Electoral Area H
Official Community Plan Review

REGIONAL DISTRICT OF NANAIMO

Deep Bay Workshop – September 17, 2016

Participants Guide

Dear Participant,

As part of the Electoral Area 'H' Official Community Plan (OCP) Review project, the RDN Board endorsed a process that included a closer examination of the Deep Bay area because of its unique circumstances and high level of community interest. In addition, community input during the Bowser Village Centre Plan project identified a need for additional consideration of future land use in the Deep Bay area.

A focus on the future growth and development in Deep Bay is meant to address changes in the area such as the new Vancouver Island University Marine Station, issues such as traffic and parking, and long-standing economic opportunities related to the harbour and aquaculture industry.

The purpose of this workshop is:

> ***To****: develop goals and a strategy for the future growth and development of the Deep Bay area on which to base updates to the Official Community Plan (OCP).*
>
> ***So that:*** *future developments, both large and small, contribute to and are consistent with the future vision of Deep Bay identified by the community of today.*

What is "development"? For the purpose of the workshop, development can mean anything from a small change to an individual property, to subdivision and construction of multiple new lots, homes, commercial buildings, or public works projects.

Please bring a photo of a place, person or event in Deep Bay that is meaningful to you and that you would like to share.

If you cannot attend, you can submit written comments to the RDN via email, letter, or the online comment form at the project website www.rdn.bc.ca/areahocp. Or, you can request a meeting with planning staff.

AGENDA

Deep Bay Workshop

Electoral Area 'H' Official Community Plan Review

Saturday, September 17, 2016
1:00 pm – 5:00 pm
Vancouver Island University Deep Bay Marine Station
370 Crome Point Road, Bowser, BC

1.	**Welcome and Introductions, Review of Agenda**	**1:00**
2.	**Discussion of Community Vision**	**1:25**
3.	**Discussion of Opportunities and Challenges**	**1:50**
4.	**Refreshment Break**	**2:40**
5.	**Presentations from Property Owners:** Baynes Sound Investments, Cooke Family, Vancouver Island University*	**3:00**
6.	**Discussion of Solutions / Strategies for Official Community Plan**	**3:40**
7.	**Next Steps and Closing**	**4:50**

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*Others TBD, please contact Courtney Simpson if interested

Community Vision

The following list of statements has been compiled based on input received during community engagement events in 2016 that included a survey, public meetings, working group meetings, and individual meetings and correspondence. Together, this list of statements describes what community members value about Deep Bay today as well as aspirations for the future.

You are invited to edit and comment on the following draft list that describes the community vision for the Deep Bay area. What would you add, remove or change?

Community Vision for Deep Bay

What would you add, remove or change?

Deep Bay is a place where:

- there is a strong sense of community and pride of place
- the natural environment is protected
- clean drinking water is protected
- archaeological sites are recognized and protected
- businesses and services compliment the harbour yet do not detract from the growth of Bowser as the commercial and service centre for the area
- the aquaculture industry is supported
- safe roadside walking routes exist, and public trails are part of developing new lands
- a second road access exists

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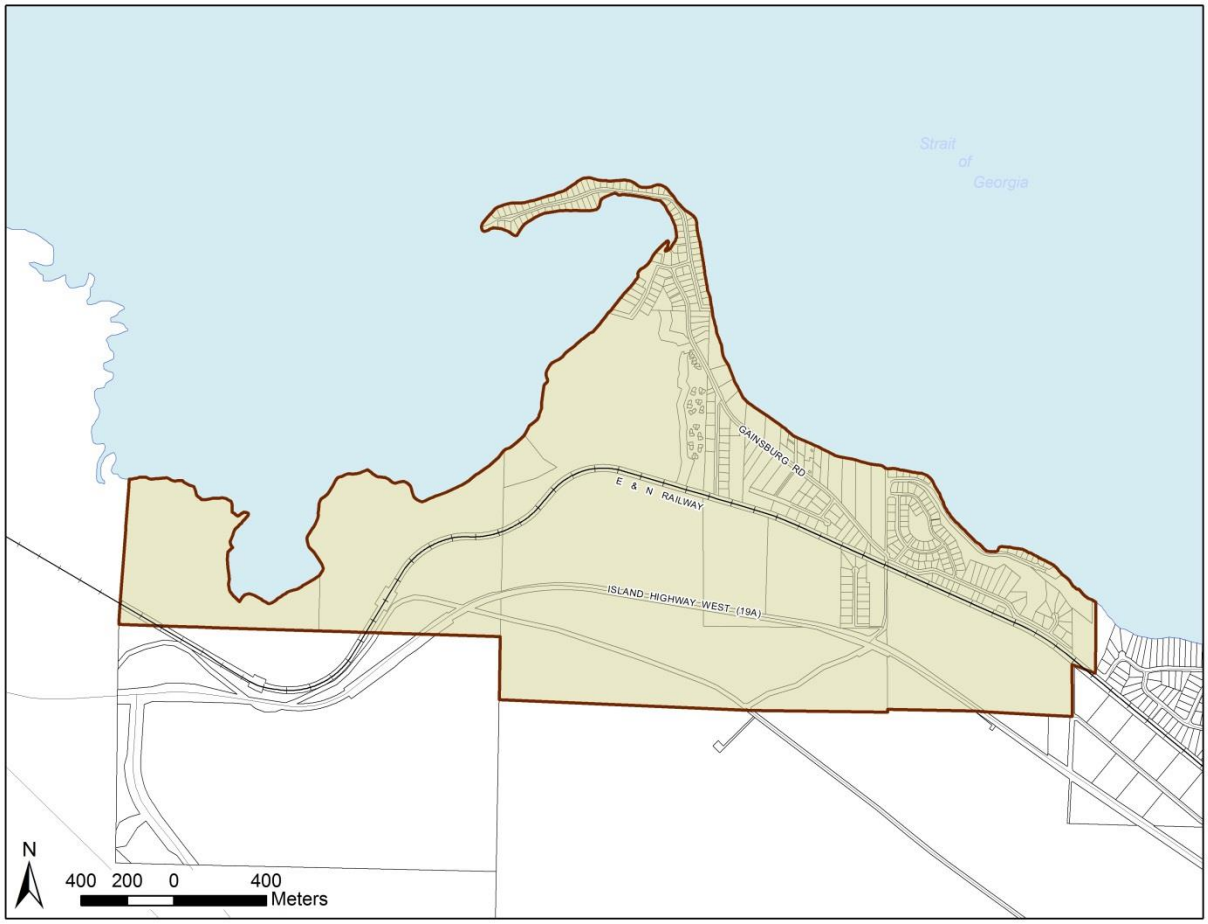
Boundaries of "Deep Bay" for the purposes of this workshop

