12.0 Development Permit Areas

A Development Permit Area (DPA) is a set development guidelines pertaining to a specific area as specified by the OCP. The authority for local governments to establish DPA's is set out in Sections 919.1 and 920 of the *Local Government* Act. A DPA is perhaps the most important tool used by Local governments to ensure that the potential impacts of development are identified and addressed. This OCP relies on the use of DPA's as the primary tool



which will assist the community in working towards achieving its vision and ensuring that future development is consistent with the Sustainability Principles, goals, objectives, and policies of this plan.

Development applications within DPA's are reviewed to ensure that the proposal is consistent with the DPA Guidelines found in Bylaw 500¹. In some cases, a report from a biologist, engineer, or other professional may be required to assist staff in evaluating an application.

A common misconception about DPA's is that they are setbacks or "no-go" buffer zones. Development may occur within a DPA provided the proposal satisfies the DPA Guidelines. In addition, certain activities may be permitted within a DPA without a development permit as specified in Bylaw 500 for² each DPA.

This section of the OCP identifies those areas where a development permit may be required, prior to the commencement of subdivision, development, redevelopment, construction, or land alteration on a property, pursuant to the *Local Government Act*. The designation DPA's is consistent with the strategic goals and actions of the RDN 2009-2012 Strategic Plan, the goals and objectives of the RGS, the Sustainability Principles, Community Goals, and is required to achieve the Community Vision.

The landscaping and screening requirements of the DPA Guidelines³ may not be consistent with 'RDN Land Use and Subdivision Bylaw No. 500, 1987'. Therefore, the RDN should consider amending Bylaw No. 500 to bring it in to conformity with the DPA Guidelines⁴. If inconsistency is found between Bylaw 500 and the DPA's Guidelines of this plan with respect to landscaping and screening, the DPA Guidelines⁵ shall prevail and a variance to Bylaw No. 500 may be required.

⁵ Bylaw 1620.05, adopted December 4, 2018



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¹ Bylaw 1620.05, adopted December 4, 2018

² Bylaw 1620.05, adopted December 4, 2018

³ Bylaw 1620.05, adopted December 4, 2018

⁴ Bylaw 1620.05, adopted December 4, 2018

Section 12.0 helps achieve the Community Vision by contributing towards community goals 4, 6, 7, 11, 12, 14, and 15. Please refer to Section 3.3 for a list of community goals.

12.1 Sensitive Ecosystem Development Permit Area¹

DESIGNATION²:

The Sensitive Ecosystems Development Permit Area is shown on Map No. 9 and applies to the following:

- all parcels containing the following sensitive ecosystems mapped in the Provincial Sensitive Ecosystem Inventory: 'coastal bluff', 'terrestrial herbaceous', and 'older forest' as mapped in the Provincial Sensitive Ecosystem Inventory; and
- known occurrences of the following rare and endangered species as mapped by the Conservation Data Centre: Propertius Duskywing (butterfly) and Vesper Sparrow.

AUTHORITY:

The Sensitive Ecosystems Development Permit Area is designated a development permit area for the protection of the natural environment, its ecosystems and biological diversity pursuant to Section 488(1)(a) of the *Local Government Act*.

JUSTIFICATION:

Increasing development pressure and environmental awareness, as well as the RGS goal of environmental protection has led to the need for the protection of the Plan Area's most sensitive environmentally significant features including components of the Coastal Douglas Fir Ecosystem, rare species, and other environmentally sensitive features to ensure their continued survival and enjoyment for generations to come.

The objective of the development permit area is to minimize the impacts of developments on environmentally sensitive features, ecosystems or habitat.

