



### **Provide education about climate change**

### Improve wildfire preparedness and adapt to future sea level rise

### **Reduce our greenhouse gas emissions**

### **Climate Change Impacts**

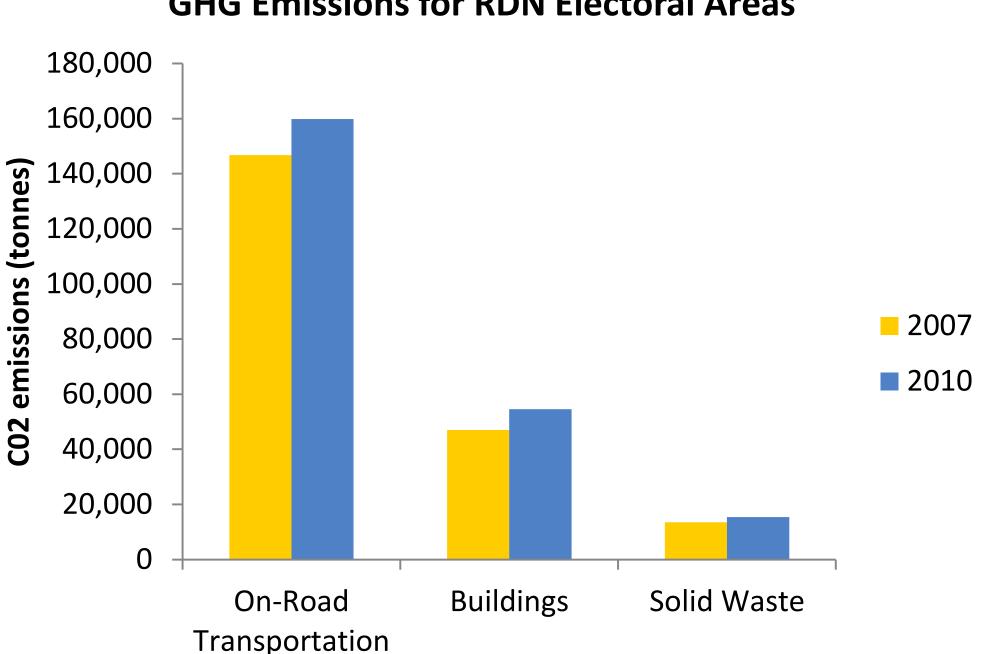
In British Columbia, average temperature has increased 1.4°C since 1900. Impacts of this rise in temperature are being experienced now and will continue into the future. Impacts of climate change in this area include:

- Hotter drier summers with wetter winters
- Increasing frequency and severity of storms
- •Sea level rise
- Increased forest fire risk

### Mitigation

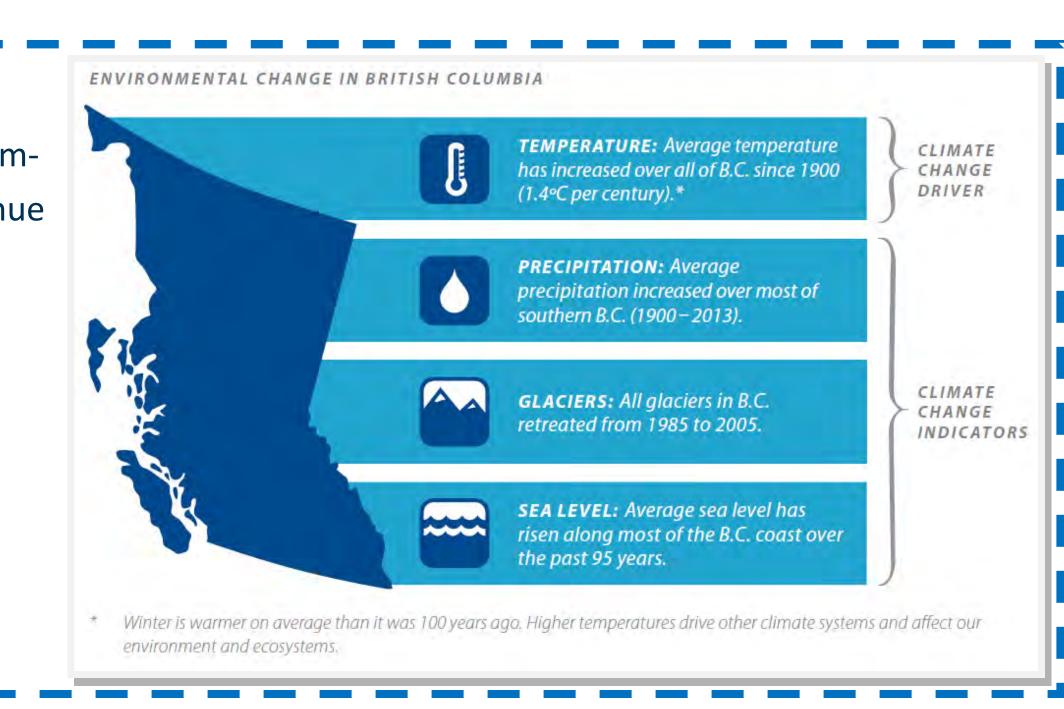
Climate change mitigation refers to the ongoing attempts to prevent significant climate change through the reduction of greenhouse gasses (GHG) in the atmosphere.

