water body.

“Non permanent stream” means a stream that typically contains surface waters or flows for periods less than six months in duration.

“Permanent stream” means a stream that typically contains continuous surface waters or flows for a period more than six months in duration.

“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.

“Qualified Professional” means an engineer, applied scientist or technologist of an appropriate discipline who is registered and in good standing with a professional organization relating to that discipline and who is acting under the association’s code of ethics.

“Ravine” means a narrow, steep sided valley that is commonly eroded by running water and with slope grades greater than 3:1.

“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 wetland that is integral to a stream and provides fish habitat.

“Streamside protection and enhancement area” means 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 Schedule SPEA-1.

“Top of stream bank” means: (a) the point closest to the boundary of the active floodplain of a stream where a break in the slope of the land occurs such that the grade beyond the break is flatter than 3:1 at any point for a minimum distance of 15 metres measured perpendicularly from the break; and (b) for a floodplain area not contained in a ravine, the edge of the active floodplain of a stream where the slope of the land beyond the edge is flatter than 3:1 at any point for a minimum distance of 15 metres measured perpendicularly from the edge.

“Top of ravine bank” means the first significant break in a ravine slope where the break occurs such that the grade beyond the break is flatter than 3:1 for a minimum distance of 15 metres measured perpendicularly from the break, and the break does not include a bench within the ravine that could be developed.”