For the purpose of this workshop Deep Bay is considered to be the areas accessed by Gainsburg Road, the BSI Lands, and the Cook Family lands. Except for the addition of the Cook lands, this neighbourhood area is consistent with the Deep Bay neighbourhood defined during the Bowser Village Plan process for the purpose of population estimates, allowing for estimates of population growth over the past several years.

This neighbourhood boundary does not have any official status, but is for the purpose of discussion at the workshop.



Opportunities and Challenges

The following opportunities and challenges are informed by what the community said in previous consultation events, conversations and emails. *What would you add, remove or change?*

Opportunities
Commercial properties could provide more services to compliment the harbour
Development of BSI lands could provide solutions to some challenges for the community
VIU Marine Station is an attraction for visitors and jobs, and is a great place for community events
Drinking water resource is of high quality and quantity
Deep Bay is an important area for First Nations history and a significant archaeological site
Strong sense of community and sense of place
OCP review is opportunity to create a plan for Deep Bay before major development application
Many older homes and cottages are being replaced
Important harbour for the shellfish aquaculture industry
Clustered development is a progressive and sustainable approach

Challenges
Expanding allowed commercial services without detracting from growth of Bowser
Single road access – when blocked no alternate
Gainsburg Road has narrow shoulder and ditch so unsafe for walking
Drinking water quality and quantity must be protected
Deep Bay is a significant archaeological site
Septic fields and their potential to impact water quality in Baynes Sound and result in shellfish closures
Climate change impacts such as sea level rise
Sea walls built to protect from erosion but can have a negative visual and ecosystem impact
Little economic growth
Clustered development must be carefully regulated to prevent unintended consequences
Tough for a young family to find work and stay local
Fishing is not as good as it used to be
Boat trailer parking on streets around marina

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Criteria for future development in Deep Bay

Following from the community vision for Deep Bay and building on these lists of opportunities and challenges, the following is a draft list of criteria for future development. *What would you add, remove or change?*

All proposed development (including redevelopment of existing sites) should:

a) demonstrate that the quality of drinking water, surface water, and marine waters will not be negatively impacted

b) demonstrate that there is sufficient drinking water quantity

c) demonstrate a high regard for archaeological sites, both recorded and potential, and how they will be protected

d) demonstrate preservation of remaining natural sections of coastal areas if applicable, and how the impact of any proposed development in coastal areas will be minimized including consideration of future sea level rise

e) demonstrate it is not expected to detract from the growth of Bowser as the commercial and service centre for the area

f) demonstrate that it will not detract from the aquaculture industry, and if applicable, would contribute to or enhance its viability

g) demonstrate how the development would complement the VIU Deep Bay Marine Station, if applicable

h) demonstrate contribution to safe walking and cycling routes

i) provide a second road access to Deep Bay if the location of the proposed development permits

j) demonstrate how it could contribute to improvement of the boat trailer parking challenge, if possible

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The Regional Growth Strategy and Deep Bay

The Regional Growth Strategy (RGS) provides a general framework for directing growth and land use activities throughout the RDN. An official community plan includes more detailed policies, and must be consistent with the RGS.

The Growth Containment Boundary (GCB) in the RGS designates Rural Village Centres in electoral areas as locations where growth is supported. This means that an OCP cannot be changed to allow additional growth outside the Growth Containment Boundary without also amending the RGS.

> *Achieving more sustainable development patterns requires a concerted effort to focus more of the region's growth inside GCBs. Increasing the proportion of growth within GCBs has proven to be very difficult while abundant low-density residential development opportunities still exist in rural areas.* (RGS page 31)

> *Existing village centres that are determined to be less feasible as potential rural growth centres could be recognized as local service centres. These smaller scale service centres would provide a limited range of goods and services intended to meet the needs of the surrounding rural community.* ***OCP policies could make provision for limited additional small-scale development in areas designated as local service centres, provided the proposed development is appropriate to the needs of the local community, contributes to the rural character of the area and can be adequately and safely served with on-site water and wastewater facilities.*** (RGS page 27, emphasis added)

Discussion about designating Deep Bay as a new rural village centre, or as a local service area has taken place in a number of different forms over the past several years.