On-road transportation is the most significant contributor to GHG emissions reduction in the RDN's electoral areas



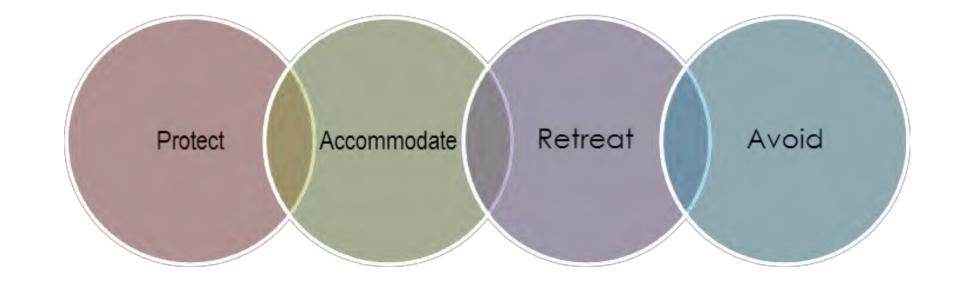
### **GHG Emissions for RDN Electoral Areas**

The RDN set an target for reduction of GHG emissions of 80% below 2007 levels by 2050. Based on projections in the 2013 RDN Community Energy and Emissions Plan, to meet that target GHG emissions for the RDN would have to drop to 1.2 tonnes per capita. From 2007 to 2010, per capita emissions actually increased.



### Adaptation

Adaptation refers to actions taken to respond to the impacts of climate change by reducing the associated risks. Adaptation can take one of the following approaches:



In the context of an Official Community Plan, adaptation can be addressed by requiring development be sited and designed in a way to reduce the risk of climate change impacts.

For example, in low lying coastal areas buildings should be constructed to withstand increasingly severe storms and future sea level rise, or should be sufficiently set back and elevated from areas where seawater has to potential to reach.



### Where do we go from here?

- Strengthen policies on climate change mitigation and adaptation  $\Rightarrow$
- Map low lying areas that will be impacted by sea level rise  $\Rightarrow$
- **Engage** with community on **active transportation** and draft the plan  $\Rightarrow$
- Draft policy to advocate for updated Community Wildfire Protection Plans  $\Rightarrow$

