

10.2 Environmentally Sensitive Features

PURPOSE

To protect the natural environment, its ecosystems and biological diversity.

AREA

This Development Permit Area is intended to protect coastal areas, estuaries and estuarine habitat, watercourses and riparian areas, aquifers, nesting trees, and other environmentally sensitive areas identified on Map No. 9 of this Plan and is defined as follows:

1. For all coastal areas – the Development Permit Area shall be 15 metres horizontal distance upland of the present natural boundary and within 15 metres horizontal distance seaward of the present natural boundary.
2. For the Little Qualicum River, the Englishman River, French Creek, and their associated estuaries – the Development Permit Area shall be 30 metres as measured from the top of the bank or present natural boundary, which ever is greater.
3. For lakes, wetlands, and ponds - the Development Permit Area shall be 15 metres horizontal distance measured from the present natural boundary.
4. For all other watercourses and streams - the Development Permit Area shall be 15 metres as measured from the top of the bank or present natural boundary, which ever is greater.
5. For all known aquifers the Development Permit Area shall be those lands identified as Aquifer Protection on Map No. 9.
6. All lands that have been identified in the Sensitive Ecosystem Inventory: East Vancouver Island and Gulf Islands 1993 – 1997 and any subsequent editions as being endangered or sensitive to disturbance including 'Riparian Vegetation', 'Wetland', 'Sparsely Vegetated', and 'Older Forest'.
7. For Eagle Nesting Trees - the Development Permit Area shall be a 60-metre radius from the nesting tree.

JUSTIFICATION:

Increasing development pressure and environmental awareness, as well as the Regional Growth Strategy's goal of environmental protection has lead to the need for the protection of the Plan Area's most sensitive environmentally significant features including coastal shoreline, estuaries, estuarine habitat, watercourses, aquifer's, eagle and heron nesting trees, and other environmentally sensitive features to ensure their continued survival and enjoyment for generations to come.

APPLICABILITY

A development permit is required for the following activities unless specifically exempt:

1. Removal, alteration, disruption or destruction of natural features, including mature and native vegetation;
2. Disturbance of soils, including grubbing, scraping, and removal of top soils;
3. Construction or erection of buildings and structures;
4. Creation of non-structural impervious or semi-pervious surfaces; and
5. Subdivision as defined in the *Land Title Act* or the *Strata Property Act*.

EXEMPTIONS:

The following activities are exempt from requiring a development permit:

1. Development or alteration of land proposed to occur outside the designated Development Permit Area as shown on Map No. 9, as determined by a BC Land Surveyor or by the RDN.
2. Minor additions to existing buildings and structures to a maximum of 25 percent of the total floor area of the existing building or structure, as well as renovations, repairs, or maintenance provided that the proposed improvements do not result in the building or structure being situated closer to or further impacting on the environmentally sensitive feature than the existing building or structure.
3. A second storey addition, excluding cantilevered construction, to a legally sited structure or structure protected by Section 911 of the *Local Government Act* provided the second storey addition is within the existing footprint of the existing structure.
4. Fence building, growing, rearing, producing, and harvesting of agricultural products in accordance with recognized standards of the *Farm Practices Protection Act* (Right to Farm) on lands upon which the Act applies.
5. Emergency procedures to prevent, control, or reduce erosion, or other immediate threats to life and property including:
 - a. emergency flood or protection works;
 - b. clearing of an obstruction from bridge, culvert, or drainage flow; repairs to bridges and safety fences; and
6. Notwithstanding Policy 5 above, emergency procedures to prevent, control, or reduce erosion, or other immediate threats to life and property must be reported to the RDN and applicable provincial ministry immediately to secure an exemption under this section.

