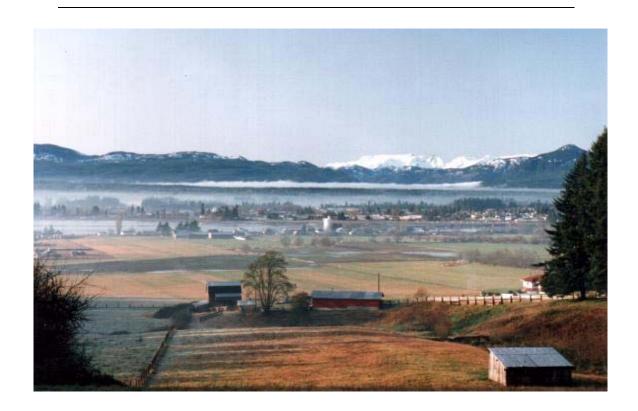
Comox Valley Agricultural Plan:

Phase 1 Report 2: Issues and Opportunities



Prepared for:



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Prepared by:

QuíWest Consulting Services George Penfold , MCIP From the Ground Up Gary Rolston P.Ag.

*GroundWorks Strategic Marketing Solutions*Paul Guiton

Comox Valley Agricultural Plan Phase 1 Report 2: Issues and Opportunities

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1.0 Issues and Opportunities

1.1 Introduction

The results of first Phase of the Comox Valley Agricultural Plan include two reports. The first report documents the history and background of agriculture in the Comox valley, the resources available for agriculture, and a description of agriculture in the Valley. In this report, an initial description of issues confronting agriculture in the Valley, and some possible opportunities for expansion of the industry are presented.

1.2 Overview

The following issues and opportunities were identified from the working group discussions and available reports and documents including other agricultural strategies in British Columbia. The document sources include reports generated from agricultural events or activities as noted in Table 1. A content analysis of these documents was used to identify the specific issues or opportunities contained in the documents. The other local strategies reviewed included North Cowichan, Saanich, Richmond, Pitt Meadows, and Surrey. Many of these issues and opportunities identified for the Comox Valley are similar to those faced by agriculture elsewhere on Vancouver Island and in B.C.

The focus for the Comox valley Agricultural Plan is not on those issues of provincial or Island wide scope. Those issues can or are being addressed by commodity organizations, the provincial Farmers Institute, and the Island Farmers Alliance. The focus here is on issues that can be addressed or that require specific attention iclose to homei, at the local level. The range of issues and opportunities, and identification of issues from various sources is shown in Table 1. These issues are presented in a general order of priority established by the Steering Committee and representatives of community organizations. The shaded cell in the Table indicates that the specific issue identified was noted in that report or document.

For the purpose of Phase 1 of the planning process, these issues and opportunities are assumed to be the most critical for the farm community in the Comox Valley. As further consultation in Phase 2 of the planning process takes place, other issues and opportunities may be added to this discussion, and priorities may change. Thus, this report is presented as a idraftî report.

The isolution options presented are not intended to represent all possible solutions. They do represent a starting point for discussion in Phase 2 based on ideas drawn for the focus groups, Steering Committee, and other reports and strategies.

Table 1: Issues and Opportunities Facing Vancouver Island, and Comox Valley Agriculture	s Facing \	/ancouver l	sland, and	d Comox	Valley Aç	priculture					
	Sources		-	-		<u> </u>	Focus Groups	SC	-		
	-VI Agri-food S Action Plan (VI Agri-food Select Standing Pre-Summit Premier's VI Survival Other Ag Action Plan Committee Workshops Summit Forum (1998) Strategies	Pre-Summit Workshops	Premier's\ Summit	/I Survival Forum (1998)	Other Ag V Strategies	Water Rural Residents	Agencie ents	es Retail Marketing	Agencies Retail Marketing Farmers Institute Committee	Project Steering Committee
Land Use Issues/Opportunities											
Agricultural Production and Wetland Protection											
Compatibility with Wild Fish Production											
Agricultural impact on Water Quality											
Composting											
Inventory existing capabilities											
Urban-Rural interface - planning											
Accuracy of Sensitive Habitat Atlas											
Greenways and Trails											
Flooding Caused by Upland Development											
Poor drainage within soil											
Economic Issues/Opportunities											
Changing Farm Size											
Farm Profitability											
Farm Succession - family farms											
Input Costs											
Land tenure - availability of land for agric.											
Available Land Resources											
Agritourism, Farm tours											
Infrastructure Issues/Opportunities											
Barge Facility											
Air Cargo											
Oyster River Research Farm											

