

Regional District of Nanaimo

Electoral Area 'H'

ALR Boundary Preliminary Analysis  
Report on Existing Conditions

November 2016

Prepared by:



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## 1.0 Introduction

This report on existing conditions provides a first step in summarizing information for the ALR Boundary Review for Area 'H'. It provides a rationale for the initiative, and describes the criteria that will be used to perform the preliminary analysis. Data gaps are also identified.

The objective of the ALR Boundary Review for Area 'H' is to provide increased confidence for decision-makers when determining whether certain areas should be included or excluded from the Agricultural Land Reserve (ALR). The preliminary analysis builds on the fine-tuning completed by the Agricultural Land Commission (ALC) in 1987 and considers the following:

- Information contained in local applications submitted to the ALC (and the ALC's decisions) over the last 15 years;
- Changes in community plans;
- Existing Agrologist reports; and
- Updates to technical mapping data.

## 2.0 Scope and Purpose

The scope of this report includes a background investigation (including a review of existing documents), the development of a rationale, a mapping update, a day spent ground-truthing several sites, and discussions with landowners, RDN staff, and other stakeholders. The consultation efforts were intended to inform stakeholders about the project and to focus on confirming mapping information gathered by the consultants on biophysical characteristics of the parcels as well as pertinent historical information. The report also provides a rigorous set of criteria through which the current boundary (at both the sub-area and parcel scale) of the ALR in Area 'H' can be analyzed in order to provide increased certainty for all land owners and government.

This summary document contains all the existing knowledge regarding the ALR in Area 'H' and will be used to inform the preliminary analysis of the ALR boundary, which will be provided in the submission of a final report.

## 3.0 Context and Background Information

### 3.1 ALR: Early History

In the early 1970s, the province delineated the ALR boundary based on the Government of Canada's Canada Land Inventory (CLI) maps which were available at a 1:50,000 scale. The CLI system rated land for agricultural capability on a scale of Class 1 to Class 7 based on biophysical factors such as soils and climate. Class 1 land is considered the most suitable for a wide range of agricultural production while Class 7 land has no capability for agriculture. The original designation guidelines, generally stated, included lands in the ALR if they had improved capability ratings of Class 1 to 4.

The draft ALR maps were produced in the early 1970s by the BC Ministry of Agriculture and were then provided to Regional Districts so that recommendations and adjustments could be made based on public information from community meetings. The official ALR boundaries were subsequently confirmed by government between 1974 and 1975. The result was 4.7 million ha of

land included in the ALR in BC, with approximately 50% of it Crown Land, often undeveloped and forested. The other 50% is privately owned and used for residential and agricultural use. The majority of the ALR lies in central and northern BC, namely the Peace River, Cariboo, East Kootenay, Bulkley Nechako, Fraser-Fort George and Thompson Nicola Regional Districts.

The ALC is an independent administrative tribunal of appointed Commissioners (and staff) who are dedicated to preserving agricultural land and encouraging farming in BC. The ALC administers the ALR in accordance with the ALC Act through six regional panels. While applications for ALR subdivision, exclusion, inclusion, and non-farm use for lands are vetted by the Regional District, the ALC has the final decision-making power. The ALC also conducts other activities such as policy development, local government land use planning, bylaw reviews, regulation interpretation, ALR boundary reviews and compliance and enforcement.

### 3.2 ALR: Fine Tuning in RDN Area 'H'

ALR fine tuning reviews were first initiated by the ALC in the 1980s in order to have the boundary refined for accuracy in areas where new data had become available and/or a multitude of exclusion applications and landowner complaints were occurring. The ALC had staff and resources dedicated to reviewing ALR boundaries throughout the 1980s, however the funding for the Fine Tuning Program ceased in 1990.

During the mid-1980s, Vancouver Island received much of the ALC's Fine Tuning funding, based on the availability of updated and more detailed CLI mapping data. In the case of Eastern Vancouver Island, it was determined that the old CLI system was not comprehensive enough to classify land for specialty crops. For example, Class 3, 4 and often Class 5 soils may be highly suitable for forage production and specialty crops, but were considered "marginal" when measured against the CLI standard of being able to produce conventional soil-based crops. Therefore, it was determined that the suitability of soils for particular crops needed to be re-considered and suitability for non-soil based agriculture should also be assessed.

