

16.3 Environmentally Sensitive Development Permit Area No. 2

Purpose

The Environmentally Sensitive Development Permit Areas are designated under Section 919.1 (1)(a) of the Local Government Act for protection of the natural environment.

Area

The Environmentally Sensitive Development Permit Areas are shown as Development Permit Area No. 2 on Schedule D.

Justification

The objective of this Development Permit Area designation is to protect environmentally sensitive areas from development. Four general areas of environmental concern are identified:

- *environmentally sensitive lands in the Gospel Rock area, including forested lands, wildlife corridors and wetlands*
- *sites of possible petroleum contamination on the shoreline*
- *environmentally sensitive lands related to riparian areas by creeks*
- *environmentally sensitive marine shore areas and Eelgrass beds*

Research and analysis supporting the identification environmentally sensitive and contaminated areas was initially conducted by Thurber Engineering Ltd. in a report entitled "Town of Gibsons Official Community Plan Reconnaissance Study of Geotechnical Hazards and Biophysical Environment" (1991). Further supporting information with regard to the sensitivity the Gospel Rock Area is presented in a report entitled "Gospel Rock Neighbourhood Plan Area: Ecosystem and Wildlife Area Use Classification, prepared by Paul van Poppelen (2009). Analysis supporting the designation of water bodies and creeks was conducted in a background report entitled "Town of Gibsons Watercourse Classification," prepared by Whitehead Environmental Consultants Ltd. (2005).

Douglas Fir – Arbutus Coastal Dryland Forest

This environmentally sensitive area is designated due to the unique forest type and habitat values in the area. The natural coastal dryland forest found in steep, exposed areas with poor, rocky soils comprises only 0.3 percent of the land area of British Columbia.

As detailed in the Thurber report, less than five percent of mature dryland forest remains undisturbed on the Sunshine Coast due to extreme development pressure. It is therefore recommended that the steeply sloped dryland forest in the Gospel Rock area be protected, and that residential development be confined to the mixed coniferous-deciduous forest landward of the approximate limit of the Douglas Fir-Arbutus Coastal Dryland Forest that has been logged. This Development Permit Area aims to protect the remaining forest.

Habitat Areas

The Thurber report notes that the Gospel Rock area contains an eagle nesting area, may provide alligator lizard habitat (although further studies are required to establish local abundance and distribution), and has specific scenic and cultural values. These habitats should be protected with any future development and connectivity should be maintained between these habitat areas and the Charman Creek ravine to the north.

Possible Contaminated Sites

Three sites along the Gibsons Harbour shorelines are identified on Schedule D where the Thurber Report or the Ministry of Environment have noted evidence of possible petroleum hydrocarbon contamination of soil and the marine environment. One site is the Shell Canada storage facility where there is potential of soil and groundwater contamination and/or leaching into the foreshore. The second site is the Hyak Marine Services (Esso) facility where there is apparent petroleum product discharge into the marine tidal zone. The third site is the marine repair facility upland of water lot L.6030, where there is evidence of metal contamination. These areas of environmental concern require detailed review prior to any future re-development. Also, the site of the Harbour Authority has been identified as a site that contains contaminated sediments.

Riparian Areas along Creeks

The riparian area associated with creeks is designated as environmentally sensitive as the area which provides essential habitat and corridors for fish, birds, and other wildlife. The riparian areas of creeks also serve a role in natural drainage, storage and purification. Their existence in a relatively undisturbed state holds the balance of maintaining a healthy, sustainable waterway. Disturbance of the riparian area may jeopardize a very delicate ecosystem and, in addition, may lead to potential land erosion, slope instability, and flood risk. This Development Permit Area aims to restrict activities within the riparian area for the purposes of habitat protection and the maintaining the long term health of the waterway. This Development Permit Area is supported by information contained in the Sunshine Coast Habitat Atlas and within the Town of Gibsons Watercourse Classification.

Marine Shore Areas

The marine shore area is considered an integral component of the marine environment and essential fish habitat. The marine shore area includes the nearshore subtidal seabed, intertidal foreshore, and adjacent backshore areas (as well as upland vegetation on the backshore). These areas are designated as Development Permit Areas for the protection of significant fish habitat. Disturbance and alteration of foreshore, nearshore areas or adjacent backshore upland (including removal of upland vegetation) can result in significant adverse environmental effects. To protect these areas and the associated fish habitat from the potential adverse effects of development, an appropriate setback/leave strip along the shore is supported. The primary objective of the setback/leave strip is the conservation and protection of the environmental values of the marine environment, including adjacent backshore upland vegetation. Accordingly, setback/ leave strips should be left undisturbed and naturally vegetated and should be maintained in perpetuity.

Eelgrass Beds

Eelgrass beds are sensitive, near shore habitats that provide food and shelter for a wide range of marine species. These habitats are considered essential for maintaining the health of the marine ecosystem. Eelgrass beds are sensitive to shading and disturbance and therefore, are included in this Development Permit Area so any development in proximity to the mapped eelgrass beds can be controlled and damage mitigated or avoided.