Table 1 (continued): Issues and Opportun	Issues an	d Opportui	nities Fac	cing Vaı	ities Facing Vancouver Island, and Comox Valley Agriculture	Island,	and (Somox	Valley	Agric	ılture	
	Sources						ocus (Sroups				
	VI Agri-food Select Stan Action Plan Committee	VI Agri-food Select Standing P Action Plan Committee V	Pre-Summit Workshops	Premier's V Summit F	Pre-Summit Premier's VI Survival Other Ag Norkshops Summit Forum (1998) Strategies	Other Ag N Strategies	Vater R R	Water Rural A	Agencies Retail Marke	etail Iarketing	Retail Project Ste Marketing Farmers Institute Committee	Project Steering Committee
Policy Issues/Opportunities												
Supply Management												
Land Stewardship/Sustainability												
ALR												
Government regulation - 'red tape'												
Property Taxation												
Meat Inspection												
Research and Development												
Access to water for irrigation												
Marketing Issues/Opportunities	-											
Food self sufficiency												
Agroforestry												
Agricultural awareness/ cultural activities												
Food safety												
Local Marketing												
On-farm and off-farm processing												
Promotion of local products - Farm Product Guide												
Promotion of local products - Dairyland Billboard												
Producer Issues/Opportunities												
Advocacy												
Strengthen Farm Organizations												
Producer training												

2.0 Land Use issues and Opportunities

2.1 Agricultural Production and Wetland Protection

Approximately 30% of the soils in the Comox Valley need improved drainage systems for optimum productivity. In addition some crops such as cranberries and imarket gardenî type production grow best in organic soils and wetland areas (See Report 1). From an agricultural perspective, the draining of wetland areas has traditionally provided a means of increasing production and enhancing the viability of farm operations. Policies and regulations under the federal *Fisheries Act*, the provincial *Fish Protection Act*, as well as regional and local planning policies regarding sensitive systems protection and fisheries habitat, virtually eliminate the possibility of drainage of wetlands for agricultural production.

Solution Options

- Do nothing. Individual farmers and the land market will eventually adjust to these limitations.
- Technical and Policy Support: As an alternative to increasing production by draining wetlands, assistance to access water for irrigation to increase yields on lands currently being farmed offers an alternative to the drainage of wetlands.

2.2 Agricultural Compatibility with Wild Fish Production

While Federal and Provincial agencies are placing much greater importance on fish and fish habitat protection, agricultural requirements for drainage and irrigation must still be considered as critical to the agricultural industry. In addition, fish protection will mean a new priority for management of riparian areas to prevent erosion and siltation and to provide shade to maintain cool water temperatures.

Care should be taken to ensure that impacts on the fishery resources are minimized. Irrigation withdrawals must follow conditions stated on a water license, use proper screening to prevent fish from being drawn into irrigation lines and use scheduling techniques to ensure that the amount of water taken is not more than what is needed.

Drainage maintenance requirements often conflict with fish habitat. In areas where fish are present in drainage channels, fish salvage may be required prior to conducting drainage maintenance work.

Solution Options

- Do nothing. Individual farmers will adjust to emerging regulations with revised management practices. Several stream stewardship groups are involved in farmer awareness programs.
- Demonstration/Education: Conduct projects that look for win-win solutions. The Agriculture Watercourse Maintenance Guide can be used as a baseline for determining works in a constructed ditch that may be done at a time of year and manner that reduces impacts on the fisheries resource.
- Education: Increase farmer awareness of the needs of in-stream fish and how farm management practices can either support or be detrimental to the fishery.

 Research: Initiate a project to classify ditches using the Ministry of Agriculture, Food and Fisheries watercourse classification guidelines.¹

2.3 Agricultural Impact on Water Quality

Reduced water quality as a result of runoff from farms as well as from commercial composting operations and cattle watering directly in watercourses is of increasing public and agency concern. Given that the most predominate agricultural activity in the study area is livestock, more attention is likely to be given to livestock based water contamination. To date, there have been few long-standing or large-scale concerns about Comox Valley producers. It is important that any concerns be addressed by producers without the ipressure of warning letters or charges under regulations. MAFF is producing a guideline entitled: "Agriculture and the Environment - Reference Guide for Livestock Producers in BC" and its companion document "Agriculture and the Environment - Developing an Environment Plan for Livestock Producers in BC." These are both currently in draft form, and soon will be available as information for farmers.