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7. The removal of hazardous trees, in accordance with the recommendations contained in a report prepared by an Arbourist or other qualified professional, that present an immediate danger to the safety of persons or are likely to damage public or private property.
 8. A property owner may construct a single trail within this Development Permit Area, subject to the following:
 - a. the trail provides the most direct route of feasible passage through the Development Permit Area;
 - b. sensitive habitat will not be impacted by the presence of the trail;
 - c. the ground must be stable, i.e. erodible stream banks or other erosion prone areas must be avoided;
 - d. no motorized vehicles are permitted;
 - e. the trail is maximum 1.5 metres in width;
 - f. no trees, which are greater than 5 metres in height and 10 centimetres in diameter, are to be removed; limbing, pruning and topping of trees should be done instead; and,
 - g. the trail's surface must be pervious.
 9. Wildlife habitat restoration or enhancement works that have obtained the required Provincial and Federal approvals. Any activity within watercourse that has or may have an impact on a stream requires compliance with Provincial and Federal legislation and notification to the Regional District of Nanaimo.
 10. The planting of trees, shrubs, or groundcovers for the purpose of enhancing the habitat values and/or soil stability within the Development Permit Area provided the planting is carried out in accordance with the guidelines provided in Stream Stewardship 1993, and Land Development Guidelines 1992, published by DFO and MOE, and "Develop With Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia", published by MOE, or any subsequent editions.
 11. The removal of invasive plants or noxious weeds on a small scale within the Development Permit Area including, but not limited to, giant hogweed, Scotch broom, Himalayan blackberry, morning glory, and purple loostrife provided such works are conducted in accordance with a vegetation management plan and measures are taken to avoid sediment or debris being discharged into the watercourse or onto the foreshore and the area is replanted immediately in accordance with "10" above.
 12. Works conducted and/or approved by the RDN, DFO, and/or MOE with respect to trail construction, stream enhancement, and fish and wildlife habitat restoration.
 13. Construction within the exterior walls of a principal building or structure.
 14. The maintenance of lawn and introduction of landscaping in previously disturbed areas, excluding retaining walls and anything that is considered a structure as defined by the

- current zoning bylaw provided that any newly introduced landscaping satisfies the criteria in exemption as stated above.
15. Except with respect to lands within the this Development Permit Area for the purpose of **aquifer protection**, an application for subdivision where the following criteria can be met:
- a) minimum lot sizes will be met exclusive of the Development Permit Area; and
 - b) no development activities including grading, clearing, trenching, or installation of pipes, relating to the creation of all parcels will occur within the Development Permit Area.
16. With respect to the lands designated within the Environmentally Sensitive Features Development Permit Area for the purpose of aquifer protection, a development permit shall not be required for the following:
- a. construction, renovation, repair, or addition to a single dwelling unit, duplex dwelling unit, or accessory residential buildings and structures;
 - b. the construction of a fence;
 - c. the subdivision of land where the application is limited to a lot line adjustment and no new parcels are proposed to be created;
 - d. the construction of a second dwelling unit on a property; or,
 - e. the subdivision of land where a maximum of three parcels, including the remainder (if applicable) are proposed to be created where the subject property does not have a development subclass of 'Heavy' nor a vulnerability class of 'High' or any combination of 'Heavy' or 'High' as identified on Map No. 2 – Environmentally Sensitive Features and Natural Hazard Areas of this Plan.

GUIDELINES:

General Guidelines

1. The location and characteristics of the environmentally sensitive features identified on Map No. 9 of this Plan are intended for convenience only. Ground truthing may be required to accurately determine the geographical location and characteristics of the features identified.
2. Where the possibility of an impact(s) exists, the RDN shall require the applicant to supply an assessment, prepared by a registered professional biologist or person with similar qualifications, and acting in their area of expertise, which inventories the existing environmentally sensitive feature(s) and assesses the environmental impact of the proposed development and prescribes appropriate recommendations for construction, mitigation, and protection of habitat, to the satisfaction of the RDN.