12.2 Freshwater and Fish Habitat Development Permit Area³

DESIGNATION

The Freshwater and Fish Habitat Development Permit Area is shown on Map No. 9, 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. Specifically, the Development Permit Area is defined as follows:

- 1. All mapped and unmapped riparian assessment areas as defined in the RAR as follows:
 - a) for a stream, a 30 metre strip on both sides of the stream measured from the high water mark;

³ Bylaw 1620.05, adopted December 4, 2018



¹ Bylaw 1620.05, adopted December 4, 2018

² Bylaw 1620.05, adopted December 4, 2018

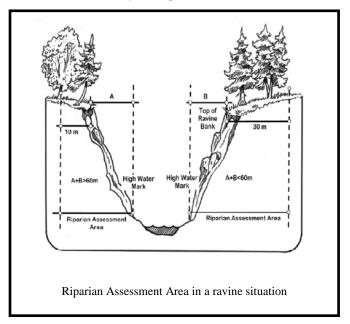
- b) for a ravine less than 60 metres wide, a strip on both sides of the stream measured from the high water mark to a point that is 30 metres beyond the top of the ravine bank; and
- c) for a ravine 60 metres wide or greater, a strip on both sides of the stream measured from the high water mark to a point that is 10 metres beyond the top of the ravine bank.
- 2. All mapped watercourses, lakes, wetlands, and ponds, that are not subject to the RAR; 15 metres as measured from the natural boundary or top of ravine bank, whichever is

greater. This includes estuarine areas (areas of tidal influence) of all watercourses and streams. For clarity, in estuarine areas the Marine Coast Development Permit Area also applies.

The following definitions are used for the purpose of defining the development permit area as above:

'ravine' means a narrow, steep-sided valley that is commonly eroded by running water and has a slope grade greater than 3:1.

'stream' includes any of the following that provides fish habitat:



- (a) a watercourse, whether it usually contains water or not;
- (b) a pond, lake, river, creek or brook; and
- (c) a ditch, spring or wetland that is connected by surface flow to something referred to in paragraph (a) or (b).

'top of the 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.

AUTHORITY

The Freshwater and Fish Habitat Development Permit Area is designated a development permit area for the protection of the natural environment, its ecosystems and biological diversity, and protection of development from hazardous conditions pursuant to Section 488(1)(a) and (b) of the *Local Government Act*.

JUSTIFICATION

Freshwater and riparian ecosystems perform a number of valuable services to humans, plants and animals alike. They support a diversity of plants and animals, provide important refuges and migration routes for birds and wildlife, and support fish life processes. Vegetation in riparian areas moderates the volume and rate of water flowing through the watershed contributing to effective





rainwater management and stabilizes stream banks by holding soil in place. Plant root systems enhance the soil's ability to absorb water by making it more porous. This allows water to be stored and released slowly into the watercourse, reducing erosion and flooding. Soils also filter impurities and sediment from runoff water, improving water quality in the stream channel.

Riparian vegetation provides food and shelter for fish. Shade from trees within the riparian area regulates water temperatures within the stream, which is critical for salmon, trout and other fish species that need cool water to survive. Logs and other woody debris fall into streams from the riparian area, influencing stream channel morphology, dissipating the stream's natural erosive energy and providing habitat for a diverse range of species. Erosion of banks and steep slopes can also pose a hazard to development, and maintaining and enhancing natural features and vegetation and siting buildings and structure appropriately, can reduce this hazard.

Land use practices including land clearing, road building, construction of buildings and structures, and location of wastewater disposal systems in or near riparian areas can jeopardize these habitats and water quality. Protection of riparian vegetation and watercourses is therefore necessary to protect the natural environment, ecosystems and biological diversity of the Plan Area. Land use practices can also change the hydraulic flow of a stream and create or exacerbate a flooding hazard.

Furthermore, the Province of British Columbia's Riparian Areas Protection Act, requires that local governments establish regulations to protect riparian areas, and not allow development to proceed until the requirements of the RAR are met.

The objectives of this development permit area are:

- 1. To protect freshwater ecosystems to maintain their natural habitat and environmental quality.
- 2. To restore freshwater ecosystems to improve their natural habitat and environmental and hazard mitigation quality if they have been previously degraded.
- 3. To protect riparian areas from development so that the areas can provide natural features, functions and conditions that support fish life processes.
- 4. To protect development from flood and slope hazard.

