Section II

PROTECTION OF THE NATURAL ENVIRONMENT

...residents of Nanoose Bay place a high priority on the preservation of the natural environment including important ecosystems, the coastal lands, green spaces, viewscapes and beach accesses, and on the protection of indigenous species and local wildlife.

In recognition of the value the community places on protecting the natural environment of Nanoose Bay, the Nanoose Bay Official Community Plan recognizes that the environment is the broadest and most critical of issues considered in this OCP.

The context of this section is 'planning with our environment'; this infers a respect for, and acknowledgment of the limitations imposed by our natural resources and the need to plan for sustainability.

The environmental sensitivities of Nanoose Bay (as part of a larger region) was recognized by the United **Nations** Educational, Scientific, and Cultural (UNESCO) Organization's Man and Biosphere (MAB) Programme with the designation of the Mount Arrowsmith Biosphere Reserve in November, 2000.

The environment is the primary determinant of growth and development. It determines ultimate build outs for a Plan Area and if the chosen standards of living are sustainable. The environment is not a commodity that can be bargained with; it is

the elements (infinite supply) that form our essential life support system.

It is essential that development within the Plan Area respects the natural environment and recognizes the inter-connectedness of natural systems and development.

In addition, it is acknowledged that, along with the protection afforded through local government bylaws, the protection of environmentally sensitive features is also within the jurisdiction of provincial and federal agencies.

2.1 ENVIRONMENTALLY SENSITIVE AREAS

Environmentally sensitive areas or sensitive ecosystems are areas of land and water that are sensitive to human presence or land development. They are features, areas, or habitats that have been identified as vulnerable and worthy of a higher level of protection. An inventory of sensitive ecosystems on east Vancouver Island was undertaken by the Canadian Wildlife Service in partnership with other agencies. Some of these ecosystems as well as others have been incorporated into the maps and policies found within this OCP.

Objectives:

- 1. *Identify, protect* and *conserve* environmentally sensitive areas within the natural environment.
- 2. *Promote* and *coordinate* the pooling of resources and knowledge to protect environmentally sensitive areas.
- 3. *Support* site specific evaluations of properties with environmentally sensitive features when the development of these properties is proposed by the landowner.
- 4. *Encourage* and *support* community stewardship of environmentally sensitive areas.

Policies:

- 1. An Inventory of Natural Environment Features is shown on Appendix Map No. 1.
- 2. Environmentally sensitive areas sensitive ecosystems include nesting and perch trees, heron roosts, watercourses and riparian habitats, wetlands, and the seven sensitive ecosystems as identified in the Sensitive Ecosystem Inventory: East Vancouver Island and Gulf Islands 1993-1997 including Woodland, Coastal Bluff, Terrestrial Herbaceous, Wetland, Riparian, Sparsely Vegetated, and Older Forests, as well as two 'other important ecosystems' Older Second Growth Forest and Seasonally Flooded Agricultural Field.
- 3. The protection of Woodland, Coastal Bluff (for lands that are subdividable), Terrestrial Herbaceous, Wetland, and Sparsely Vegetated is supported through the establishment of Development Permit Areas as shown on Map No. 6.
- 4. The protection of nest trees (for eagles, peregrine falcons, gyrfalcons, ospreys, heron and owls) is supported as per provincial regulations and as regulated

- by the Development Permit Area designated¹ in this OCP.
- 5. Stream protection and enhancement programs are also supported as per provincial regulations and as regulated by the Development Permit Area designated² in this OCP.
- 6. Efforts to improve the quality and accuracy of the inventory of environmentally sensitive features or sensitive ecosystems are supported.
- 7. This OCP supports working with landowners and developers on the protection of environmentally sensitive areas or sensitive ecosystems though the provision of information and education programs.
- 8. Community stewardship and care of environmentally sensitive areas shall be encouraged by supporting initiatives to educate the community about the importance of protecting these areas.
- 9. Applications to change the zoning of land, or subdivide land, adjacent to a watercourse or containing a sensitive ecosystem shall only be supported if reasonable and acceptable evidence is provided that the proposed development will not adversely affect the environmentally sensitive area, as evaluated according to the following criteria:
 - a) the impact on soil stability, natural vegetation or ground cover;
 - b) the impact on wildlife and fisheries sensitive areas;
 - c) the impact on the quality and quantity of groundwater and surface water;
 - d) the impact on environmentally sensitive areas or sensitive ecosystems on adjacent land; and

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¹ Bylaw 1400.05, adopted December 4, 2018

² Bylaw 1400.05, adopted December 4, 2018

- e) the possible protection of environmentally sensitive areas or sensitive ecosystems will be considered through the following means:
 - i. dedication and/or purchase of the environmentally sensitive area for a park;
 - ii. dedication to, and/ or purchase by, a private land trust for conservation purposes;
 - iii. the registration of restrictive covenants for conservation purposes (preservation of lands or habitats for future generations) with the RDN, the Province, and/or non-governmental organization eligible to hold conservation covenants supported; and
 - iv. alternative development practices including clustering, density averaging and where appropriate, covenant protection and other methods.

2.2 COASTAL ZONE³

The coastal zone includes recreational beaches, productive shellfish aquaculture areas, sheltered bays, rocky coastlines, and sensitive estuaries. It represents the interface between the ocean and land, a fragile component of the natural environment.

The care and management of the coastal zone is maintained under the jurisdiction of a number of provincial and federal agencies. The province controls foreshore lands below the natural boundary and is responsible for some environmental protection initiatives as well as the administration and allocation of shellfish leases. The province also has jurisdiction over beach access rights of way. The federal government maintains a role in protecting fish habitat, fisheries management, and has an interest in the

Nanoose Harbour due to the location of the Department of National Defense base. The RDN maintains a role, as well, through jurisdiction over the use of land and water surfaces through zoning.