- In 2011 the RDN Board received an application from Baynes Sound Investments for a development that included 386 single and multi-family residential units, 6,975 m^2 of commercial land and 292 recreational vehicle spaces. In order to proceed, this development application would have required amendments to the OCP and RGS to designate a new Rural Village Centre in Deep Bay.
- At the time the RDN was planning a region-wide study of Rural Village Centres, and the RDN Board directed staff to include the proposal for a new Rural Village Centre in Deep Bay in the scope of the study, and put the application on hold pending its completion.
- The Board ultimately denied the application, and there is currently no active application at the RDN for development on the BSI properties.

The Rural Village Centre Study

The objective of the Rural Village Centre Study was *to identify the Rural Village Centres that have the most potential to evolve into complete, compact communities.*

The study looked at three categories: community structure/design and land use; development viability; and community water and wastewater infrastructure. Deep Bay ranked mid-low in all categories compared to the other rural village centres and service areas. Nearby Bowser had the second highest potential to evolve into a compact, complete community behind Cedar and along with three others.

Given the results of this study, some community opposition to the proposed village centre, an alternate proposal for less intense development may be more acceptable to the community, possibly in line with a Local Service Centre described in the RGS.

Current Population and Land Use

How will Deep Bay grow?

One of the biggest questions to address in this OCP Review is what kind of growth should the OCP support for Deep Bay. There is interest in developing the lands adjacent to the currently developed area of Deep Bay by both some members of the community and by the property owner, Baynes Sound Investments (BSI).

More recently, the Cook Family who owns three properties to the west of the BSI lands has indicated they would like to remove their lands from the ALR and undertake some kind of development.

The BSI lands were removed from the ALR several years ago, and are the only large lots in the Deep Bay area that could be significantly subdivided and developed right now without approval from the ALC. The Cook properties, and three other properties in the ALR seaward of the Island Highway, would have to first be removed from the ALR before any significant residential or commercial development could occur.

The Population of Deep Bay Today

Currently, population is estimated at 669 people, including full time and part time residents, up from 580 people in 2010. This population is estimated by taking the number of addresses in Deep Bay (within the boundary shown on the map on page 4) and multiplying it by the average number of persons living in a home of 2.1 persons (2011 census). For all of Area 'H', approximately 31% of properties are owned by non-residents, so if applying this to Deep Bay there would be an estimated year-round population of approximately 462 people.

Lots and subdivision

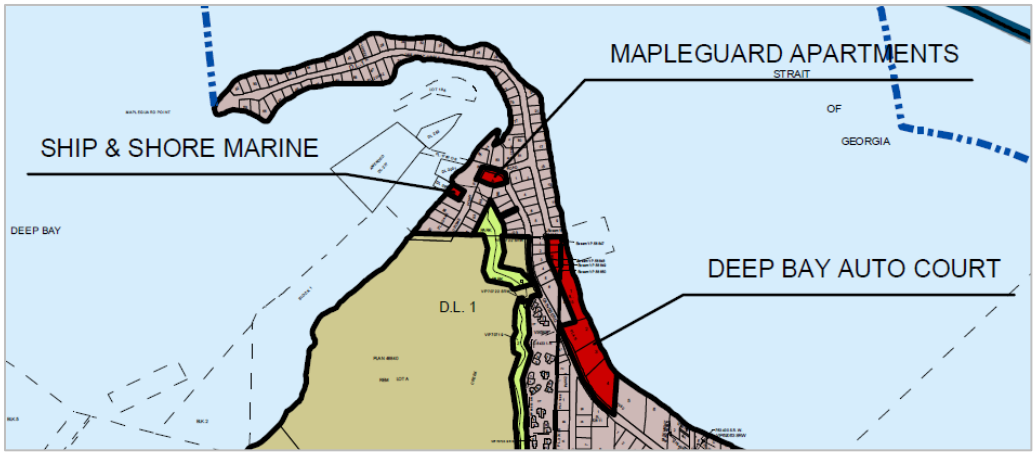
- There are currently 332 residential lots in Deep Bay, most of which are designated "Rural Residential" in the OCP. Most are zoned Residential 2 (R2) except for the Lighthouse Landing strata where the zoning is Residential 3. Secondary suites are allowed on all lots in the Residential 2 zone.
- The majority of lots are in Subdivision District 'M', with a minimum permitted lot size of 0.2 ha (0.5 acres) with community water.
- A number of lots in the R2 zone can be subdivided, with a potential of somewhere in the range of 20-50 new lots. The exact number depends on constraints of the lot which can only be determined by analysis of each individual lot.
- The average lot size of R2 lots in Deep Bay is 0.2 hectares (0.5 acres). Many are smaller but would have been created prior to current zoning.

Commercial and Institutional and Public Land Uses

There are three commercially designated properties on 12 lots:

- Ship and Shore (1 lot, plus a second lot designated Rural Residential)
- Mapleguard Apartments (1 lot)
- Deep Bay RV Park (3 lots plus part of 7 other lots)

In addition, the Deep Bay Harbour is home to a commercial fishing and aquaculture fleet and provides moorage for local and travelling boats. The Lighthouse Country Marine Centre is located on the docks and is shared by the Deep Bay Yacht Club and Royal Canadian Marine Search and Rescue 59.



The **Vancouver Island University Deep Bay Marine Field Station** is located on a lot subdivided from the BSI Lot A and currently retains the OCP Rural designation. The use is institutional in nature, and consideration should be given to designating the lot as "Institutional" in the OCP to reflect the current use. The **Deep Bay Improvement District** office including the fire hall is also located on a lot designated Rural in the OCP, but is zoned "public use", reflecting its current use.