In 1987, a thorough review of agricultural capability within Area 'H' was completed to determine if any land should be included and/or excluded from the ALR. The purpose of this process was to review, in a consistent manner and using predetermined criteria, lands with potential for agriculture that were outside the ALR and those with limited opportunities for agriculture that were within the ALR. The process included re-mapping soils and agricultural capability data at the 1:20,000 mapping scale as well as the consideration of specialty crops, land use, parcel size, location, community development plans, and provincial plans.

The process was undertaken over a two-year period (1986-1987) and resulted in the inclusion of 865 ha of land into the ALR and the exclusion of 1,410 ha from the ALR, resulting in a net exclusion of 545 ha. At that time, the General Manager of the ALC stated that the process created a more credible and defensible ALR boundary within Area 'H'.

The land that was brought into the ALR included areas with agricultural capability ratings of Class 1 to 3 that was under forest cover at that time. The majority of land excluded from the ALR was Class 5 to 7, although some areas had small pockets of better capability. Some of the land that was excluded had good capability for agriculture, but was determined to have little potential for long term agricultural use because it had already been subdivided into small lots (less than 2 ha or 5 acres). This indicates that the ALC considers small lots to have less potential for farming.

Some of the land excluded in the Qualicum Bay area had already been alienated from agricultural use through development into a fire hall and a community centre.

#### **4.0 Rationale for the Review of the ALR Boundary in Area ‘H’**

In November 2015, the RDN Board endorsed a terms of reference for the Electoral Area ‘H’ Official Community Plan Review project which included completion of a preliminary analysis of the ALR boundary in Area ‘H’ as background information for the review. During the course of subsequent public engagement related to the Official Community Plan (OCP) review for Area ‘H’ in 2016, the desire to have the ALR boundary re-reviewed was reinforced at community meetings and through an online survey. The feedback included comments regarding the desire to exclude and/or subdivide ALR for increased development and for hobby farming purposes. Others commented that the ALR is a valuable resource that should be protected. The OCP Community Working Group met several times between April and July 2016 to discuss key issues related to the OCP update, including the discussion of certain parcels of land within the ALR. An open house was subsequently held regarding the Area ‘H’ OCP review on June 22, 2016 in Bowser. Discussion occurred on several subjects and was not particularly focused on the ALR. Specific comments relating to agriculture included the following:

- Whether development should occur on specific ALR properties.
- Support for the ALR and that it should only be used for agricultural uses.
- That residents in the Arrowsmith area should receive support from the RDN for ALR exclusion.
- Questions regarding the suitability of soil for cultivation of crops in some ALR properties.
- That the use of ALR for increased housing should be explored.

In June, twelve residents of the Boorman Rd neighbourhood submitted a petition to the RDN requesting that a block ALR exclusion application be supported in order to encourage hobby farming on smaller 5 acre lots. This request reflects numerous subdivision, exclusion, and non-farm use applications that have been submitted to the ALC by residents in this area (which includes Whistler Rd, Fowler Rd, Bonsai Place, and Rembar Rd) since 2000. Most of these applications have been denied by the ALC. Other parts of Area ‘H’ that have seen clusters of ALC applications include Grovehill Rd and areas around Spider Lake and Horne Lake.

#### **5.0 Sources of Data**

##### 5.1 Existing Studies

The following studies were used to inform this report:

- Order in Council for inclusion and exclusion of ALR and associated report and maps regarding ALR Boundary Fine Tuning program for Regional District of Nanaimo, BC Ministry of Agriculture and Fisheries and Agricultural Land Commission (1987).
- History of ALC applications and associated decision letters since 2000.
- Reports from Professional Agrologists that accompanied historical ALC applications, including:

- Agricultural Capability Assessment for 2450 Whistler Rd West, Lot 6, District Lot 81, Newcastle District, Plan 8857, by Catherine Orban, PAg (2008).
- Land Capability Assessment and associated subdivision plan map for 421 Boorman Road, Lot 28, District Lot 81, Newcastle District, Plan 1967, by Peter T. Mason and Mel Zwierink, PAg (1999).
- Agricultural Capability Assessment for 7955 Island Highway West (Cook Properties) by Laura Hooper-Byrne, PAg (2015).
- Supplementary Report for Application to the ALC for the Remainder of Lot A, Plan 48840, District Lots 1 & 86 and Lot B, Plan 38643, District Lot 86, by Brian French (1999).
- Land Capability Assessment for 2715 Turnbull, Lot A, Block 360, Alberni District and Newcastle District (2003).
- Agricultural Capability Assessment for 4920 Island Highway West, Lot 24, District Lot 81, Newcastle District, by Nicole Muchowski, PAg (2010).
- Agriculture Water Demand Model report for the Regional District of Nanaimo by the BC Ministry of Agriculture (2013).
- Agricultural Land Use Inventory for the Regional District of Nanaimo by the BC Ministry of Agriculture (2011).
- Soils of Vancouver Island, a compendium published by the BC Forest Service (1973).
- Soils of Southeast Vancouver Island published by the BC Ministry of Agriculture and Food (1985).
- ALR Boundary Review Manual published by the Agricultural Land Commission (2014).
- Electoral Area 'H' Agricultural Bylaw and Policy Updates Project, draft property data summary (2016).
- Electoral Area 'H' Official Community Plan Background Report (2016).
- Electoral Area 'H' Official Community Plan survey results and notes from community meetings (2016).

## 5.2 Mapping Data

Digital (PDF) versions of agricultural capability maps were used to determine overall agricultural capability for the sub-areas. The following Agricultural Capability Maps for Regional District of Nanaimo were used:

- Soil maps for agricultural soil management groups, published by BC Ministry of Environment and Parks at scale of 1:20,000 (1984).
- Agricultural Capability maps published at scales of 1:125,000; 1:50,000 (1979); and 1:20,000(1984) (by Talisman Projects Inc. in 1979 and BC Ministry of Environment and Parks in 1986).

Geographic Information Systems (GIS) data was also obtained in thematic map layers to allow for integrated analysis of land data. The data layers include:

- 20 m topographical contours (Terrain Resource Information Management (TRIM))-GeoBC.
- Watercourses and Environmental Features (TRIM).
- Ground water wells – BC Ministry of Environment Water Resources Atlas (2016).
- Parcel data including Farm Tax status (Regional District of Nanaimo).
- Lot and Coverage Data from the Agricultural Land Use Inventory (ALUI) – BC Ministry of Agriculture (2012).
- Source data and results from the Agricultural Water Demand Model (BC Ministry of Agriculture (2013).

### 5.3 ALC Application History

A review of 37 historical ALC applications (submitted since 2000 for the purposes of inclusion, exclusion, subdivision, and non-farm use) is included here. The purpose of this review is to obtain a full picture of the type of applications that are being submitted regionally as well as to investigate the nature and consistency of the ALC’s decisions. As part of the analysis, a detailed inventory of historical applications submitted to the ALC from landowners within the RDN Area “H” was compiled. Information regarding the ALC decisions were obtained from RDN staff and was analyzed to determine the basis for approval or rejection of applications. The data set was completed with assistance from ALC staff.

A review of applications was conducted on a sub-area-scale. For ease of analysis, Area “H” is grouped into the following six sub-areas:

- Sub-area 1: Deep Bay (3 applications);
- Sub-area 2: Bowser (no applications);
- Sub-area 3: Qualicum Bay and Dunsmuir including Horne Lake Rd. (14 applications);
- Sub-area 4: Boorman Rd., Whistler Rd., Fowler Rd., Bayliss Rd., and Oakdowne Rd. (15 applications);
- Sub-area 5: Horne Lake area (no applications); and
- Sub-area 6: Spider Lake area (5 applications).

Several landowners submitted repeat applications. For instance, if an exclusion application was denied then the landowner may have submitted a subdivision application a few years later, or a request for reconsideration. No applications were submitted in the Bowser or Horne Lake areas. Overall, the decisions of the ALC have been consistent across Area “H” applications.

They can be summarized as follows:

- 4 non-farm use applications, two of which were approved (one for a secondary dwelling and one for a seniors assisted living facility);
- 7 exclusion applications (one recently submitted and not yet decided). Two of the exclusion applications were approved (one due to poor agricultural capability in the

Spider Lake area and the other due to concerns around shellfish operations in the Deep Bay area);

- 22 subdivision applications, seven of which were approved to improve the operational conditions of the agricultural sites;
- 1 application to include a portion of land and then subdivide the larger lot, which was approved; and
- 3 inclusion applications, which were all approved.