12.3 Marine Coast Development Permit Area¹

DESIGNATION:

The Marine Coast Development Permit Area is shown on Map No. 9 and applies within a 15 metre horizontal distance upland from the present natural boundary and within 15 metres horizontal distance seaward of the present natural boundary. In estuarine areas, it applies upstream, both on land and water, to the extent of tidal influence. For clarity, in estuarine areas the Freshwater and Fish Habitat Development Permit Area also applies.

Bylaw 1620.05, adopted December 4, 2018



AUTHORITY:

The Marine Coast Development Permit Area is designated a development permit area for the protection of the natural environment, its ecosystems and biological diversity, and protection of development from hazardous conditions pursuant to Section 488(1)(a) and (b) of the *Local Government Act*.

JUSTIFICATION:

Coastal and marine environments provide goods and services from an ecological, economic, and social perspective. The form and dynamics of the shoreline help determine essential habitat conditions for coastal plant and animal communities. Coastal areas are also highly valued by property owners, the general community, and marine recreational users for their aesthetic qualities, recreational values, and viewscapes.

In addition, many coastal communities are experiencing unprecedented levels of growth. This is a critical time to recognize the unintended consequences of past practices and to identify ways to reduce the impacts of development and ensure that the benefits of having healthy marine ecosystems continue to be enjoyed for generations to come.

The objectives of this development permit area are:

- 1. To work towards the 'protection of the environment' goal of the Regional Growth Strategy, in particular by following the policy to 'minimize impacts of development in coastal zones by ensuring use of low impact development'.
- 2. To plan and regulate new development in a manner that preserves, protects and restores the long-term physical integrity and ecological values of shorelines and associated foreshore and upland areas.
- 3. To balance development opportunities with the ecological conservation and restoration of the shoreline environment.
- 4. To maintain the public's safe use and access to these important recreation areas in a way that does not compromise the ecological integrity of the shoreline.

12.4 Eagle and Heron Nesting Trees Development Permit Area¹

DESIGNATION:

The Eagle and Heron Nesting Trees Development Permit Area is shown on Map No. 9. The development permit area is defined as follows:

- a) For **Bald Eagle Nesting Trees** the development permit area applies to all mapped and unmapped trees containing bald eagle nests and is a 60 metre radius measured from the base of the nesting tree.
- b) For **Great Blue Heron Nesting Trees** the development permit area applies to all mapped and unmapped trees containing great blue heron nests, and shall be
 - i. a 60 metre radius from the base of the nesting tree on lots 1.0 hectare or smaller; and
 - ii. a 100 metre radius from the base of the nesting tree on lots larger than 1.0 hectare.

¹ Bylaw 1620.05, adopted December 4, 2018



Where the colony consists of more than one tree, the radius is measured from a line drawn around the outer perimeter of the base of all nest trees.

The locations of the eagle and heron nesting trees identified on Map No. 9 of this plan are intended to provide an approximate location only. Ground-truthing may be required by Regional District staff, a Registered Professional Biologist, or British Columbia Land Surveyor, to accurately determine the location of the tree or trees.

AUTHORITY:

The Eagle and Heron Nesting Trees Development Permit Area is designated a development permit area for protection of the natural environment, its ecosystems and biological diversity, pursuant to Section 488(1)(a) of the *Local Government Act*.

JUSTIFICATION:

Nesting birds such as the Great Blue Heron and Bald Eagle are sensitive to impact from development and disturbance by human activity and require special treatment in order to protect their ecological value, now and for the future.

Pacific Great Blue Herons are a Species of Special Concern in Canada and are Blue-listed in British Columbia. There are only about 500 nests on Vancouver Island and the Gulf Islands. Bald Eagles are territorial and generally require 1000 meters between nesting sites. Both species nest near lakes, rivers and shorelines throughout BC where they are close to their food source. The loss of available nesting habitat near their food source, as well as disturbance from human presence, reduces the birds' ability to thrive and successfully raise their young. While Section 34 of the *Wildlife Act* provides for the protection of Bald Eagles and Pacific Great Blue Herons and several other at risk bird species, this development permit area protects the nesting habitat essential to ensuring breeding populations are maintained.