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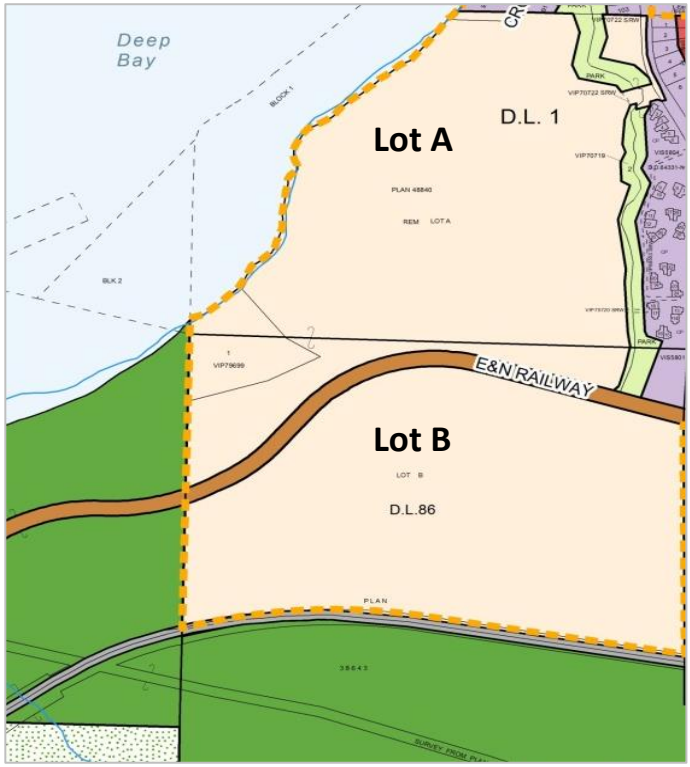
Baynes Sound Investment Lands

The BSI lands consist of three lots, two of which are outside of the ALR and designated Rural Lands in the OCP. Lot A is zoned Rural 1 (RU1) and Lot B is zoned Resource Management 1 (RM1).

In 2011 BSI submitted an application to the RDN for a development that included 386 single and multi-family residential units, 6,975 m^2 of commercial land and 292 recreational vehicle spaces. In order to proceed, this development application would have required amendments to the OCP and RGS to designate a new Rural Village Centre in Deep Bay. It was ultimately denied by the RDN.



In May, 2014 BSI led a community design workshop in which resulted in new design concepts for Lots A and B They have not submitted a new application to the RDN.

For the September 17, 2016 workshop led by the RDN, the BSI lands will be considered in the context of the wider neighborhood and region, and criteria for development, thresholds of number and size of lots that would be supported will be discussed. Detailed design is not part of this workshop.

Current estimated subdivision and dwelling potential

The table below shows subdivision potential for BSI Lots A and B. The gross potential takes the lot size and divides it by the minimum lot size permitted for subdivision (zoning) or a principal dwelling (OCP). The net potential makes this same calculation on 80% of the parent lot size to account for the land likely required for roads, environmentally sensitive areas, etc.

	ESTIMATED OCP AND ZONING SUBDIVISION POTENTIAL For BSI Lots A & B							
	Lot size (ha)	Min lot size OCP (ha)	Gross Lots OCP	Net* Lots OCP	Min lot size zoning (ha)	Gross Lots Zoning	Net* Lots Zoning	Max lots without OCP amendment
Lot A	38.85	4.0	9	7	2.0	19	15	15
Lot B	36.00	4.0	9	7	20.0	1	1	7
Total	**74.85**		**18**	**14**		**20**	**16**	**22**

* This estimate deducts 20% of land that may be required for roads, parks, environmentally sensitive areas, septic fields etc. The actual number of lots possible is generally 80% of gross

Under current zoning there is the net potential for approximately 15 lots for Lot A, and Lot B could not be subdivided. However the OCP supports approximately 7 lots for Lot B. Without amending the OCP there are two density scenarios for the BSI Lands:

1. Subdivision application for Lot A only, resulting in approximately 15 lots
2. Rezoning for Lot B to allow the minimum lot size of 4.0 ha already supported in the OCP, then subdivision application for both lots resulting in approximately 22 lots

For the purpose of estimating subdivision and dwelling potential scenario 2 is assumed, as the OCP already supports the increased density on Lot B.

For each of the estimated 22 potential lots on Lots A & B, if each lot is greater than 2 ha, two dwelling units are permitted and up to two secondary suites are also permitted, one of which can be detached. This means that the total number of dwelling units is estimated at 88:

22 lots greater than 2 ha:

44 principal dwellings + 44 suites = 88 dwellings

Although it is very unlikely that every lot would have two dwellings and two suites, or even a single suite, this is the theoretical maximum.

It is unknown what the average number of people living in a secondary suite would be, but it would likely be less than the average of 2.1 persons per dwelling in Area 'H' according to the 2011 census. Taking a conservative number, if an average of 1 person lived in each secondary suite, this would represent an increase of population of 136 people, some of whom may be seasonal residents.

How do we start considering something different?

Keeping the status quo of a subdivision potential of approximately 22 residential lots is an option, but there could be value to the community in supporting additional development. Comments so far indicate the community value or amenities could include:

- A second road access to the highway
- Boat trailer parking
- Services that compliment or support the VIU Marine Station
- Protection of water quality in Baynes Sound by requiring sewer for the development instead of individual septic fields
- Public trails
- Progressive subdivision design allowing clustering (this is also considered a negative by some)
- Other progressive development requirements such as meeting performance standards

Without considering amendments to the OCP to allow additional development it is unlikely most of these amenities would be obtained.