Guidelines

Development Permits issued in the Environmentally Sensitive area shall be in accordance with the following guidelines:

Professional Qualifications

Professional environmental studies submitted in support of applications for Development Permits shall be prepared by a Qualified Environmental Professional. A Qualified Environmental Professional is an applied scientist or technologist, acting alone or together with another qualified environmental professional. He or she must be registered and in good standing in British Columbia with an appropriate professional organization, acting under that association's code of ethics and subject to disciplinary action by that association. The applicable professional may be a professional Biologist, Agrologist, Forester, Geoscientist, Engineer, or Technologist. To be able to certify that they are qualified to conduct the assessment methodology, the individual's area of expertise must be recognized 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 Qualified Environmental Professional only for that portion of the assessment that is within their area of expertise.

Gospel Rock Area – Douglas Fir Arbutus Coastal Dryland Forest

No alteration of the sensitive area will be permitted unless demonstrated through professional environmental studies that it would not adversely affect the natural environment. Any residential development should be confined to the mixed coniferous-deciduous forest landward of the approximate limit of the Douglas Fir Forest as indicated generally on Schedule D and the areas not designated Greenbelt on Schedule B: Land Use Plan.

Development should be directed away from wetland areas and areas necessary to maintain wildlife connectivity between habitat areas.

No buildings, structures, or uses permitted on the land shall be sited within the following areas:

- *areas with grades steeper than 25 percent in order to protect soil cover and drainage patterns*
- *the area within 100 m of the eagle nest shown on Schedule D*
- *the natural clearings shown on Schedule D*

Any other development within the identified Gospel Rock sensitive areas shall be designed to:

- *avoid the removal/modification of native vegetation*
- *avoid the introduction of non-native invasive vegetation*
- *avoid impacts to the protected root zones of trees*
- *avoid disturbance to wildlife and habitat*
- *minimize the use of fill*
- *minimize soil disturbance*
- *minimize blasting*
- *minimize changes in hydrology*
- *avoid run-off of sediments and construction-related contaminants*

The following measures may be required to prevent and mitigate any damage to the environmentally-sensitive area:

- *temporary or permanent fencing*
- *environmental monitoring during construction*
- *demarcation of wildlife corridors, wildlife trees, and significant trees*
- *restricting development activities during sensitive life-cycle times*
- *registration of a natural state covenant*

Possible Contaminated Sites

Prior to any new development, re-development or use of the land and foreshore areas indicated on Schedule D, detailed environmental assessments are required to specifically identify the extent and type of potential contamination and recommend actions for site remediation. The assessments are to be done by a Qualified Environmental Professional with experience in site contamination, and meet the requirements of the Ministry of Environment, Fisheries and Oceans Canada and any other relevant agencies.

Riparian Areas

In response to the Province's Riparian Area Regulations, the Town of Gibsons has established an Environmentally Sensitive Development Permit Area for the "Riparian Assessment Areas" as defined in the Riparian Area Regulations. A 30 m setback area from the top of the creek banks has been identified on Schedule D.

No land clearing or development is permitted in a Riparian Assessment Area unless a Qualified Environmental Professional carries out an assessment and certifies in the assessment report for that proposal that he or she is qualified to carry out the assessment, that the assessment methods have been followed, and provides in the their professional opinion that the criteria listed in the Riparian Area Regulations have been fulfilled.

In addition, the following measures may be required to prevent and mitigate any damage to the riparian area:

- *temporary or permanent fencing*
- *environmental monitoring during construction*
- *restricting development activities during sensitive life-cycle times*
- *registration of a natural state covenant*

Re-vegetation and restoration may be required as mitigation or compensation regardless of when the damage or degradation occurred.

Marine Shore Areas

Prior to any new development, redevelopment or use of the marine area within the Marine Shore Area as indicated in Schedule D, an environmental assessment is required. The environmental assessment shall be conducted by a Qualified Environmental Professional with experience in assessing environmental impacts on fish habitat with knowledge of Fisheries and Oceans guidelines for the protection of the marine environments. The environmental assessment shall identify:

- *the extent and type of potential impact on fish habitat*
- *the circumstances and conditions under which development permits may be issued to manage development that potentially has a significant impact on the natural marine shore and fish habitat*
- *the measures of remediation required to minimize the impacts*

In addition, the following measures may be required to prevent and mitigate any damage to the riparian area:

- *temporary or permanent fencing*
- *environmental monitoring during construction*
- *restricting development activities during sensitive life-cycle times*
- *registration of a natural state covenant*

Re-vegetation and restoration may be required as mitigation or compensation regardless of when the damage or degradation occurred.

Eelgrass Beds

Prior to any new development, redevelopment or use of the marine area within the Eelgrass Area as indicated in

Schedule D, an environmental assessment is required. The environmental assessment shall be conducted by a Qualified Environmental Professional with experience in assessing environmental impacts on fish habitat with knowledge of Fisheries and Oceans guidelines for the protection of the marine environments. The environmental assessment shall identify:

- *the extent and type of potential impact on fish habitat*
- *the circumstances and conditions under which development permits may be issued to manage development that potentially has a significant impact on the ocean bed, eelgrass and fish habitat*
- *the measures of remediation required to avoid or minimize the impacts*