Despite the application that was approved for exclusion, having poor agricultural capability was not generally considered by the ALC to be a significant enough factor to warrant exclusion, non-farm use, or subdivision of the ALR land base. The ALC has repeatedly noted that non-soil based agricultural activities could and should be explored in areas with marginal (Class 4-5) and challenging (Class 6-7) soils. The ALC does not encourage repeat applications that do not otherwise demonstrate any relevant new information. It is clear that the ALC has been consistent in these repeat application decisions and that a different conclusion is unlikely in the future.

#### 5.3.1 Deep Bay: 2 Exclusion Applications and 1 Non-farm Use Application

- One exclusion application was approved due to poor agricultural capabilities and concerns from the local shellfish operators regarding potential impact of upland and upstream agricultural activities.
- A second application for non-farm use (in order to construct an additional dwelling for an employee and to establish a pallet building and repair business) was denied. The ALC's reasoning was that the construction and establishment of the pallet business had no benefit to agriculture in the region and was inconsistent with ALR regulations and intentions.
- A third application for exclusion (by representatives of the Cook properties) has recently been submitted to the ALC and is being processed. A decision has not yet been made. The site is not being used for agriculture and proponents argue that any agricultural development of the site may negatively impact nearby shellfish operations.

#### 5.3.2 Inland Island Highway (South of Horne Lake Exit): 4 Subdivision Applications

- Three applications were by the same landowner for subdivision of a lot and two blocks, with the addition of a third block in the final application, which was a reconsideration request. The fourth application was submitted by a different landowner with a much smaller parcel size.
- Three of the four subdivision applications were approved. The ALC reasoning for approving the subdivisions was that the subdivision of high capability land into parcel sizes that remained large enough to be viable parcels, but more financially attractive, would allow for a wider variety of agricultural operations and would be more likely to be farmed. The ALC also agreed that the properties were bisected by the highway, which created challenges in farming the lot as one contiguous operation.



- The properties ranged from 58 ha to 400 ha in size and were all zoned as either A-1 or A-2. The final subdivision resulted in properties ranging from 8.3 ha to 167.8 ha, which remain within the zoning's minimum parcel size.

#### 5.3.3 Grovehill Rd: 4 Subdivision and 1 Non-farm Use Application

- Three subdivision applications were submitted by the same landowner for the same parcel, with slight variations each time. The initial application and follow-up reconsideration request were submitted for subdivision into two or three lots. Each of these applications was denied by the ALC due to concerns that the subdivision would reduce options for agricultural use and would encourage further parcelization of properties. The application was later re-submitted for non-farm use to construct a second dwelling, which was approved as it was considered part of the farm operation and required for parents and co-owners of the farm who were living off-site.
- The fourth subdivision application was approved due to a BC Hydro and Terasen Gas right-of-way. Each parcel on either side of the right-of-way contained a house and the proposed subdivision would already recognize the de facto situation.

#### 5.3.4 Boorman Rd (including Whistler Rd and Fowler Rd): 10 Exclusion and Non-farm Use Applications

- A total of ten applications were submitted from landowners on Boorman Rd, Whistler Rd, and Fowler Rd since 2000. All, except one application, have been denied by the ALC.
- The application that was approved was for non-farm use for a seniors housing complex. The senior residents were to be encouraged to engage in farming activities on-site. The housing complex was developed, however it is currently sitting vacant.
- Five of the remaining nine applications were submitted by the same landowner (annually) as reconsideration requests. The reason for denial by the ALC was consistent for all applications: it was determined that the subdivision of parcels into small lots (usually 5 acres or less) would reduce the agricultural potential of the parcels. The ALC also noted that subdivision into small lots would also increase expectations of surrounding landowners. While the marginal nature of the soil on these properties was taken into consideration, the ALC was of the opinion that non-soil based agriculture should and could be explored.

## 6.0 Development of Criteria to Assess ALR Boundary

Using predetermined criteria to examine the suitability of land within the ALR in Area 'H' allows the preliminary analysis to be conducted in a consistent manner. The proposed set of criteria can be used on a "sub-area" scale and then "parcel-based" for sub-areas where the ALR boundary may warrant a greater degree of attention. The criteria for both sub-area and parcel-scale analysis is based primarily on biophysical data and land use activities in order for the results to be robust and defensible.

### 6.1 Sub-Area Criteria

As a first step, a sub-area-scale analysis is performed using a set of high-level criteria. For ease of analysis, Area "H" is grouped into the following six sub-areas:

- Sub-area 1: Deep Bay;
- Sub-area 2: Bowser;
- Sub-area 3: Qualicum Bay and Dunsmuir including Horne Lake Rd.;
- Sub-area 4: Boorman Rd, Whistler Rd, Fowler Rd, Bayliss Rd, and Oakdowne Rd;
- Sub-area 5: Horne Lake area; and
- Sub-area 6: Spider Lake area.