The OCP could contain conditions under which rezoning to allow more lots would be permitted, and a maximum density that is supported should all of the conditions be met. Density can be expressed in a number of ways. Typically in an OCP, it is expressed as a minimum lot size, or number of lots or dwellings per hectare. The table below shows OCP examples of expression of maximum densities or target densities in the case of the Bowser Village Plan (BVP).

Density maximums or targets from current Area 'H' OCP			
OCP Designation	**Minimum Parcel Size (ha)**	**Principal dwelling units / ha**	**Units / ha (target)**
Rural	4.0		
Rural (under conditions)	2.0		
Rural Residential		5	
BVP Com-Tourist			10
BVP Civic			35
BVP Com-Mixed Use			35
BVP Res-Medium			35
BVP Res-High			45

If the OCP Rural Residential density were to be applied to the BSI Lots A and B, there is an estimated maximum of 299 lots, with an estimated population of 627 people. For each of these lots one secondary suite would be allowed. If every lot contained a secondary suite and there was 1 person living in each suite, this could theoretically represent an additional 299 people for a total of 926 people.

	ESTIMATED DEVELOPMENT POTENTIAL If OCP Rural Residential density extended to BSI lots A and B				
	Lot size (ha)	Lots / ha[1]	Gross Lots OCP	Net[2] Lots OCP	Est. population (x 2.1)
Lot A	38.85	**5**	194	155	325
Lot B	36.00	**5**	180	144	302
Total Lot A & B	**74.85**		**374**	**299**	**627**

[1]The OCP states density for the Rural Residential designation as "dwelling per hectare" but this has been implemented in the zoning bylaw as lots per hectare, and for the purposes of this table is described as lots per hectare.

[2]This estimate deducts 20% of land that may be required for roads, parks, environmentally sensitive areas, septic fields etc. The actual number of lots possible is generally 80% of gross.

The estimated development potential under a 5 lots / ha density scenario above does not take into consideration park land that could be required as part of the development over and above the total of 20% already removed for roads, parks and other things combined. There is no right or wrong way for the OCP to express a maximum density but there are different options with different implications, particularly if flexible minimum lot sizes are allowed under the alternative forms of rural development policy in the RGS. More is described about alternative forms of rural development later in this document.

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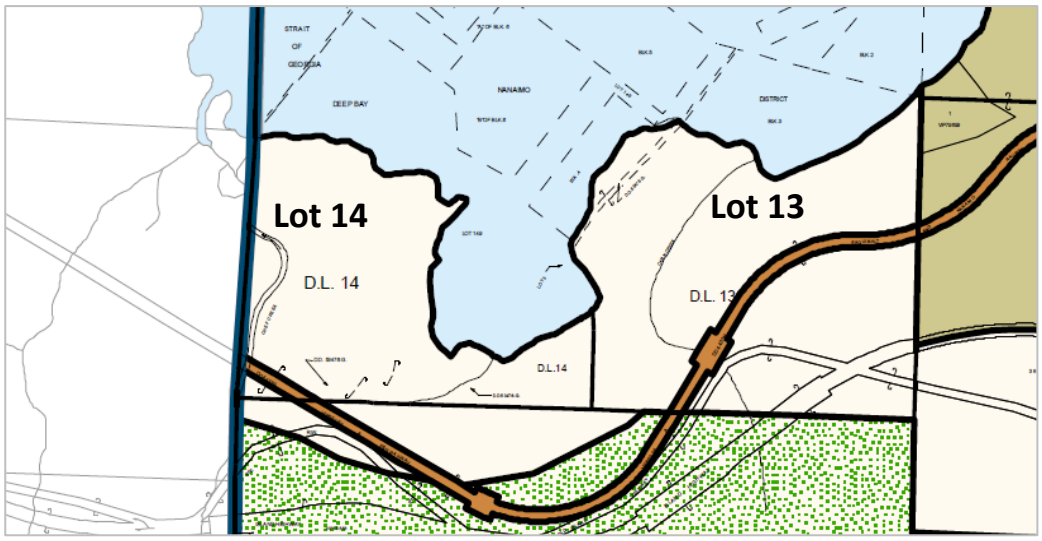
Cook Family Lands

During this OCP Review, the Cook family indicated their interest in development on their three waterfront lots on Deep Bay. As one of these lots is outside of the RDN, this section deals only with the two lots that are in the RDN boundaries, Lots 13 and 14.



Both lots are within the Agricultural Land Reserve (ALR), and the OCP designates them as Resource Lands. An 8.0 ha minimum parcel size is supported by the OCP for Resource lands in the ALR, but the current zoning bylaw sets the minimum lot size at 20.0 ha. Subdivision would require approval from the Agricultural Land Commission.

	ESTIMATED OCP SUBDIVISION POTENTIAL For Cook Lots 13 & 14						
	Lot size (ha)	Min lot size OCP (ha)	Gross Lots OCP	Min lot size zoning (ha)	Gross Lots Zoning	Net* Lots OCP	Net* Lots Zoning
Lot 13	54.7	8.0	6	20.0	2	5	2
Lot 14	34.0	8.0	4	20.0	1	3	1
Total Lot 13 & 14	**88.7**		**10**		**3**	**8**	**3**

*This estimate deducts 20% of land that may be required for roads, parks, environmentally sensitive areas, septic fields etc. The actual number of lots possible is generally 80% of gross.

How do we start considering something different?

Keeping the status quo is an option, which would be the potential for approximately 8 lots from the current two properties, if rezoned and approved by the ALC, but there is community interest in exploring additional development.