The objectives of this development permit area are:

- 1. To implement Regional Growth Strategy Policy 2.14 to protect environmentally sensitive areas from the impacts of development.
- 2. To protect eagle and heron nesting sites from the impacts of development.

12.5 Aquifers Development Permit Area¹

DESIGNATION:

The Aquifers Development Permit Area is shown on Map No. 9 and applies to parcels within the growth containment boundary or industrial lands where non-residential development is supported.

AUTHORITY:

The Aquifers Development Permit Area is designated a development permit area for the protection of the natural environment, its ecosystems and biological diversity, pursuant to Section 488(1)(a) of the *Local Government Act*.

¹ Bylaw 1620.05, adopted December 4, 2018



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JUSTIFICATION:

Aquifers are sensitive to impact from development and disturbance by human activity and require special treatment in order to protect their ecological value, and community value as a drinking water source now and for the future.

Aquifers and surface water are connected and interact with each other as typically, surface waters recharge aquifers in months with precipitation and snow melt. The groundwater system contributes to baseflow in rivers and streams, maintaining habitat for fish, wildlife and plants and is the sole domestic water supply for many residents. Maintaining both water quality and quantity requires careful management for the long-term sustainability of ecosystems and drinking water values.

Care must be taken in construction methods, excavation, surface drainage and the storage, handling and manufacture and use of products on parcels of land within this Development Permit Area to avoid contamination of the underlying aquifer and to protect and promote its sustainable use as a drinking water source.

In the Cassidy Village Centre area, a 2010 groundwater vulnerability study conducted by GW Solutions Inc. in partnership with Vancouver Island University indicates the upper Cassidy aquifer is highly vulnerable to surface contamination while the lower aquifer was found to be protected by a thick layer of blue clay. There is concern in the community based on the fact that the majority of residents draw their drinking water from the upper aquifer and there are no community water or sewer services.

In the South Wellington Industrial – Commercial area, there are no community water or community sewer services. Residents are concerned with the protection of groundwater resources, their primary source of domestic drinking water, due to the lack of community services combined with the fact that there are heavy industrial uses on relatively small lots in close proximity to rural residential uses that rely on private domestic wells. Therefore, it is important to ensure that both existing and future commercial and industrial uses do not pose a threat to ground water quantity or quality.

The Cedar Village Centre area overlies mapped Aquifer 161 which is closely connected to the Nanaimo River and ranked as high vulnerability to surface contamination due to the shallow water table and very permeable gravel and sand aquifer material. Water supply for the North Cedar Improvement District comes from Aquifer 161, therefore it is important to ensure both existing and future land uses do not pose a threat to groundwater quality and quantity.

The objective of this development permit area is to implement RGS Policy 2.14 to protect groundwater aquifers and environmentally sensitive areas from contamination and reduced supply caused by land use and development activities.





12.6 Hazard Lands Development Permit Area¹

DESIGNATION:

The Hazard Lands Development Permit Area is applicable to the Nanaimo River Floodplain identified on Map No. 9.

AUTHORITY:

The Hazard Lands Development Permit Area is designated a development permit area for protection of the natural environment, its ecosystems and biological diversity and for the protection of development from hazardous conditions, pursuant to Section 488(1)(a) and (b) of the Local Government Act.

JUSTIFICATION:

The Nanaimo River floodplain (including portions of Haslam Creek) is designated by the province as a 'high risk' floodplain area. The objective of this development permit area is to protect property from flooding and potential loss of land and property due to high water, erosion, and instability.

12.7 Farmland Protection Development Permit Area²

DESIGNATION:

The Farmland Protection Development Permit Area is shown on Map No. 10 and applies to all properties adjacent to the Provincial Agricultural Land Reserve (ALR) boundary.