Solution Options

- Do nothing. Individual farmers will adjust to emerging regulations with revised management practices, or will be subject to penalties under the regulations.
- Education: Improve farmer awareness of best management practices and obligations under the prevailing regulation. The Ministry of Agriculture, Food and Fisheries, farm organizations and Stewardship Groups along with the relevant regulatory agencies could be useful resources.
- Education: Improve agency and local government awareness of the importance of irrigation and drainage to agriculture. Again, the Ministry of Agriculture, Food and Fisheries, farm organizations and Stewardship Groups along with the relevant regulatory agencies could be useful resources.

2.4 Composting and Waste Management

Composting is not really an agricultural issue in as much as most of the current concerns relate to commercial, non-farm composting, and composting of non-farm wastes on farms. Farmers do compost manure and occasionally use commercial composting for disposal of dead stock. If land based aquaculture increases, composting as a service to those farmers may become more important to dispose of imortsî.

Nuisance such as odour from composting facilities in agricultural areas can impact both non-farm and farm residences, and create confusion among rural residents in terms of differences in composting processes and requirements between commercial operations and on-farm manure composting.

Ministry of Water, Land and Air Protection Regulations: Aside from backyard composting and agricultural composting (as defined below), recycling of organic matter is covered by the provincial Organic Matter Recycling Regulation (OMRR.)

Backyard Composting means composting food waste and yard waste at a site, where:

¹ http://www.agf.gov.bc.ca/resmgmt/publist/800series/810200-1.pdf

- a. The food waste and yard waste is generated at the site and;
- b. the annual production of compost does not exceed 20 cubic meters.

Agricultural waste composting means composting agricultural wastes in accordance with the Province of BC Reg. 131/92 ñ the Agricultural Waste Control Regulation as follows:

- 1. Agricultural waste may be composted on a farm if:
 - a. the agricultural waste being composted consists only of agricultural waste produced on that farm, or
 - b. produced elsewhere but being composted for use on that farm only,
- 2. the composting site is located more than 15 meters from a watercourse and 30 meters from any source of water used for domestic purposes, and
- 3. the agricultural waste is composted in a manner that does not cause pollution.

Wood waste is the only non-agricultural waste that can be composted with agricultural byproducts and the resulting compost may be used on the farm or sold off the farm, however, the wood waste must have been previously used on the farm (bedding, etc.)

The Organic Matter Recycling Regulation imposes operating conditions on commercial composters. These include the requirement to have a leachate management plan, odour management plans and operations and closure plan prepared by a qualified professional. Generally, commercial composting facilities must be located on an impermeable surface like asphalt or concrete unless ia qualified professional can demonstrate through an environmental impact assessment that the environment will be protected through the use of alternative leachate management processes.î Existing commercial composting facilities in the Comox valley are not located on impermeable surfaces. OMRR also defines the conditions for storage and use of biosolids. The Ministry of Water, Air and Land Protection is pressuring local governments to reduce the waste that is land filled but at the same time, they are making it increasingly more difficult to compost products or to use composted products as soil amendments.

Land Reserve Commission Policy on Composting: The Land Reserve Commission (LRC) policy on Composting Facilities in the ALR (Policy #014/86) groups composting facilities into 3 groups that may or may not require approval:

General Commercial Composting ñ includes general composting including municipal solid waste. May or may not use agricultural animal waste as part of the process. Requires an application under Section 12(1) or 20(1) of the Agricultural Land Commission Act (ALCA).

Agricultural Commercial Composting - requires an application under Section 12(1) or 20(1) of the Agricultural Land Commission Act. This includes several local facilities that have a strong agricultural orientation due to one or several forms of locally generated animal waste as a component of the composting operation

Farm Composting ñ composting of wastes originating from on or off the farm for use on the farm. No application is required.

Note: The LRC is also responsible for administering the Soil Conservation Act (SCA) and their policy specifically states that $\ddot{\mathbf{e}}$ approval under the ALCA will not be inconsistent with the SCA.

