



Section 4: The Natural Environment

Many residents of Electoral Area 'F' are drawn to the area for its green space, water resources and natural features. These features all contribute to the character and livability of the Plan Area. Throughout the public consultation process, residents emphasized the importance of protecting the natural environment, particularly from forms of land use and development that could impact the environmental well being of the Area.

It is recognized that certain matters are beyond the jurisdiction of the Regional District of Nanaimo. The Plan's objectives and policies relating to these matters are intended to serve as indicators of community preference, and to guide and assist senior levels of government in their planning and decision-making.



Environmentally Sensitive Areas

Environmentally sensitive areas are natural features in the Plan Area that are susceptible to damage from use or development. Sensitive areas include watercourses, wetlands, areas of rare plant species, woodlands, steep slopes and fish and wildlife habitats. Groundwater is also included as a feature sensitive to contamination, although the extent of groundwater resources is not fully mapped in the Plan Area. Archaeological sites, historic sites, wildlife areas and areas with scientific significance may also be considered as environmentally significant areas, but these sites and areas are not designated in this Plan. In addition, no lands subject to hazardous conditions have been identified within the Plan Area.

In this Official Community Plan, individual and community stewardship are emphasised as the primary means of protecting environmentally sensitive areas. That is, residents in the Plan Area accept the responsibility of protecting natural features through personal and community efforts.

Objectives

1. Protect the natural environment.
2. Encourage and support community stewardship of environmentally sensitive areas.
3. Promote soil conservation.
4. Manage development to minimize the potential for personal injury or loss of property.

General Policies

1. Support economic activities that are compatible with the rural nature of Electoral Area 'F' (e.g. fisheries, forestry, agriculture and eco-tourism).
2. Support tourism and recreation with an interconnected system of parks and trails.
3. Support the provision of setbacks, screening, vegetative buffers and berms to separate developed lands from natural features.
4. Encourage senior governments to consider wildlife habitat and important corridors and linkages in development approvals beyond the jurisdiction of the RDN.
5. Discourage the filling and draining of wetlands.
6. Encourage safe storage of industrial equipment, materials and chemicals.



Surface and Groundwater Systems

The watersheds in the in Area 'F' are a short run distance from the mountain to the sea (average distance less than 20 kilometres) and steep grades carry water rapidly to the Georgia Strait. Activities such as land clearing, development, hard surfacing, clear cut logging ditching for roads and draining wetlands increases the intensity of this run-off water. Recharge areas, such as wetlands, are also impacted by development. As recharge areas are eliminated (that is, as wetlands are filled in or water is diverted), water production from local wells can be reduced. This can lead to a lower volume of clean, uncontaminated water in summer months or dry periods throughout the year.

Groundwater resources can be contaminated by heavy runoff, failed or improperly maintained septic systems, agricultural operations, chemicals from commercial or industrial operations, and other non-point sources. The siting of higher density residential and industrial development in areas sensitive to contamination should only proceed with wastewater treatment mitigation.

Any deterioration to the natural supply of clean, fresh water will have a detrimental effect on residential well water, tourism, agriculture, commercial and recreational fishing, indigenous fish species reproduction, shellfish harvesting and other water related activities. Land use and development must be carefully planned to minimize impacts on groundwater and maintain the quality and quantity of surface water in Electoral Area 'F'.

Objectives

1. Preserve and protect water quality and quantity.
2. Encourage the RDN to improve mapping of watercourses and wetlands.

General Policies

1. Storm water management through the use and construction of settlement ponds, structured wetlands, dugouts and other measures is supported.
2. The restoration of streams, rivers, wetlands and adjacent riparian areas through stream protection and repair programs is encouraged in this Plan.
3. Measures to minimize human or animal waste, pesticides, herbicides, chemicals or industrial waste from adversely effecting water quality are supported.
4. Road construction through environmentally sensitive areas is discouraged.
5. The relocation of natural watercourses shall not be supported by this Plan.
6. The protection of environmentally sensitive areas shall be supported through the following means:
 - a. Dedication or purchase of environmental sensitive areas by the RDN;
 - b. Dedication or purchase by a private land trust or nature conservatory for conservation purposes;
 - c. Registration of a restrictive covenant for conservation purposes with the RDN, the province, and/or a non-governmental organization eligible to hold conservation covenants; and
 - d. Creative development proposals, which enhance watercourse protection.

Freshwater and Fish Habitat Development Permit Area¹

The Freshwater and Fish Habitat Development Permit Area is designated on Map No. 3 of this Official Community Plan, and applies to the riparian assessment areas of mapped and unmapped streams subject to the Riparian Areas Regulation (RAR) of the Riparian Areas Protection Act, as well as all other mapped lakes, wetlands, ponds and watercourses not subject to the RAR. The zoning bylaw sets out the guidelines of the Freshwater and Fish Habitat Development Permit Area.

¹ Bylaw No. 1152.05, adopted December 4, 2018

² Bylaw No. 1152.03 adopted January 23, 2007