AUTHORITY:

The Farmland Protection Development Permit Area is designated a development permit area for the protection of farming, pursuant to Section 488(1)(c) of the Local Government Act.

JUSTIFICATION:

The BC Agricultural Land Commission has acknowledged that the development of lands adjoining farmlands may compromise the agricultural use of the ALR lands. Agricultural lands therefore require protection for long-term agricultural use.

In addition, as a result of inappropriately designed developments, land use conflicts may develop between the land uses. The incorporation of a 15 metre wide buffer between developed lands and agricultural lands is expected to promote greater compatibility between the uses while protecting the agricultural uses from urban impacts.

The objective of this Development Permit Area is to protect the agricultural land resource of the Plan Area for present and future production of food and other agricultural products.

² Bylaw 1620.05, adopted December 4, 2018



¹ Bylaw 1620.05, adopted December 4, 2018

12.8 South Wellington Industrial – Commercial Development Permit Area¹

PURPOSE:

This Development Permit Area (DPA) has been designated pursuant to the following Sections of the *Local Government Act*:

- i. 919.1(a): protection of the natural environment, its ecosystems, and biological diversity
- ii. 919.1(f): establishment of objectives for the form and character of commercial, industrial, or
- iii. 919.1(h): establishment of objectives to promote energy conservation
- iv. 919.1(i): establishment of objectives to promote water conservation

AREA:

This DPA primarily includes those commercial and industrial activities designated South Wellington Light Industrial Commercial Area concentrated along the Trans Canada Highway bordering the south boundary of the City of Nanaimo as shown on Map No. 10.

JUSTIFICATION:

This DPA includes land with a range of commercial and industrial uses, most of which are currently servicing the region. There are no community water or community sewer services available to lands within this DPA. Residents are concerned with the protection of groundwater resources, their primary source of domestic drinking water, due to the lack of community services combined with the fact that there are heavy industrial uses on relatively small lots in close proximity to rural residential uses. Therefore, it is important to ensure that both existing and future commercial and industrial uses do not pose a threat to ground water quantity or quality.

The visibility of this area from the Trans Canada Highway, the gateway to the City of Nanaimo and surrounding residential neighbourhoods, justifies the need to ensure that the form and character of development compliments rather than detracts from the aesthetic appeal of the area, reduces visual distraction, and ensures that development is compatible with surrounding land uses.

12.9 Cedar Main Street Development Permit Area

This DPA includes the properties identified within the Cedar Main Street Development Permit Area on Map No. 10. Refer to the Cedar Main Street Development Permit Area Guidelines contained in Section 6 of the Cedar Main Street Village Plan attached as Schedule B.

12.10 Cassidy Development Permit Area²

PURPOSE:

This Development Permit Area (DPA) has been designated pursuant to the following Sections of the *Local Government Act*:

² Bylaw 1620.05, adopted December 4, 2018



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¹ Bylaw 1620.05, adopted December 4, 2018

- i. 919.1(a): protection of the natural environment, its ecosystems, and biological diversity
- ii. 919.1(f): establishment of objectives for the form and character of commercial, industrial, or multi-family residential development
- iii. 919.1(e): establishment of objectives for the form and character of intensive residential development
- iv. 919.1(h): establishment of objectives to promote energy conservation
- v. 919.1(i): establishment of objectives to promote water conservation
- vi. 919.1(j): establishment of objectives to promote the reduction of GHG emissions

AREA:

This DPA includes the properties within the Cassidy Rural Village Land Use designation as shown as Map No. 10.

JUSTIFICATION:

The Cassidy Rural Village DPA has been designated by this plan in recognition of the community's desire to create a more compact complete community in Cassidy where residents can go to access local services, employment, and recreational opportunities.

A recent groundwater vulnerability study conducted by GW Solutions Inc. in partnership with Vancouver Island University indicates that Cassidy is underlain by a highly vulnerable aquifer. The report indicates that the upper Cassidy aquifer is highly vulnerable to surface contamination while the lower aquifer was found to be protected by a thick layer of blue clay. There is concern in the community based on the fact that the majority of residents draw their drinking water from the upper aquifer and there are no community water or sewer services.