As the topic of development on the Cook properties arose well into the consultation on this OCP Review, there has not been opportunity to gauge community support for development, or to understand what kind of development would be supported. A few things that have been said by community members include:

- Some types of agriculture could produce run-off that would damage the water quality of Baynes Sound and the aquaculture industry, so there should be a way to support the property owner in alternative uses of the land that do not produce run-off[1].
- The land is a beautiful estuarine and older forest ecosystem and these values should be protected.
- Public access to the lands such as walking trails would be an asset to the community

Development of the Cook lands has some differences to development of the BSI lands that include:

- For the Cook lands to be developed beyond what is permitted on lands in the ALR, they would have to be removed from the ALR which is not a decision of the RDN Board but of the ALC.
- Two of the key community amenities sought through development of the BSI lands cannot be provided on the Cook lands: second road access to Deep Bay and boat trailer parking.
- The Cook lands are not adjacent to any currently developed lands.

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[1] Best management practices exist for preventing contaminated runoff from agricultural storage and application of manure, and application of fertilizers and pesticides.

Alternative Forms of Rural Development

In order to limit sprawl, reduce fragmentation of ecological systems, and encourage more sustainable forms of subdivision, the RGS supports creation of new OCP policies to encourage alternative forms of rural development outside the GCB in the RGS Rural Residential land use designation (RGS Policy 5.13). The RGS Rural Residential land use designation includes Area 'H' OCP designations of Rural Residential and Rural.

> **RGS Policy 5.13:**
> *Notwithstanding policy 5.2, in order to limit sprawl, reduce fragmentation of ecological systems and encourage more sustainable forms of subdivision on lands already zoned for rural residential use, an OCP may make provision to allow for smaller minimum parcel sizes outside the Growth Containment Boundary in the RGS Rural Residential Land Use Designation provided there is no increase in the overall density or the potential number of new lots, and provided that the new parcels can be served with potable water and wastewater disposal systems in a manner that does not degrade the environment or water sources. Potential options may include rezoning of land, clustered development, and/or density transfers. OCP policies that provide opportunities for alternative forms of rural residential development shall require the conservation of residual lands in perpetuity for agricultural, forestry, environmental or ecological purposes, or other public good purpose. Options for alternative forms of development shall be consistent with the sustainability principles and growth management policies of this RGS.*

A 2012 report on Alternative Forms of Rural Development for the RDN outlines numerous approaches to achieve these objectives in three categories:

- design approaches;
- density shifting; and
- performance alternatives.

The design approaches involve allowing smaller lot sizes in order to concentrate development into a smaller footprint leaving more area for protection of natural values or working landscapes. Density shifting involves moving density from one property to another, and performance alternatives involve encouraging development to meet certain goals related to rural values through incentives or regulation. All of these approaches involve no overall increase in density. The full report can be accessed on the RDN's Regional Growth Strategy Implementation website.

The OCP does not currently contain any policies to enable the use of any of the options for alternative forms of rural development mentioned above, and a policy or policies will be drafted for community review based on input received already in the OCP Review process, as well as during the Deep Bay Workshop. Such policies would apply to all lands designed Rural and Rural Residential in the OCP.

There are a number of lots with subdivision potential in the Deep Bay area that are also within the Rural Residential or Rural OCP land use designations that such potential new policies would apply to. The lots with the most significant subdivision potential in Deep Bay are BSI lots A and B.

Regarding the design approaches that would involve smaller lot sizes, for areas with community water but no community sewer, the minimum lot size typically accepted as adequate for provision of a septic field is 0.2 ha (0.5 acres). One possible example for BSI Lot A is the OCP could state that the minimum **average** lot size is 2.0 ha, but the minimum lot size is reduced to as small as 0.2 ha. The total potential

gross new lots would remain at 28, but they could vary in size. The OCP could require that the total number of lots be calculated based on developable area outside of roads and parkland (net number of lots), or could allow the calculation based on the total lot area. It depends on what is trying to be achieved.

The remainder lot could be an additional lot, but would have to be protected in perpetuity "for agricultural, forestry, environmental or ecological purposes, or other public good purposes" (RGS policy 5.13). Recommended approaches for protecting the remainder land in perpetuity include changing the zoning to allow no further subdivision plus one or more other approaches that could be:

- Section 219 Covenant
- Conservation Covenant
- Land Transfer (purchase, return to Crown, transfer to public ownership, etc.)

In addition, a comprehensive development zone can clearly identify building lots and protected areas, being very specific about the size, number and location of lots. Development agreements can address servicing and other amenities.

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Water and Wastewater Servicing

Wastewater

The RGS is clear that any development outside the GCB must be served by on-site wastewater disposal. This would preclude the use of a new sewer service outside of Village Centres or shared septic fields within a bare land strata, unless there is a threat to public health or the environment in an area of existing development.

In order to achieve more sustainable patterns of rural development that are also supported by the RGS, shared wastewater disposal systems may have to be supported at some scale in rural areas. If an amendment to the RGS is required in order to implement a new OCP policy for growth in Deep Bay, allowance for shared septic or sewer could be proposed as a change to the RGS as well.

In this discussion of the future of Deep Bay, septic fields have been identified as undesirable due to the potential negative impact they could have on the water quality of Baynes Sound. However, establishing a new sewer system would be costly, and a higher threshold of density and total number of lots would be required for it to be economically feasible for a developer.

As an alternative to sewer for development of new lands in Deep Bay, the OCP could require a significant setback from the ocean for new development, and /or that effluent is treated to a higher standard such as in a type 2 or type 3 system, but this could only be a requirement if the property was subject of a rezoning application. See the attached Information Sheet on Wastewater for more information.