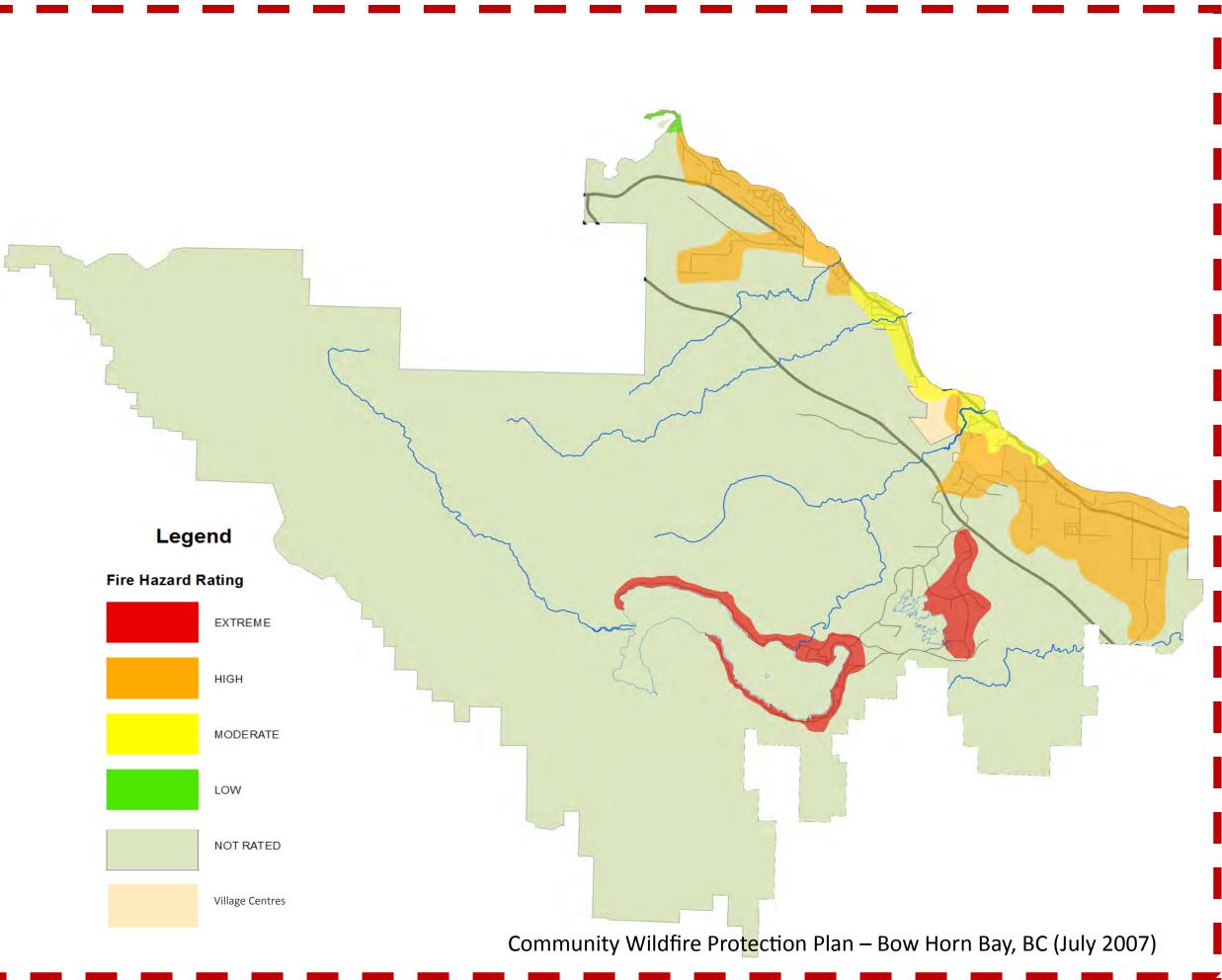
### **Forest Fire Hazard and Preparedness**

The RDN Emergency Planning department engages fire department and residents in education and preparedness.

•The Horne Lake community is not served by a fire department, and has a high to extreme interface fire risk.

• Currently the OCP takes an approach of education and encouragement for wildfire preparedness, rather than a regulatory approach.

•The OCP could support requirement for fire-resistant design and construction in high risk areas. At this time, education may be sufficient. What do you think?



### **Renewable Energy Generation**

It is anticipated that homeowner interest in generating renewable energy to supplement income will grow, particularly as buildings become more efficient and renewable energy systems become more financially viable.

Currently the OCP is silent on this emerging field, and could contain policies that speak to supporting renewable energy generation but maintaining the look and feel of the residential neighbourhood at the same time.



### **Active Transportation Plan**

The RDN is creating an Active Transportation Plan that identifies how to make it safer and easier for people to walk and cycle in Electoral Area 'H'. active online map!

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### **New Mapping**

The RDN is acquiring detailed elevation data for coastal areas in order to map the future impact of sea level rise. This mapping is also expected to assist in improving slope hazard mapping in Area 'H' which is based on older maps at a small scale.

This new mapping is expected to be available in the Fall of 2016.

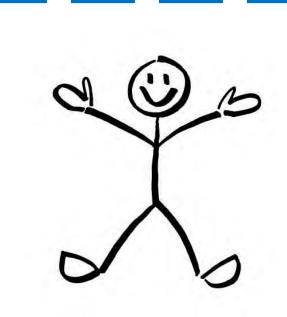
# REGIONAL DISTRICT OF NANAIMO

### THE COMMUNITY SAID ...

### Grow the local economy and create local jobs

Attract more services to the area, particularly health services like a doctor and pharmacy

### **Creating local jobs means I**different things to different lage groups:



### Youth...

are seeking part time jobs, and full time jobs after graduating high school. Community input so far suggests more jobs in the resource sectors like aquaculture and forestry would provide well paying jobs to keep youth in the community as they age. Some will always leave for school or work in larger centres.

### Younger adults and families with children at home...

say that they move here or stay here for the lifestyle, rural setting, sense of community, and affordability. But they may make employment sacrifices such as having a long commute. Many are self employed or telecommute, and would like improved supports such as co -working space / business centre, and improved cellular coverage.

### Older adults and seniors...

value having children and youth in the community, and understand that without more employment options it will continue to be difficult to attract and keep these demographics.