The criteria used for examining agricultural suitability at the sub-area level include:

- 1) ALR Designation: Large proportional presence of Agricultural Land Reserve designation in the sub-area is a general indicator of agriculturally-suitable lands.
- 2) BC Assessment Class 9 (Farm Class status): The presence of farming operations with Farm Class status indicates that farming may be viable in the sub-area.
- 3) Steep Slopes: Sub-areas with a lot of steep slopes reduce the diversity of agricultural operations that are suitable to an area.
- 4) Soil Types: The presence of large amounts of stony soils, organic (peat) soils, or other soils with significant constraints will be considered as a challenge to soil-based farming (although not necessarily a challenge to farming entirely).
- 5) History of ALC applications: Sub-areas with pockets of multiple ALC applications may warrant further attention at a parcel-level. However, the details included in the decisions (results) of the ALC applications will need to be given consideration at the parcel-scale level of analysis.

### 6.2 Parcel-Based Criteria

Additional parcel-based suitability analysis may be required for certain sub-areas, using the following criteria:

- 1) Agricultural Capability: Agricultural capability includes references to soil type and topography as well as any potential limitations (stoniness, need for irrigation, slopes, soil structure) at a scale of 1:20,000. However, livestock operations, poultry, or non-soil based agriculture (greenhouses, aquaculture) are all examples of agricultural activities

that can thrive on parcels with marginal or low agricultural capability ratings. Pockets of Class 4, 5, and 6 land can slowly be improved over time and eventually be added to the productive farm unit.

- 2) Agricultural Suitability: This is a further interpretation of agricultural potential based on soil, crop, climate and productivity limitations for the site and the area. Suitability more closely represents the practical options for agricultural use of the site. Both soil-bound and non-soil bound farm operation options are considered, as both types of farms can be successful from a business perspective. The potential influence of climate change on a site will also influence suitability.
- 3) Parcel size: The size of the farm property is an important determinant with regard to viability. The diversity of what can be produced is reduced as the parcel becomes smaller, and economies of scale increase as the parcel size increases. As a general rule, the ALC notes that farms under 5 acres are alienated from commercial farming. These smaller farms tend to be used primarily for rural residential purposes and can also lead to the erosion of the ALR boundary, therefore subdivision is generally discouraged.
- 4) Irrigation and Drainage: A viable farm requires water for irrigation during the growing season and drainage infrastructure during the wetter shoulder season and winter months. It is reasonable to expect a certain level of investment and site development on the part of the landowner to set up the irrigation (pumps, drip lines, sprinklers) and drainage (tiles, ditches) systems. The criteria considers whether irrigation water is available on site, from an adjacent site, or lacking. It also notes whether drainage is naturally occurring or if infrastructure is required.
- 5) Roads: Roads can be both an opportunity and a hindrance for farms. Working farms require roads in order to move farm vehicles and products into and out of the farming operation. However, if a busy road bisects a farm parcel and alienates a portion of the site it can have a negative effect. Farms also benefit from egress (secondary entrance/exit) although this is not an absolute requirement.
- 6) BC Assessment Class 9 (Farm Class status): BC Assessment confers Farm Class Status (Class 9) to farm operations that are able to provide evidence of a minimum income being generated. The existence of Farm Class Status, whether current or historical, is an indicator of overall viability of the parcel. Farm Class Status of adjacent parcel(s) may also be considered.
- 7) Land use: Similar to the Farm Class Status criteria, the presence of farming activity of the parcel will be considered. Land Use Inventory data, stakeholder discussion, and ground-truthing can be used. The presence of agricultural operations on adjacent and/or nearby parcels will also be considered.
- 8) Land Cover: Land cover differs from land use in that it describes the buildings and infrastructure present on the parcel. Alienation of land from agriculture (presence of roads or waterbodies) and overall amount of paved surfaces will be considered.

These criteria will be applied to the sub-areas, and parcels (if applicable) and recommendations associated with the analysis will be provided in the final preliminary analysis report.