Drinking Water

The Deep Bay Improvement District (DBID) provides drinking water in the Deep Bay area. Connection fees and procedures are regulated by the DBID and are not under the purview of the RDN. The DBID is one of several agencies whose approval is required for subdivision where the new lots are to be serviced by water from the DBID, and the cost and procedure for their approval is outlined in their bylaws. As a general rule, any costs associated with new connections are borne by the property owner and not by the DBID.

At the time of a rezoning application, the following existing OCP policies from Section 2.3 require proof of sufficient water supply:

5. *Prior to approving any rezoning to increase the density and intensity of land use on any property which may include environmentally sensitive groundwater resources, the Regional District shall require a hydro geologic impact review and/or assessment on the water supplies of adjacent properties and on any nearby surface water resources. A qualified professional engineer or geoscientist, with proven knowledge and experience in groundwater management must certify, through a hydro geological impact assessment, assurance of the long term reliability of the water supply.*

6. *Prior to considering any development in areas covered by any Electoral Area 'H' water utility, the RDN will require written confirmation from the water utility stating its ability to provide sufficient quantity and quality of potable water for the development.*

Next Steps

Following this workshop a report summarizing all input received and the collective direction provided by workshop participants will be prepared and distributed to the public. Comments will be invited, and OCP content drafted for Deep Bay. Draft OCP content will be available to the public for review and comment, and will be discussed at upcoming Community Working Group Meetings, and a broad Community Meeting.

Thank you for taking the time to review this Guide. We hope you can attend the Deep Bay Workshop on September 17th. Please don't forget to register online.

Official Community Plan

Alternative Subdivision Design

What is Alternative Subdivision Design?

Conventional subdivision design typically carves the land into relatively uniform parcel sizes and traditional patterns based on prescriptive minimum parcel size regulations. This approach does not encourage consideration of topographical constraints or environmentally sensitive features in site design. An example is the creation of parcels adjacent to a watercourse each having lot lines that run through the riparian area.

Alternative subdivision design is a general term used for a more sustainable approach to subdivision which helps limit sprawl, reduce fragmentation of ecological systems, and encourage more sustainable land use patterns. Alternative subdivision design also provides an opportunity to be more responsive to site-specific topographical constraints and environmental features. Alternative subdivision design allows for adaptive site design by supporting more flexibility in parcel layout and minimum parcel size.

Conventional

Alternative

Comparison of conventional and alternative subdivision design

Conventional Subdivision Design

⇒ The form of subdivision that residents are most accustomed to.
⇒ Results in parcels that are more or less uniform in size.
⇒ Less opportunity to protect environmentally sensitive features.
⇒ More difficult to adapt to site constraints.
⇒ Lot lines typically run through riparian areas, ravines, and environmentally sensitive areas.
⇒ Ownership can be fee simple, strata, or shared interest.

Alternative Subdivision Design

⇒ Typically results in a range of parcel sizes.
⇒ Overall density is maintained (not increased).
⇒ More opportunity to preserve green space and protect environmentally sensitive features.
⇒ Accommodates creativity and flexible subdivision design
⇒ Encourages opportunities for shared services such as community water and community sewer.
⇒ Helps foster a sense of place and community.
⇒ Ownership can be fee simple, strata, or shared interest.

Alternative Subdivision Design

Alternative subdivision design in a Rural Village Centre context

In Rural Village Centres, the Official Community Plan (OCP) does not set a minimum parcel size or maximum number of parcels as these are locations where increased density is encouraged. Creativity in subdivision design is encouraged to create compact mixed use communities that make efficient use of land and have a reduced ecological footprint.

Within the context of Rural Village Centres, alternative rural subdivision design could take many forms including single detached, ground-oriented townhomes, row housing, and condominiums.

How could the remainder/residual lands be preserved in perpetuity?

Alternative subdivision design results in a remainder or area of residual land that could be preserved for various reasons. The RDN may use a combination of the following tools to ensure that these areas are preserved in perpetuity.

⇒ Zoning changes
⇒ Section 219 Covenant
⇒ Conservation Covenant
⇒ Land Transfer (purchase, return to Crown, transfer to public ownership, etc.)

Did you know?

⇒ The RDN has completed the Alternate Forms of Rural Development study which is an in-depth analysis of options for rural residential areas. Click here to view this study.

Alternative subdivision design outside of Rural Village Centres

On lands located outside of Rural Village Centres, the smallest parcel size supported by the OCP is 2,000 m^2 (0.5 acres).

The Regional Growth Strategy (RGS) supports alternative subdivision design on lands which are designated by the RGS as Rural Residential. The RGS support is premised on there being no increase in the overall density or the number of new lots, and provided that the new parcels can be served with potable water and wastewater disposal systems in a manner that does not degrade the environment or water services. The RGS also requires the remainder to be preserved in perpetuity.

In general, development within a rural residential context should be limited to ground-oriented detached forms of housing. This ensures compatibility with surrounding uses and helps encourage higher density forms of development to be located within the Rural Village Centres.

The use of alternative subdivision design in this context may be to preserve working agricultural or resource lands, protect a community watershed, preserve stands of mature forest, or to protect an environmentally sensitive feature. It may also be used to increase marketability or to reduce the per unit cost of providing subdivision servicing infrastructure such as roads, water and sewer or any combination of the above.

How could the OCP support alternative subdivision design?

The authority over land use falls entirely within RDN jurisdiction. Should the community support this concept, the OCP could include policies that apply at the time of rezoning similar to the policies contained in the Bowser Village Plan.