### Those 40 and under place a higher importance on the economy than those over 40

The community survey in January asked which of the following four issues is the most important for the community right now: economy, affordable housing, environmental protection and transportation.

This table shows that respondents aged 40 and under placed the highest

importance on the economy, in contrast to those over 40 who placed the highest importance on environmental protection.

This likely reflects that those in they early to mid income-earning years value a strong economy in a community where they live, while older adults nearing or in retirement, hold different values.

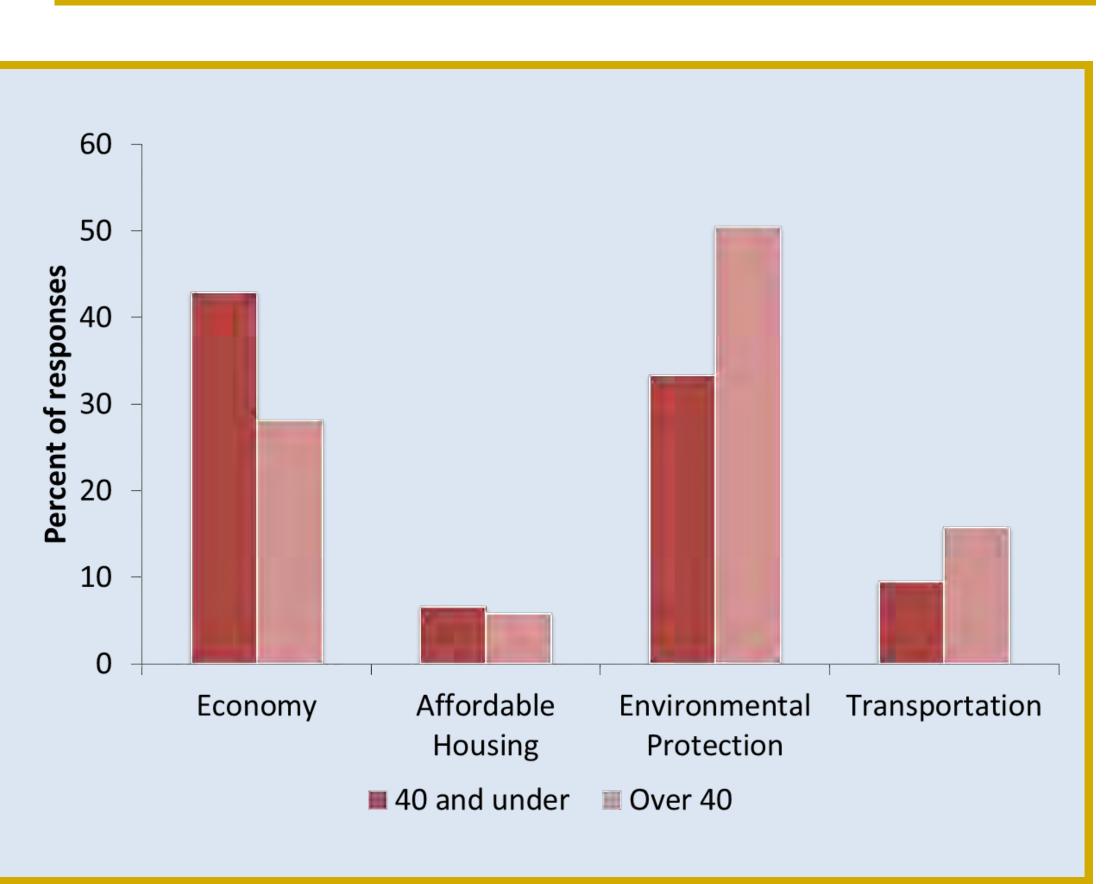
## Economy & Services

### What kind of jobs keep young people in the community?

### Input so far mentions:

- $\Rightarrow$  there is an opportunity for growth of the aquaculture, forestry and ecotourism sectors
- $\Rightarrow$  it makes sense to support growth of aquaculture-related business in Area 'H' given the location near the Deep Bay Harbour and Baynes Sound, and there is an opportunity to grow industry that compliments the new VIU Marine Field Station











Where do we go from here?

- Draft changes to development permit areas to reduce requirements where possible, particularly in Village Centres
- While continuing community discussion about supporting some areas outside Village Centres for more development, provide good information to help weigh the costs and benefits to the local economy

### **I**Services

All ages say they want more services like a doctor, dentist, and pharmacy, and there is an understanding that the population may need to grow to support these services.

In Area 'H', there is not a lack of available land for needed services, but their feasibility is limited by **population size and density**.