RDCS Position: iAn Agricultural Plan will be developed in the year 2001. It is anticipated that through the Agricultural Plan public process the Regional District will define conditions and standards that a composting operation will be required to meet, according to RDCS bylaws, to ensure that the natural environment and neighbouring uses are impacted minimally.î (Quoted from a letter from RDCS Planning to MELP, December 19, 2000). At a meeting held in February 1999, the RD board supported the concept of composting wastes for use on local farms and for commercial sales. They have supported composting of non-farm waste in the rural area. The three local area plans covering the study area generally support commercial composting. A meeting of concerned individuals and stakeholders was held at the BC Access Centre to discuss the issues and concerns related to commercial composting in the RDCS. The issues that arose at that meeting included: odour; noise; impacts on groundwater and surface water; risk of fire from spontaneous combustion; diseased fish effects on milk quality from runoff (non-issue) and that composting sites are too close to residences. They are also concerned with potential pollution from leachates. The neighbours affected by odour from composting operations live up to 1 kilometre away from the site.

In addition to the current scope of waste management systems, there may be opportunity to augment the volume of recycled inputs available to agriculture by adding organic by products from urban households and businesses to the composted waste stream, and by making waste water from the waste treatment facility available for irrigation of farm land. Some municipalities provide opportunities for home separation of organic waste and separate pick up for composting (e.g., Capital Regional District) and use water discharge from the sewage treatment system for irrigation purposes (e.g., Cranbrook.)

Solution Options

- Do nothing. The Provincial authorities will address this issue though regulations.
 Once standards or guidelines have been developed, they can be included in local plans and zoning bylaws as appropriate.
- Site and Well Management: Proper setbacks and proper design and maintenance of
 wells are part of the answer to the groundwater contamination concerns. Most often
 contamination comes from surface activities directly above the well². Landowners
 should test well water regularly. Without historic water quality records, it would be
 difficult to conclude when and how the well was contaminated.
- Conflict Resolution: Concerns about environmental issues are often directed to the Regional District in spite of the fact that the province regulates them. A regional imediatorî whose primary mandate is to resolve conflict rather than enforce by-laws could inspect, refer to appropriate agency, and try to resolve between the two parties. There is often a simple answer to a problem and often the answer is not related to the original complaint. A classic example happened a few years ago when a farmeris neighbour complained that the farmer was piping manure into a roadside ditch along the farm. It turned out that the pipe came from the complainantis own septic field.
- Education: Develop a list serve at the RDCS that allows staff to send out bulletins on environmental or other specific subjects such as composting to interested subscribers.
- Education: Encourage urban municipalities and the Regional District to consider the benefits of composting of organic waste in the current solid waste management system, and of using the discharge water from the sewage treatment facility for farm irrigation.

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² See website http://muextension.missouri.edu/xplor/waterg/wq0675.htm

2.5 Rural Urban Interface

This issue is complex in that it is of concern in several different contexts and at different scales. This means that a range of different policies, programs or activities are needed to help address existing iproblemi situations and to avoid creating new problems when either farm operations or urban uses develop.

2.5.1 Existing problems

Existing problems are of two general types:

- Farm operations that are located adjacent to urban boundaries or settlement areas
- Farm operations in the rural area that have problems with adjacent rural nonfarm or farm neighbours. These farms can be located either in the ALR or outside of the ALR

Farming operations next to urban boundaries are the result of incremental urban boundary expansion. As new areas have been included in urban areas, there has not been a priority placed on adequate buffers within the urban area to mitigate nuisance such as odour and noise from the farm and issues such as trespassing, litter, or stray dogs that impact the farm. Land Reserve Commission Guidelines now call for establishment of a buffer on the urban side of the boundary, but these are not always implemented as a condition of approval of a boundary expansion. To date, none of the boundary expansions approved in the Comox Valley have required buffering as a condition of the expansion.

Farming operations next to non-farm or farm neighbours are the result of establishment or expansion of farming operations in a rural context that is increasingly a mix of agriculture and rural non-farm uses and landowners. In some cases, new residences have been constructed on lots adjacent to existing operations. These situations are the result of lack of any guidelines or regulations requiring some separation between farm and non-farm uses. Such guidelines are used in other provinces (e.g., Ontario³) but are not used in British Columbia.

Farming operations in these situations are iprotected by the Farm Practices Protection Act. This limits a farmers liability from nuisance suits if they are managing their operation in accordance with inormal farming practice. Farms outside of the ALR are only protected if they are appropriately zoned for agricultural use by the municipality. This legislation does not however protect the farmer from non-farm generated nuisance such as complaints, trespass, or litter and associated costs.