Cassidy Residents also have concerns over the preservation of the community's rural characteristics and aesthetic values which this DPA is intended to address.

This DPA will ensure that development is conducted in a way which respects the environment and helps to maintain the rural characteristics of the community, encourages pedestrian and cyclist use, promotes energy and water conservation, and reduces GHG emissions.

12.11 Cedar Development Permit Area¹

PURPOSE:

This Development Permit Area (DPA) has been designated pursuant to the following Sections of the *Local Government Act*:

- i. 919.1(a): protection of the natural environment, its ecosystems, and biological diversity
- ii. 919.1(f): establishment of objectives for the form and character of commercial, industrial, or multi-family residential development
- iii. 919.1(e): establishment of objectives for the form and character of intensive residential development

¹ Bylaw 1620.05, adopted December 4, 2018



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- 919.1(h): establishment of objectives to promote energy conservation iv.
- 919.1(i): establishment of objectives to promote water conservation ν.
- 919.1(i): establishment of objectives to promote the reduction of GHG emissions vi.

AREA:

This DPA includes a small number of multi-residential, intensive residential, commercial, and industrial zoned properties generally located along Cedar Road and throughout the Cedar GCB area as shown as Map No. 10.

JUSTIFICATION:

This DPA has been designated in recognition of the properties existing commercial and industrial zoning to ensure that future development of these sites is compatible with surrounding residential uses, has minimal environmental impacts, promotes energy and water conservation, and does not pose a threat to groundwater resources.

12.12 Yellow Point Aquifer Protection Development Permit Area ¹

PURPOSE:

This Development Permit Area (DPA) has been designated pursuant to the following sections of the Local Government Act:

- 919.1(a): protection of the natural environment, its ecosystems and biological diversity.
- 919.1(i): establishment of objectives to promote water conservation.

AREA:

This DPA is intended to ensure that new subdivision does not have a negative impact on groundwater levels both on the subject property and on adjacent properties on lands located above the Yellow Point Aquifer as shown on Map No. 9 of this plan. It is also intended to require water conservation measures to reduce water use and protect drinking water supplies for existing residents.

JUSTIFICATION:

The Yellow Point aquifer is a fractured sandstone bedrock aquifer east of the Island Highway. It stretches from Duke Point in the north down to Ladysmith Harbour in the south. The Yellow Point aguifer is composed of compacted mud and sandstone layers known as the 'Nanaimo Group'. Unlike the highly productive Cassidy aquifer nearby, the Yellow Point aquifer is a very 'low producing aquifer' with 'low permeability' and 'low porosity'. That means that this type of rock has a limited ability to store and produce water and that when water is removed from this aquifer it can take a long time to recharge, or 're-fill'. This type of aquifer is not well suited to large extractions or urban development. Several sources, including a 2010 Ministry of Environment study, the 2009 RDN Electoral Area 'A' Groundwater Assessment and Vulnerability report, and a recent Drinking Water and Watershed Protection Program public consultation process have indicated that some areas that draw from this aquifer are experiencing water supply issues. There are indications that

¹ Bylaw No. 1620.02, adopted June 24, 2014



water is being extracted faster than the aquifer's recharge capacity. If this continues, a point may be reached (or may have already been reached) where further extraction and further development is no longer sustainable.

RAINWATER HARVESTING BEST PRACTICES GUIDEBOOK

It is strongly recommended that applicants refer to the Regional District of Nanaimo Rainwater Harvesting Best Practices Guidebook for guidance on the design and installation of a rainwater harvesting system within the Yellow Point Aquifer Protection Development Permit Area.

DEFINITIONS:

Total household water use means the sum total of all water use in a household during a typical hot dry summer day including gardens and lawns, baths and showers, kitchen (dishwasher, etc.), toilet flushing, laundry, car washing, drinking, property maintenance, and other outdoor uses.