The **Bowser Village Centre Plan** sets out a land use pattern that aims for a significantly higher density of homes and businesses, which could bring with it substantial population growth. Dusmuir and Qualicum Bay Village Centres do not have a detailed plan such as Bowser's, but the OCP supports significant growth and development in those locations as well.

Making appropriately designated land available is how an OCP can **directly** encourage needed services, and this has already been done.

This OCP review needs to look at how the OCP can **indirectly** create conditions to help attract desired services to the area.

### **Development Permit Areas (DPAs)**

A DPA is an important tool used by local governments to ensure that the potential impacts of development are identified and addressed. It is a set of guidelines that apply to a specific area for the purpose of achieving identified objectives.

In this OCP Review project so far, community input asks for streamlining of the development process to help encourage development in Village Centres in particular.

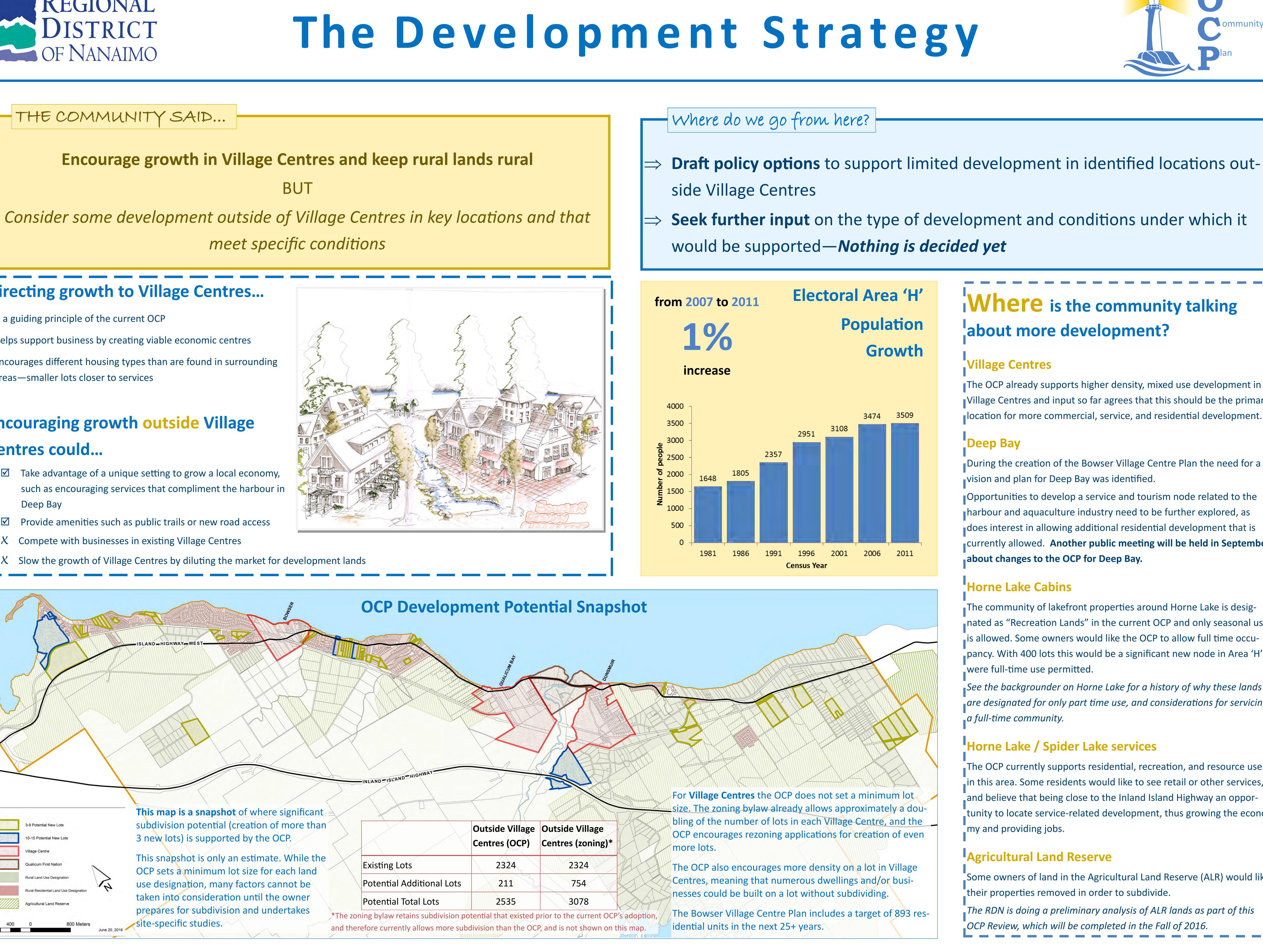
Taking a close look at our DPAs is one way in which we can do this. For example, since the DPAs were put in place, **building inspection** service has come to Area 'H' and we know there are some areas of duplication between the building permit process and the DPA guidelines that can be removed.