## 7.0 Ground-Truthing

Consultants spent a day (September 22, 2016) in Area 'H' to verify maps and other data sources for accuracy with regard to agricultural suitability, property boundaries, water features, steep slopes, and roads. The criteria were also tested to ensure they were robust and resulted in reasonable conclusions at the sub-area and parcel-based scales. Using a similar approach to that taken during an Agricultural Land Use Inventory, some of the parcels were viewed from the property line, properties were walked when possible, and meetings were held with specific landowners, as requested.

### 7.1 Ground-Truthing Goals

The broad goals of the ground-truthing were to:

- Communicate and raise awareness about the project in order to generate discussion with landowners on potential issues and priorities;
- To inform and confirm mapping, reporting, and data review;
- Gather input and feedback from landowners; and
- Determine data and information gaps.

### 7.2 Landowner Outreach

Meetings with landowners were scheduled on an as-request basis. The following steps were taken to reach out to landowners in Area 'H'.

- 1) Initial communication between RDN and landowners: Outreach was conducted through a combination of mail letters, phone calls, and email. Landowners were invited to submit all relevant information regarding their parcels and ALR claims. They were also asked if they would like to request a face-to-face meeting with the consultants. (July and August 2016).
- 2) Communication between consultants and interested landowners: Members of the consulting team connected with interested landowners to set up a date and time for the ground-truthing visit. (August and September 2016).
- 3) Meetings between landowners and consultants: Members of the consulting team spent a full day in Area 'H' to meet with stakeholders and perform ground-truthing. A total of 7 subareas were visited and three detailed landowner meetings, each approximately 45 mins in length, occurred. (September 22, 2016)

### 7.3 Ground-Truthing Itinerary

As a result of this outreach, the following ground-truthing itinerary was established:

- Oakdowne Rd, Corcan Rd: viewed Farm Class properties outside the ALR. These included an alpaca farm and several horse and hobby farms.
- Boorman Rd, Whistler Rd, Fowler Rd, Rembar, Bonsai Place: Met with landowners and viewed agricultural properties with and without Farm Class status in the area, including a forage and hay farm, horse farms, and mixed-use farms. The Arrowsmith Golf Course was also noted in this area, which is located within the ALR.
- Grovehill Rd.: Drove to the end of Grovehill and viewed properties that have submitted repeated ALC applications, as well as at least one property that appeared to be a functioning agricultural operation (horse and hay farm).
- Horne Lake Rd (including Olympic Rd, Thorpe Rd): Viewed properties that have Farm Class properties and that are outside the ALR as well as a couple of properties that have submitted repeat ALC applications. Agricultural activities included berries, fruit trees, and poultry.
- Spider Lake Rd and Turnbull Rd: Met with landowners and viewed properties with and without Farm Class status in the area, including a garlic farm, a small-scale poultry farm, and fruit tree operations.
- Deep Bay (including Gainsberg Rd): Took a tour of the Cook Properties and discussed their development plans. Viewed properties that have Farm Class properties and/or active agricultural status.
- Island Highway around Qualicum Bay and Widgeon Rd: Viewed some Farm Class properties that are outside the ALR as well as properties that have had applications rejected by the ALC.

These site visits, along with discussions with stakeholders, were used to fact-check the GIS mapping, Agricultural Land Use Inventory maps, and Agrologist reports, where applicable. Digitized GIS maps were used as a primary guide to assessing the criteria prior to ground-truthing. The criteria approach proved to work quite well, however, it became apparent that the available topographic data (20 m TRIM contours) is not sufficient to make a desktop assessment as to a slope's impact on agricultural suitability. Numerous small and medium-scale topographic features were observed during the ground-truthing that could have an impact on individual parcel's agricultural suitability that were not identifiable from the TRIM contours in GIS.

## **8.0 Existing Conditions: Key Findings**

### 8.1 Gaps in Data and Resources

As the mapping portion of the existing conditions report progressed, it became apparent that a number of data sets are available at a level of resolution that is too coarse to provide analysis at the parcel level. However, efforts to provide findings on a sub-area level were successful. In particular, the following data gaps were identified:

- Slope data is only available at 20 m contours. While this provides a high-level determination of slope impact on a sub-area basis it does not account for site-specific topographical variations.
- Agricultural Capability (CLI) data maps were originally completed by hand in the 1980s. Efforts to digitize these maps is challenging due to registration issues. Efforts to overlay this data on a sub-area bases were somewhat successful, but usefulness at a parcel scale is limited due to the scale of the source analysis. This underscores the importance of individual Agrologist reports at the parcel level.