There is a `iFarm Practices Protection Board` established at the provincial level to review complaints and address issues and determine if normal farming practice standards are being adhered to. Usually issues are referred to this Board when the situation has reached an extreme level of conflict.

Solution Options

Do nothing. Individual farmers and their neighbours will eventually iwork it out.i

³ http://www.ridgetownc.on.ca/KMcEwan/Reports/Kmbylaw/Tableofcont.PDF

- Education: Farmers, farm organizations and/or the Regional District could be proactive in informing urban residents adjacent to farming operations, and urban municipal councils and staff, about normal farming practices as well as the potential impact of their actions on the farm.
- Mediation: Although there is a Board at the provincial level, a local committee or individual who could interpret normal farming practice and facilitate communication and problem resolution could potentially resolve or reduce the conflict in many of these concerns.
- Zoning: Farms outside of the ALR need to be recognized and included in the protection provided by the Farm Practices Protection Act through appropriate zoning provisions.

2.5.2 Avoid Creating New Problems

Addressing current problems should be accompanied by a strategy to make sure that new problems are not created by inappropriate approaches to development. Avoidance can be accomplished by appropriate policies. Again, the two main contexts are the urban interface and new operations or residences in rural areas.

For existing operations that are being encroached upon by urban boundary expansion or development, adequate buffers in the urban area need to be provided to minimize potential impacts. These requirements are currently in provincial guidelines, but are not always implemented as conditional requirements on approval of a boundary expansion or development applications.

When an agricultural area exists adjacent to an urban area, establishment of new agricultural facilities without adequate separation between urban and agricultural uses can result in new conflicts being created. Adequate distance should be provided between the new agricultural use and existing urban boundaries or development to minimize this potential problem.

In rural areas, new residences locating on parcels adjacent to farming operations should provide as much separation distance as possible from the farming operation. Similarly, development of new agricultural facilities in rural areas where non-farm uses exist should provide as much separation distance as possible from the non-farm uses.

Under revised management processes for the Land Commission, there may be opportunities for delegation of some of the decisions currently made by the Commission to iregionali panels and to municipalities. Having delegated decision making may help to avoid creating conflict situations as decision makers will have a good understanding of the local context. However, this means that it will be all the more important for farm communities to establish their role in the system.

Solution Options

- Do nothing. Current policies are adequate.
- Education: Farmers, farm organizations and/or the Regional District could be proactive in informing urban municipal councils and staff about normal farming practices as well as the potential impact of their actions on agricultural operations.
- Policy: The Regional District could establish policies and regulations to require appropriate lot sizes in agricultural areas, separation between new farm uses and

- existing urban or non-farm uses, and separation between existing farm uses and new development.
- Policy: In commenting to the province on boundary expansion applications, the Regional District could ask the province to require that buffers be provided in any urban expansion adjacent to agricultural areas.
- Policy: The Regional District could take advantage of opportunities to accept additional responsibilities for decisions in agricultural areas through delegation of authority currently held by the Land Commission.
- Advocacy. Ensure strong representation of the farming community in regional panels established by the Land Commission.

2.6 Accuracy of Sensitive Habitat Atlas

Response from the focus groups suggests that the agriculture industry does not have confidence in the atlas because it has not been adequately ground truthed. Also, as drawn it distorts the magnitude of riparian areas. The atlas shows fisheries sensitive zones 60 to 80 meters wide on either side of streams. The OCP and agreements between government agencies have normally settled on 15 to 30 metres as a required setback for farm buildings. This difference creates concern that too much of the responsibility for riparian area protection and/or enhancement will fall on the agricultural community, rather than on isocietyî as a whole. In addition, the Atlas does not take into consideration other values and priorities such as agriculture, forestry and recreation.

Solution Options

- Do nothing. The Regional District uses the Atlas as a `iguideline, î and they recognize its limitations. Site-specific information can be collected as the need warrants.
- Research and data collection: Within the plan area, classify watercourses using Watercourse Classification in Agricultural Areas (Resource Management Fact sheet, BC Ministry of Agriculture, Food and Fisheries, May 2001, Order No. 810.200-1). Build these classifications into the RDCSis GIS system in place of the current Sensitive Habitat Atlas.
- Policy: Establish clear requirements for building, manure management and other agricultural activities as part of a new farm bylaw.