When a first draft of changes to the DPAs is ready, it will be important for developers and builders as well as the community at large, to take a close look and help shape further drafts and eventually the final product.

Growth of Bowser Village Centre has been slower than anticipated. What are the barriers?







### **Encourage growth in Village Centres and keep rural lands rural**

BUT

### **Directing growth to Village Centres...**

- Is a guiding principle of the current OCP
- Helps support business by creating viable economic centres
- Encourages different housing types than are found in surrounding areas—smaller lots closer to services

### **Encouraging growth outside Village Centres could...**

- ☑ Take advantage of a unique setting to grow a local economy, such as encouraging services that compliment the harbour in Deep Bay
- Provide amenities such as public trails or new road access
- X Compete with businesses in existing Village Centres
- X Slow the growth of Village Centres by diluting the market for development lands

This map is a snapshot of where significant subdivision potential (creation of more than 9 Potential New Lots 3 new lots) is supported by the OCP. -15 Potential New Lots /illage Centre This snapshot is only an estimate. While the Qualicum First Nation OCP sets a minimum lot size for each land Rural Land Use Designation use designation, many factors cannot be Rural Residential Land Use Designation taken into consideration until the owner Agricultural Land Reserve prepares for subdivision and undertakes site-specific studies.



### Where is the community talking about more development?

### Village Centres

The OCP already supports higher density, mixed use development in Village Centres and input so far agrees that this should be the primary Iocation for more commercial, service, and residential development.

During the creation of the Bowser Village Centre Plan the need for a vision and plan for Deep Bay was identified.

Opportunities to develop a service and tourism node related to the harbour and aquaculture industry need to be further explored, as does interest in allowing additional residential development that is currently allowed. Another public meeting will be held in September **about changes to the OCP for Deep Bay.** 

### Horne Lake Cabins

The community of lakefront properties around Horne Lake is designated as "Recreation Lands" in the current OCP and only seasonal use is allowed. Some owners would like the OCP to allow full time occupancy. With 400 lots this would be a significant new node in Area 'H' were full-time use permitted.

See the backgrounder on Horne Lake for a history of why these lands are designated for only part time use, and considerations for servicing a full-time community.

### **Horne Lake / Spider Lake services**

The OCP currently supports residential, recreation, and resource uses in this area. Some residents would like to see retail or other services, and believe that being close to the Inland Island Highway an opportunity to locate service-related development, thus growing the economy and providing jobs.

### **Agricultural Land Reserve**

Some owners of land in the Agricultural Land Reserve (ALR) would like their properties removed in order to subdivide.

The RDN is doing a preliminary analysis of ALR lands as part of this OCP Review, which will be completed in the Fall of 2016.





Create affordable and diverse housing

BUT

Maintain the rural, single family neighbourhoods we moved here for



- One secondary suite is permitted per dwelling unit to a maximum of two per parcel of which only one may be detached.
- Secondary suites are limited to two bedrooms.



Some community members say they are looking for housing on smaller lots or in a multi-family setting, within walking distance to services. This kind of housing is attractive to people young and old

There are a few homes in Bowser that are within walking distance to the grocery store and other services, and no multi-

The OCP supports higher density housing in Village Centres, but they have been slow to develop, and no multi-family housing.

> For suites located in an accessory building (carriage house) the floor area of the entire building is included in the maximum floor area calculation

Example showing a carriage home

 An attached secondary suite must be in the same real Estate Entity as the prin-

- Two additional parking spaces are required
- A separate entrance is re-
- Detached suites require a minimum lot size (800  $m^2$  for parcels serviced with Community Water Sewer and 8,000 m<sup>2</sup>) for all other servicing scenarios.
- Secondary suites must not exceed 40% of the habitable floor space of the principle dwelling unit it is associated with nor 90 m<sup>2</sup> of total floor space, whichever is lesser





Maintaining rural areas outside Village Centres is important to the future of the region. For some people it is the rural aesthetic and privacy that brought them here in the first place and they don't want that to change.

Keeping lots large enough outside of village centres so that they can be served by individual septic systems and in some cases also private wells is important. The cost of providing water and sewer services to large, spread out lots can be extremely high, as can be maintenance and replacement costs in the long term.