### 8.2 Existing ALR Boundary

The majority of ALR in Area 'H' is located in Qualicum Bay, Dunsmuir, and Deep Bay. During the 1980s the ALR fine tuning program was extended to include eastern Vancouver Island, including RDN Area 'H'. At that time, a net exclusion of approximately 545 ha occurred. While a number of applications have been made by landowners to exclude and subdivide land from the ALR since that time, few have received support from the ALC, and therefore the ALR boundary has not changed substantially.

The current ALR boundary includes a variety of agricultural capability ratings, mainly Classes 2, 3, 4, and 5. The feasibility for a diversity of soil-based agricultural production may be marginal, but the suitability for forage crops, non-soil based farming, and livestock remains high. Maps were created to present the updated ALR boundary for RDN Area 'H' (see Appendix).

### 8.3 Agricultural Land Use

Based on findings from the Agricultural Land Use Inventory, BC Farm Class status data, and a day spent ground-truthing farmland in Area 'H', the following agricultural uses were noted most frequently:

- Horse / equine operations;
- Hay and forage crops;
- Small scale poultry production;
- Llama and alpaca production;
- Small to medium-scale fruit and nut tree production;
- Pasture (managed and unmanaged);
- Sheep and goat;
- Tree plantations (Christmas trees, fibre/pulp trees);
- Field vegetables; and
- Berries.

These agricultural uses are consistent with those that could be expected to be found on marginal (Class 3, 4, 5) agricultural soils.

Maps indicating ALR and presence of parcels with BC Farm Class status were created and are attached (see Appendix). Results indicate that most properties with Farm Class are within the

ALR, with some exceptions noted around Deep Bay (Jamieson Rd) and Qualicum Bay (Widgeon Rd and Oakdowne Rd).

#### 8.4 Environmental Features

Based on mapping and ground-truthing it became clear that steep slopes and marginal (stony, coarse) soils are the most common constraints to farming found in Area 'H'. Access to water for irrigation purposes does not appear to be a challenge. Maps developed to highlight environmental features indicate an overwhelming presence of water wells throughout the ALR in Area 'H'. While challenges in aligning the hand-drawn CLI Agricultural Capability maps prevented precise location analysis of soils, a sub-area map was created to present this data alongside slopes and water wells. The main agricultural capability constraints noted in the mapping were T (Topography), P (Stoniness), and A (Aridity), which are consistent with observations made during ground-truthing. These maps are provided in the Appendix.

### **9.0 Next Steps**

The information contained in this report, along with the criteria developed to determine agricultural suitability, will be used to perform a preliminary analysis of the ALR boundary in Area 'H'.

While this is underway the following consultation will occur with stakeholders:

- Inform the AAC: The consulting team will assist RDN staff in developing materials for AAC members to inform them of the project's progress and provide updates on stakeholder engagement. This will provide the AAC with an opportunity to submit feedback on the existing conditions report.
- Inform the Area 'H' OCP advisory committee: The consulting team will assist RDN staff in developing content to inform the Area 'H' OCP committee meeting and associated Open House. This content will include the rationale, criteria, and updated boundary maps for the project. Depending on the timeline of these events it is possible that a draft of the final preliminary analysis report will be available for presentation.
- Presentation of draft report to RDN staff: The consulting team will draft the report and present it to RDN staff. At that time, staff may choose to refer the report to specific stakeholders (ALC, BC Ministry of Agriculture, landowners, AAC) for feedback.
- Final report is available for public viewing: The report will be finalized and linked to the RDN website.

## 10.0 Appendix

The following maps are attached:

### ALR Applications and Decisions (2000-2015)

Three maps are provided to indicate the status of historical (2000-2015) ALC applications:

- ALR in Area 'H' level
- Deep Bay and Dunsmuir sub-area level
- Qualicum Beach and Spider Lake Rd sub-area level

### Parcels with Farm Class Status (2015)

Four maps are provided to indicate the parcels that had BC Farm Class status in 2015:

- Full Area 'H' level
- ALR in Area 'H' level
- Deep Bay and Dunsmuir sub-area level
- Qualicum Beach and Spider Lake Rd sub-area level

### Environmental Features (2015)

Two maps are provided to indicate possible constraints to farming:

- ALR in Area 'H' level
- Deep Bay and Dunsmuir sub-area level
- A map of the Qualicum Beach and Spider Lake Rd sub-area level remains under production