2.7 Greenways and Trails

The subject of greenways through the Comox Valley has been addressed both as a general study and as part of the Rural Official Community Plan. Generally Greenways as natural areas are of less concern to farmers than trails. There is a proposal for a Regional District (Vancouver Island) Trail route to be located on a former logging right of way from the Puntledge River, through the Dove Creek area into Black Creek. Landowners along the Dove Creek section expressed serious concerns at the focus group. In this section, the trail would dissect developed, working farms if it stays on the original right of way. This is an example of the type of conflict that can arise when tourism and recreation uses in the rural area impact on active farming operations.

Solution Options

• Do nothing. Individual farmers and trail users will adjust to the realities of recreational or trail use through or near active farming operations.

Policy: Encourage either use of existing roadways, or public rights of way. When
public rights of way are used that impact directly on active farming operations,
sufficient mitigation measures to protect the farmersí activities and investment should
be considered.

2.8 Flooding Caused by Upland Development

Urbanization over the last 15 years has dramatically increased storm water runoff volumes. In several areas of the Valley the drainage systems that discharge this water pass through agricultural areas. The Lazo area and Courtenay Estuary area are two examples. Flooding and residual water can cause crop damage, and soil saturation reduces crop growth rates and yields and can damage soil structure.

Solution Options

- Do nothing. Individual farmers have the option of going to court and claiming damages as a result of flooding.
- Investment: Install properly designed and constructed drainage ditches where permitted. Many drainage ditches are not sized to match the intended flows and have vertical sides that cave in when under heavy water flows. This impedes water flow and causes siltation. Ditches should have sloped sides with the angle of the slope determined by the soil type. Build ditches the right size and establish vegetation to stabilize the banks and prevent erosion. (Resource: BC Agricultural Drainage Manual, BCMAFF, 1997).
- Policy: Require upland developers to incorporate features that reduce the rate of surface runoff onto surrounding farmlands ñ e.g., planning trees, grass, and retention ponds.
- Policy: Establish sub-watershed areas as local improvement areas so costs of drainage improvements can be equitably allocated. An initiative is underway to consider this option on the Queens Ditch located in Electoral Area B.
- Research and Education: consider alternative means to address mitigation of water runoff volumes, water quality issues, and farm drainage options.
- Management: Require new development to meet the Agricultural Drainage Criteria as provided by BCMAFF⁴. This will require education of developers and local government on the drainage needs of agriculture and the BCMAFF guidelines and criteria.

2.9 Poor Soil Drainage

Approximately 30% of the soil types in the Valley (12,000 ha in the ALR) have production capability limitations due to poor drainage or excess water. By improving drainage (i.e. both surface and sub-surface drainage) the productivity of these soil types can be increased and risk of crop loss can be reduced. It is estimated that the annual net benefit of sub surface drainage of forage land can be up to \$200 per acre (\$550 per hectare).⁵

Solution Options

 Do nothing. There are adequate unused and underutilized land areas and management options to allow agriculture to grow on the better-drained areas.

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Drainage Fact Sheet - 'Planning for Agricultural Drainage' and 'Regional Drainage Criteria', BCMAFF

⁵ BC Agricultural Drainage Manual, BCMAFF, 1997

- Investment: Install surface and sub surface drainage systems. These require a good regional drainage system that meets the agricultural drainage criteria.
- Management and Education: Reduce compaction and increase organic matter in the soil.

3.0 Economic Issues and Opportunities

3.1 Changing Farm Size

The trends show that the medium sized commodity, or single product farms are declining in number but the remaining ones are increasing in size. In the smaller scale farms, there is also a trend away from single commodity livestock to mixed livestock. For example, the number of large commercial poultry operation has declined, but the number of poultry producers or farms reporting income from poultry and eggs has increased due to a shift to smaller mixed farms. Agriculture Canadaís recent work with small flock poultry producers found literally hundreds of small-scale producers. The same is true of mixed vegetable and fruit producers. The Farmersí Market is testimony to these changes. The number of vendors has increased from less than ten in 1991 to over 50 in the 2001 market season.

This trend toward smaller mixed farms that concentrate on local market opportunities may be a significant opportunity in the Valley. Infrastructure, such as the Farmers Market and farm gate outlets are in place, and the community has developed a idemandi for local products. There is a land base available for an expansion in this sector as the iparcelizationi inventory shows a large number of small parcels (less than 4 ha) that are not currently in agricultural use.