3. The Regional District of Nanaimo, as a condition of the issuance of a development permit, shall, where feasible require compliance with any or all conditions recommended in the report prepared by the Registered Professional Biologist.
4. Where the applicant's biologist or qualified professional recommends revegetation and/or enhancement works within the Development Permit Area or elsewhere on the subject property, the RDN shall require the applicant to submit a landscaping and security deposit equal to the total estimated costs of all materials and labour as determined by a landscape Architect or other qualified person to the satisfaction of the Regional District of Nanaimo.
5. Development or subdivision of land should be designed to:
 - a. replicate the function of a naturally vegetated watershed;
 - b. maintain the hydraulic regime of surface and groundwater and pre-development flow rates;
 - c. not interfere with groundwater recharge;
 - d. not introduce or remove materials where it would cause erosion of or the filling in of natural watercourses and/or wetlands.
6. The applicant will work with the RDN to consider possible variances to the land use and subdivision bylaw to minimize encroachment into the Development Permit Area.
7. If development or alteration of land is proposed within the Development Permit Area, it shall be located where it will cause the least impact on the environmentally sensitive features within the Development Permit Area. Notwithstanding, this policy, development shall only be supported in areas with environmentally sensitive features if the applicant can provide compelling reasons supported by a qualified professional's recommendation to support the request.
8. Where an applicant is proposing to disturb native vegetation within this Development Permit Area, the RDN shall require the applicant to supply a re-vegetation plan to the satisfaction of the Regional District of Nanaimo.
9. Construction at a time of year and using construction methods that minimize the impacts on the Development Permit Area shall be required.
10. In order to ensure that unnecessary encroachment does not occur within the Development Permit Area at the time of construction, permanent or temporary fencing measures may be required.
11. On parcels where development (including tree and vegetation removal) is proposed for an area with a slope of 30 percent or greater, the RDN may require the applicant to supply a report, prepared by a professional geotechnical engineer, indicating that slope stability will not be jeopardized and soil erosion and site mitigation measures can be implemented, to the satisfaction of the Regional District of Nanaimo.

12. All development proposals are subject to the requirements and procedures of the *Fish Protection Act* and the Riparian Areas Regulation.
13. Development applications shall generally comply with the environmental protection policies contained in Sections 2.1-2.8 of this Plan.
14. All development proposals should be designed in substantial compliance with the guidelines contained in the document: "Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia" as amended from time to time published in March 2006 by the Ministry of Environment.
15. The Regional District of Nanaimo may require a Section 219 covenant to be prepared at the applicant's expense and to the satisfaction of the RDN, specifying areas that must remain free from development and/or protecting an environmentally sensitive feature.
16. Rain water should be managed on site and no increase or changes to off site rain water flows should be supported.
17. The use of rain gardens, vegetated swales, a reduction in impervious surfaces, and other technologies for managing rain water on site should be included in all development proposals considered in this Development Permit Area.
18. The Regional District of Nanaimo shall consider the site-specific natural features, ecological processes that support fish, riparian function, wildlife ecology, and unique ecosystems. These include, but are not limited to:
 - a. maintenance of an effective visual and sound (natural vegetated) buffer around eagle and heron nesting sites or the sensitive ecosystem;
 - b. vegetation, trees, snags, and root systems;
 - c. rare and uncommon species and plant communities;
 - d. soils and soil conditions (moisture, nutrients and permeability);
 - e. bird and other wildlife and their habitats, such as nesting and breeding areas;
 - f. maintenance of linkages with adjacent sensitive ecosystems to minimize fragmentation;
 - g. topography and relative orientation of features on neighbouring properties;
 - h. wildlife habitat, including but not limited to wildlife breeding areas as well as nesting and perch trees;
 - i. appropriate timing of construction; and,
 - j. maintenance of linkages with adjacent sensitive ecosystems to minimize fragmentation.

19. Best practice fire mitigation techniques shall be considered where they minimize impacts on the environmentally sensitive features and ecological function within the Development Permit Area.