# Affordable & Diverse Housing

### Where do we go from here?

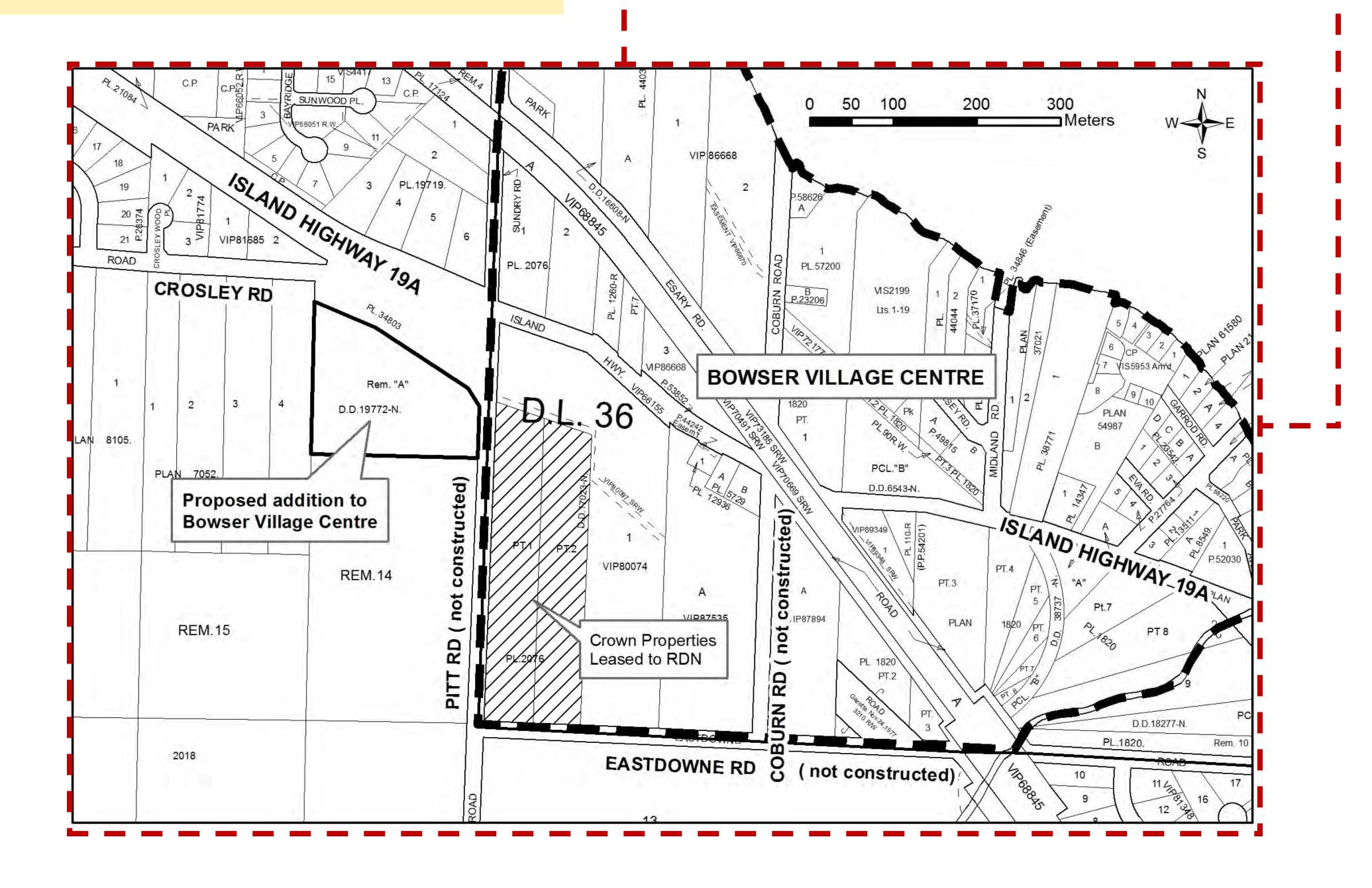
- Look at ways to further encourage construction of a variety of housing types in Village Centres
- Draft changes to OCP for road access to the future Lighthouse Villa for Seniors
- Maintain rural neighbourhoods outside village centres—carefully weigh exceptions

### Maintaining Rural Neighbourhoods

See the Septic Disposal Factsheet for more information

### Bowser Seniors Housing Society and **Crosley Road realignment**

- cation.





The Lighthouse Villa for Seniors is planned for construction on Crown land behind Magnolia Court that is leased by the RDN. There is no practical road accesses to this site. The neighbouring property owner has offered to build a new road to access the Seniors Housing, and realign the intersection of Crosley Road with the highway 19A, in exchange for their property being added to the Bowser Village Centre, Commercial Mixed Use designation.