Solution Options:

- Do nothing. The land and agricultural markets will respond to viable opportunities as they emerge.
- Policy: Promote small scale agriculture as an economic development opportunity in the region
- Education: Work with real estate agencies to inform them of the productive potential of small holdings
- Policy: Review the minimum parcel size required to create a subdivision in agricultural areas with a view to supporting smaller farming operations.

3.2 Farm Business Succession

Numbers of medium scale ifamilyî farms are falling in part because the outgoing generation canít pass them on to the younger generation for a number of reasons. For example, approximately 75% of the Valleyís dairy farm families are in the midst of succession to the next generation. The main issues in succession relate to profitability of agricultural investment (which is the main issue) and the various duties and taxes on the transfer of capital assets. The capital value of larger farm operation can be in the order of 2 to 3 times the value of annual gross sales (i.e., a farm grossing \$100,000 annually could have a sale value in the order of \$200,000 to \$300,000. In some cases, the younger generation is either not interested or canít afford to take over the farm based on return on investment potential. In addition, the time commitment to operate a farm is a disincentive. Some farms have expanded wherever possible to make the farm big enough to operate with non-family employees, but that approach leads to increased management challenges. The alternative of

fragmenting large scale businesses and related land base is not a desirable long term solution.

Solution Options:

- Do nothing. Individual farmers will make their own choices about how best to address succession issues.
- Information: There are farmers who want to retire and non-farm landowners too busy with other ventures to make good use of their land. Many of these people would probably lease or joint venture their properties, but there is no mechanism to bring the landowners together with those who might be interested in farming.
- Management: One tool for succession of dairy farms is share milking. A farm owner could share the proceeds with an operator/partner on a proportional basis.

4.0 Marketing Issues/Opportunities

4.1 Food Self Sufficiency

In the early stages of agricultural development on Vancouver Island, almost all of the food consumed on the Island was produced here, mainly because of the costs and storage losses associated with moving food long distances. Vastly improved transportation and food storage systems have all but eliminated these problems, and the proportion of food produced on the Island now varies considerably depending on commodity. Overall, in terms of economic value, only approximately 10% of what is consumed on the Island is produced here.

Many people (producers and consumers) have expressed the goal of producing a larger portion of our own food on Vancouver Island. The Select Standing Committee on Agriculture and Fisheries of the previous Legislature examined the Strategic Options laid out in the 1999 i Choosing Our Future. A stated goal at that time was i To make the value of the food we produce equal to the value of the food we consumeî. The government has not adopted this goal as a specific policy. Although the policy of the new government is not yet known in this regard, such a goal would need to be met by increased production in agricultural areas such as the Comox Valley. A policy to reverse the decline in proportion of food produced on the Island relative to consumption would be a significant boost to Island and Valley agriculture.

Improved transportation, processing and storage infrastructure also means that opportunities now exist to viably move many food products anywhere in the world. If specialty products can be identified that are particularly suited to Comox Valley growing conditions, access to the Comox Airport may offer export market opportunities. Exporting agricultural products would offset imports of lower priced staple commodities into the region.

Either of these opportunities could result in the opportunity to expand agricultural production in the Valley. There are two basic ways that the industry could increase production. One is to increase the area in production and the other is to increase the intensity of production. Increased intensity of production may be achieved through better management, higher valued crops, better soil fertility, irrigation, and drainage. Each of these methods is easier, less expensive and more effective than clearing land.

Solution Options

- Do nothing. Food self-sufficiency does not seem to be of concern to consumers or government.
- Market Research: Conduct research on local consumer preferences to help identify new or expanded product opportunities in the local market area.
- Marketing: This will require effort at all levels ñ internationally, provincially, on Vancouver Island and locally ñ to inform consumers about the availability of local products and the advantages of Valley products. Local marketing effort should be based on the market research noted above.

4.2 New Food, Industrial and Agro Forestry Products

Local, regional and global markets and opportunities are continually evolving. These changes open new opportunities for producers to use the land base for alternative crops that may have greater profitability than current uses. Hemp, agro forestry, specialized or exotic products, land based aquaculture, green house (vegetable, horticulture), botanical forest products and agro-industrial products⁶ all may be possible production options now or in the future. Given that less than half of the ALR land is currently in production, there appears to be opportunity to expand production in the study area if there are adequate returns. The challenge is to maintain awareness of new opportunities as they emerge, to evaluate the possibility for these opportunities to be viable in the Comox Valley, and to access the necessary training and investment capital to establish new production enterprises or activities.