Guidelines specific to Coastal Areas and all Riparian Ecosystems

20. Where the possibility of an impact(s) exists, the Regional District of Nanaimo may require an applicant to supply a sediment and erosion control and/or rain water management plan, complete with recommendations for implementation, prepared by a registered professional engineer or person with similar qualifications, to the satisfaction of the Regional District of Nanaimo.
21. For applications where a shoreline stabilization device is being proposed, the RDN shall require the applicant to supply a report from a registered professional engineer assessing the risk of erosion on the subject property and the suitability of the subject property for a shoreline stabilization device. The report must also include an analysis of the impacts on adjacent properties as a result of installing or not installing the proposed shoreline stabilization device. Shoreline stabilization devices are not supported on lots that are not subject to active erosion.
22. The use of marine retaining walls and other "hard" surfaces such as seawalls, concrete groynes, headlands, gabions, and rip rap shall only be supported where a qualified professional has determined that "soft" approaches to shoreline stabilization such as vegetation enhancement, upland drainage control, biotechnical measures, beach enhancement, anchor trees, and gravel placement are not appropriate given site specific conditions.
23. Shoreline stabilization measures near the natural boundary that obstruct pedestrian access to and along public beaches or foreshore areas shall be opposed by the RDN.
24. Where it is determined by a qualified professional that a retaining wall is required, it should be located upland of the natural boundary and should, where feasible, meet the applicable minimum required zoning setbacks. The placement of retaining walls to reclaim land lost to erosion shall not be supported.

Guidelines specific to Aquifer Protection

25. The use or disposal of substances or contaminants that may be harmful to area aquifers shall be discouraged and wherever practical, steps shall be taken to ensure the proper disposal of such contaminants.
26. Where the possibility of an impact(s) exists, the RDN shall require the applicant to supply a report from a registered professional which must provide the following:
 - i. an assessment of the characteristics of the aquifer and its ability to accommodate the additional groundwater demand proposed by the development which must include the anticipated demand based on the development potential of the subject property(s) based on the current zoning, including potential impacts on adjacent properties;

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- ii. a statement backed by a professional assessment that the proposed development will not have a negative impact on the aquifer; and,
 - iii. recommendations on what measures are required to ensure the aquifer is protected.
27. Developments that are found to pose detrimental impacts on either the quality or quantity of groundwater shall not be supported;
28. For developments that are proposed to be serviced by a community water system, written confirmation of sufficient quantity and quality of potable water will be required from the water service provider.
29. Where the possibility of an impact(s) exists, the RDN may require an applicant to submit a rain water management plan prepared by a professional engineer which must ensure that the discharge of any treated effluent and rain water shall not negatively impact water quality. Treated effluent and diverted rain water collection and discharge systems on commercial, industrial, multi-residential, and other developments where there is potential for silt and petroleum-based contaminants to enter a watercourse or infiltrate into the ground will require the provision for grease, oil, and sedimentation removal facilities and the on-going maintenance of these facilities.

10.3 Hazard Lands

Purpose:

To protect development from hazardous conditions.

To protect the natural environment, its ecosystems, and biological diversity.

Area:

This Development Permit Area is applicable to flood prone lands and those lands within the Plan Area with a natural grade greater than 30 percent as generally identified on Map No. 9 (Environmentally Sensitive Features and Hazard Lands Development Permit Areas). With respect to steep slopes west of the Little Qualicum River, this Development Permit Area shall apply to lands within 15 metres from the top of the bank where the natural grade of the slope is greater than 30 percent.

Justification:

Hazardous lands include steep slopes adjacent to watercourses and along the coastal shoreline and flood prone lands. The subdivision, development of land, or removal of vegetation in these areas may destabilize the area, cause environmental damage, and pose potential for loss of life and property. In response to these risks and conditions, the OCP establishes a Hazard Lands Development Permit Area for protecting life, property and the environment from hazardous conditions.