The property is within an area for future expansion of Bowser Village Centre. The property is 2.7 hectares in size, currently has 2 houses and cannot be subdivided. Adding it to the Bowser Village Centre would allow a range of residential and commercial uses, and a specific proposal would be presented to the community with a rezoning appli-





### Maintain a healthy environment and protect cultural history

Support recreation and tourism that has a low impact on the environment and takes advantage of the area's natural assets

### How does the OCP protect the environment and where can it improve? **Aquifers** Forests ✓ The OCP already has strong policies regarding protection of drinking water quality and quantity Strong requirements exist for rezoning applications to prove lands both availability of water and that there will be no negative impact on the aquifer scape \* The RDN Drinking Water and Watershed Protection Program actively seems to improve our understanding of significant recharge areas and capacity of the aquifers **Eagle and Heron nests** \* We will improve coordination with water improvement districts \* OCP should include current mapped nests to share knowledge and information **Further studies...** Shoreline Ecosystems <sup>6</sup> Protection of natural coastline ecosystems and processes of can be strengthened <sup>4</sup> Future sea level rise and increasing frequency and intensity of storms due to climate change needs to be taken into consideration

### First Nations archaeological sites and present-day communities

- The *Heritage Conservation Act* provides legal protection for archaeological sites in BC, and is administered and enforced by the Provincial Government.
- •There are significant sites throughout this area such as a village site at Deep Bay including a system of constructed fish trap lagoons.
- The OCP can better recognize that Area H is within the **traditional** territory of Coast Salish First Nations, and that there are significant archaeological sites that need to be protected.
- An OCP does not typically show the location of **mapped archaeolog**ical sites as this information is not publicly available due to concerns that these sites will be damaged by the general public looking for artifacts. However the OCP can describe the general areas where archaeological sites are found in order to raise awareness.

- \* Look at ways to strengthen policies on protection of forest lands ☑Other levels of government also provide protection for forest
- \* Consider how the OCP can encourage a working forest land-
- \* Improved attention to wildfire prevention and preparedness
- \* Can improve policies for protecting these sites

• The RDN is collecting coastal elevation data to understand the impact of sea level rise, and to improve coastal slope hazard mapping.

• The RDN is contracting with a hydrologist to consolidate and enhance existing data on water supply, to help inform this OCP Review.

• The **Qualicum First Nation** reserve is between the Village Centres of Qualicum Bay and Dunsmuir, and the OCP could better acknowledge opportunities for the Qualicum First Nation and the surrounding community of Area 'H' to work together on the growth and development of the area.

B.C.'s archaeological heritage is a precious, non-renewable resource

- $\Rightarrow$  Archaeological sites are the physical evidence of how and where people lived in the past.
- $\Rightarrow$  For 98% of the time people have lived in British Columbia, no written records were made.
- $\Rightarrow$  Archaeological sites and oral tradition are the only vestiges of this rich history extending back at least 12,000 years. This resource is of great value to First Nations, local communities, and the general public.







# Natural & Cultural Assets

Where do we go from here?

- Draft policy to **improve protection** of shoreline ecosystems, forests, eagle and heron nests
- Draft policy to better acknowledge the significant First Nations archaeological sites in the area, and support their protection
- Draft policy to support alternative rural subdivision, with conditions and criteria for community review

### **Alternative Rural Subdivision**

Where the OCP supports subdivision in rural lands, it can encourage better design to protect sensitive and important natural areas.

> OSCAR Layout Bird's Eye View

### **Conventional Subdivision Design**

Traditional Layout

Bird's Eye View

- $\Rightarrow$ Traditional and familiar
- $\Rightarrow$ Parcels are more or less the same size
- $\Rightarrow$  Developer has little flexibility or incentive to protect environmentally sensitive features
- $\Rightarrow$ More difficult to adapt to site constraints
- $\Rightarrow$ Lot lines typically run through riparian areas, ravines, environmentally sensitive areas

The OCP can include conditions, such as a minimum lots size, requirement for public lands or roads and trails through the development, and method of protecting the remainder lot from future development.

### **Alternative Subdivision Design**

- $\Rightarrow$ Has emerged as best practice around the world
- $\Rightarrow$ Flexibility for lots to vary in size
- $\Rightarrow$ Total number of lots allowed does not increase
- $\Rightarrow$ Opportunity to preserve green space and protect environmentally sensitive features
- $\Rightarrow$ Encourages creativity and flexible subdivision design
- $\Rightarrow$ Encourages opportunities for shared services such as community water and community sewer

### **Further reading...**





- The RDN undertook a study to develop a suite of options to support a more sensitive and sustainable approach to development in rural areas. Read the report online @
- www.rdn.bc.ca/areahocp