The coastal zone is home to a variety of marine and terrestrial wildlife. It is also a place of tourism, human habitation and industry. Damage to the coastal zone may result from excessive or inappropriate development and/or natural hazards. Examples of these hazards are coastal storm surge, coastal and river flooding, erosion and over time sea level rise. This is a critical time to identify ways to mitigate and adapt to coastal hazards by prioritizing the protection of property, people ecological function in the Plan Area.

Objectives:

- 1. *Recognize* the importance of the coastal zone to the community.
- 2. Facilitate public access provisions along the foreshore of the coastal zone.
- 3. Support the development of shellfish aquaculture in Nanoose Bay in a manner that does not conflict with residential and recreational uses of the coastal zone and harbour.
- 4. Advocate cooperation and coordination among agencies responsible for the use and management of marine, foreshore and upland areas to ensure comprehensive management of the coastal zone.
- 5. *Reduce* the risk of climate impacts on people, property and ecological function.

Policies:

- 1. The province shall be encouraged to develop a coastal resource inventory to document the nature, importance, and sensitivity of the foreshore.
- 2. Community stewardship and care of the coastal zone shall be encouraged by

³ Bylaw 1400.06, adopted October 8, 2024

- supporting initiatives to educate the community about the importance of protecting these areas.
- 3. Where an application for a commercial lease within Nanoose Harbour is referred to the RDN by a senior government with the authority to approve such applications, the Regional District shall recommend that the government consider the impact of all lease agreements and approvals in Nanoose Harbour on the coastal zone in this area prior to the approval of additional commercial leases.
- 4. Where the construction of a seawall, or other structures over 1 metre in height are proposed, the Regional District shall work to ensure that such works are properly constructed as part of the building permit and/or the development variance permit process.
- 5. Direct development away from natural hazard areas where possible, and where development does occur in or near a natural hazard area, ensure appropriate measures are taken to mitigate the impacts.
- 6. The Regional District will gather and communicate information about coastal hazards to help develop a better understanding of the long term impacts and consider implementing measures to mitigate and adapt to these impacts.

2.3 WATER MANAGEMENT

The natural environment of Nanoose Bay includes an extensive and complex water system. The water system includes surface water (streams, lakes, swamps, and wetlands) and groundwater resources.

Groundwater resources are particularly important to residents as the majority of users rely on water from area aquifers for both domestic and agricultural water supplies. Groundwater is part of a broader

hydrological cycle. What happens on the land surface has a direct impact on the quantity and quality of water below the surface of the ground. Quantity is reduced when water is withdrawn at a faster rate than it is replenished or when it is diverted through surface water bodies. Quality is compromised by the introduction or presence of natural or synthetic contaminants into the system. As both quality and quantity of surface and groundwater are impacted by the manner in which land is used, land use development must be carefully planned in order to minimize impacts on groundwater resources and maintain hydraulic regimes.

Many demands are placed upon water resources. These demands include human and agricultural needs, fisheries and wildlife requirements and recreational pursuits. The continued use of groundwater for domestic consumption is anticipated over the long term. Consequently it is critical to achieve a greater understanding of groundwater resources. The implementation of groundwater protection measures is also prudent.

It is also important that accurate and detailed information on community wells is recorded and considered as part of any application for rezoning or OCP amendment.

Objectives:

- 1. Ensure that adequate quantity and quality of fresh water is available for the uses and development densities as stated in this Official Community Plan.
- 2. Acknowledge that fresh water is an essential element in our life support system, and because of its finite supply, should be a determiner of further growth and development.
- 3. *Complete* an inventory and assessment of water resources that recognizes the

- importance of water and its finite supply.
- 4. *Preserve* the quality and quantity of the freshwater supply for domestic, agricultural, fisheries and wildlife needs.
- 5. *Recognize* the importance of surface water in maintaining the quantity and quality of freshwater supply.
- 6. Encourage the long-term conservation and enhancement of water quality and quantity, including the impact of development on ground water recharge and surface water protection.
- 7. Recognize the importance of groundwater notwithstanding the development of a surface water source.

Policies:

- 1. The protection and conservation of water resources and improvements to water quality is a high priority of the Nanoose Bay community and the RDN in the determination of land use decisions and other policies affecting surface and groundwaters.
- 2. Senior governments shall be encouraged to assist the Regional District in monitoring groundwater resources through a formal request from the RDN to the province to undertake a comprehensive water management plan.
- 3. Senior governments shall be encouraged to adopt groundwater protection legislation.
- 4. Land use and servicing policies may be amended based on new information about groundwater resources and new legislation for the protection of groundwater resources.
- 5. Community stewardship of groundwater and surface water resources shall be encouraged by supporting projects and implementing local actions to educate the community

- about the importance of groundwater resources and methods of protecting groundwater resources.
- 6. Zoning amendment proposals that have the potential to impact the quantity or quality of water resources shall be accompanied by a hydrological impact assessment report. The report shall be certified by a professional engineer with experience in hydrologic analyses, and shall address the long-term impact of the amendment development zoning proposal surface on the groundwater resources of the watershed and adjacent properties and aquifers. The amendment proposal must also ensure that impact is not made on viable fish habitat and the receiving waters, including channel stability and flow maintenance.
- 7. Where practical, residents in Nanoose Bay are encouraged to consider the purchase of low-flow appliances for domestic uses to contribute to water protection and conservation.
- 8. The Approving Officer shall be requested to require that subdivisions be designed to protect water resources by:
 - a) maintaining the hydraulic regime of streams;
 - b) encouraging retention and recharge where possible; and
 - c) preventing the intrusion of erosion material into surface water and maintaining levels of groundwater recharge.