Policies could apply to lands located in Rural Village Centres and to lands located outside of Rural Village Centres where alternative subdivision design is supported by the RGS.

Official Community Plan

Onsite Sewage Disposal

Context

While some Electoral Area residents rely on communal methods of sewage disposal, most rely on the use of individual onsite systems. There are a range of onsite sewage disposal methods available ranging from a basic type 1 conventional septic system which includes a septic tank and a dispersal field to more advanced type 2 and 3 systems which treat wastewater to produce higher quality effluents.

When properly designed, sited, and maintained, septic systems are an efficient and safe treatment and disposal option. However, when not properly designed, sited or maintained, they pose risk of contamination of surface and groundwater resources, which can lead to public health and environmental concerns.

Legislative Framework

The *Sewerage System Regulation* and *Public Health Act*, administered by Island Health apply to systems that:

- Process a sewage flow of < 22,700 litres per day (approximately 16 - 20 three bedroom dwelling units).
- Serve single-family systems or duplexes.
- Serve different buildings on a single parcel of land.
- Serve one or more parcels on strata lots or a shared interest of land.

The *Sewerage System Regulation* lists three types of approved sewage systems and requires that the design and installation of these systems be certified by a Registered Onsite Wastewater Practitioner or professional engineer.

Systems that produce more than 22,700 litres per day and most systems that discharge into water are authorized under the *Environmental Management Act* administered by the Ministry of Environment.

Current challenges

Although septic systems can be an effective means of wastewater disposal, they pose some inherent challenges as summarized below:

State of regulatory oversight for ongoing maintenance
Once designed and installed by an authorized person there are no regulatory or enforceable reporting requirements to ensure that homeowners have their septic system inspected and maintained by an authorized person.

Aging septic systems on small lots
Electoral Area 'H' has many existing small parcels (2000 m^2 (0.5 acres) or less) which are serviced with septic systems of various types and ages.

Although septic systems can typically operate in an efficient and safe manner for many years if properly maintained, at some point the system or its components will need to be repaired or replaced.

Septic systems which have not been properly maintained pose a risk to groundwater, surface water, and ultimately human health.

Achieving the densities envisioned in the OCP on lands located in the Rural Village Centres
Septic systems occupy land which cannot be used for development. It may be difficult to physically achieve the densities and intensities of use envisioned in the rural village centres using septic systems (eg. Bowser).

Point Source Vs. Non-Point Source
Unlike community sewer systems which have a single operator and outfall, each septic system has its own disposal field and must be individually maintained. It is more difficult to control and monitor non-point source emissions.

Septic Disposal

What are the minimum parcel size requirements for lands serviced with a septic system?

There is an important distinction to be made between new and existing parcels.

For new parcels, Island Health has published subdivision standards which are considered to be the minimum standards for the creation of new parcels. The intent of the standards is to provide a viable long-term solution for parcels serviced by septic systems, thereby eliminating the need for costly community sewer systems in the future.

The smallest minimum parcel size supported by the standards is dependent on the availability of community water, the slope within the discharge area, and soil depth. According to the standards, ***under ideal conditions***, the smallest parcel size supported with a connection to a community water system is 2,000 m^2 (0.5 acre) and without a community water service connection is 1.0 ha (2.47 acres). For the most part this is consistent with current zoning.

For existing parcels, it is important to consider that there are many small <2,000 m^2 (0.5 acre) parcels in Electoral Area H. Most of these lands may be serviced by a community water system while others may not. Parcels of <2,000 m^2 (0.5 acre) serviced with a septic system would typically no longer be permitted because of the challenges identified in this document and because they are not consistent with the OCP and Regional Growth Strategy. In addition, subdivision may not be approved by the Ministry of Transportation and Infrastructure due to servicing limitations.

Maintaining separation distances to protect drinking water

It may be difficult on small lots to maintain adequate separation distances between a septic system and a well. The *Sewerage System Regulation* requires that a sewerage system be located at least 30 metres from a well. A lesser setback may be permitted under the regulation if a professional hydrologist determines that doing so would not result in a health hazard.

Ensuring land is available for reserve field

It is important to have a backup plan should the need arise to replace a failing septic system. Small lots provide less opportunity for the establishment of a reserve field should one be required. Maintaining larger lot sizes in areas serviced by septic systems helps to avoid potential problems in the future.

Where are septic systems most suitable?

Septic systems are a cost effective choice in rural areas where there is adequate land available for both a disposal field and a reserve field. This helps achieve community goals related to growth management.

Considerations for Community Sewer

The provision of community sewer services is an integral component of complete compact communities within the Regional District of Nanaimo Rural Village Centres. These services are required to support the densities and types of development envisioned by the OCP.

Due to the high cost of providing community sewer, compact higher density development is essential. Larger lots and greater separation distances require more infrastructure and are less efficient to operate and maintain. In addition, there are fewer property owners who benefit from the service, which typically results in higher individual costs.

What role could the OCP play?

Although the authority to authorize onsite sewage systems rests with the Province, the OCP can play an important role through the identification of goals, objectives, policies, and implementation actions that relate to land use, protection of the natural environment, and servicing.

For example, the OCP could contain policies that apply at the time of rezoning which require a the use of a type 2 or 3 system for parcel of a certain size, development in environmentally sensitive areas, or development of a certain intensity.

RDN Initiatives

⇒ The RDN Septic Smart Program currently offers septic system maintenance rebates? For more information click here or visit the RDN website at www.rdn.bc.ca.

For More Information

- Environmental Management Act
- Sewerage System Regulation
- Public Health Act