Solution Options

- Do nothing. Producers and the Ministry of Agriculture, Food and Fisheries are already well enough informed about opprtuni5ties.
- Ask the Economic Development Society to periodically iscanî available information on new production opportunities, and when an option that appears to ifitî with the opportunities in the Comox Valley is noted, work with the Farmers Institute, MAFF, and Producer groups to gather information and assess options.

4.3 Local Marketing of Farm Products ñ Market Research

Venues for local marketing such as the Farmers Market, on farm sales, and sales through retail chains are already being used. The Farmers market is also considering development of a covered facility that can be used all year. The assumption of the Plan is that opportunities exist to expand sales in these areas. What is less clear is exactly what these opportunities are in the local area.

Solution Options:

- Do nothing. There are adequate markets for current and foreseeable production.
- Market Research: If local production based on local sales is to expand, several questions need answers. These are:
 - What products are local consumers looking for, at what level of quality and preprocessing?
 - What value do consumers place on local production, freshness, and food safety?

⁶ See for example http://agproducts.unl.edu/research.htm

- Which distribution channels offer the best opportunity to take advantage of these values ñ regional grocery, foodservice, direct sales, etc.
- What demand would there be for local products in the ioff-seasoni if a year round facility for the farmers market is developed?
- Are there any niche market opportunities (local, regional, export) that could be addressed by local production?
- Would a combined marketing strategy by several farmers be successful or are consumers oriented to itheirî particular farm supplier?
- What opportunities exist to market though local restaurants and other prepared food outlets?

4.4 Marketing of Farm Production Opportunities

It is apparent from the description of agricultural activities in the Comox Valley that there is an adequate, good local resource base to develop new agricultural enterprises. There are numerous parcels of all sizes scattered throughout the study area that are not in agricultural use. The key questions are: who are the potential clients, what information would be useful for them, and who would ideliver this information? The target client base falls into three categories:

- Potential agricultural investors from other regions;
- Consumers, both local and tourist;
- Agricultural awareness events and Schools.

There could be a great deal of overlap between these groups. Much of the information contained in the Ministry of Agriculture, Food and Fisheries publication describing agriculture in Comox Strathcona would be useful for all three client groups. A smaller more concise version could be provided to the Chamber, EDS, and real estate offices, and be available at various awareness events. A draft of such a publication was produced as part of Phase 1 and will be reviewed and edited as part of Phase 2 of the project.

For the potential agricultural investor, specific information on production capability for specific commodities would be valuable. The current capability information focuses on field crops. This does not adequately address the opportunities for specialized crops, fruits or vegetables. As part of the Phase 1 activities, digital soils and agricultural capability mapping was obtained from the Land Reserve Commission and is now operational on the RDCS GIS system.

If specific production opportunities can be identified in Phase 2, and these can be associated with specific soil types, areas that have the best capability for those production opportunities can be mapped. If individual producers have specific information requests, BCMAFF staff and RDCS staff will have to coordinate the process of development of that information base.

Solution Options

- Do nothing. Individual farmers interested in locating in the Valley will find adequate information from current sources.
- Coordination: The Ministry of Agriculture Food and Fisheries is normally the main contact for this type of information. They could take the responsibility for

- distribution, updates to the agricultural information base and client follow-up. However, a joint industry/government initiative might be the best approach.
- Coordination: BCMAFF and RDCS could develop an approach to use the GIS database to respond to individual or group requests for soils capability information in the region.

4.5 On-Farm Processing

Other than dairy and potatoes, there currently isnit enough volume of any given product to justify local large scale processing. Given this lack of production, and the closures of processing plants in southwestern BC in the past decade, the Valley may be better to focus on small scale, cottage industry value added enterprises that fit with the tourist industry and the character of the Valley. Making the most of local market opportunities means adding value to raw agricultural products \tilde{n} for example selling jam rather than berries. At a minimum, this provides an outlet for substandard products that cannot meet consumer criteria for premium priced fresh products. At best, further processed products such as specialty cheeses may be less vulnerable to commodity price pressures.

This approach should be encouraged. Facilities and skills need to be developed. There is no regularly accessible commercial kitchen facility in the Valley that local small scale producers could use to create added value products.

Solution Options:

- Do nothing. There is not enough interest to pursue a community kitchen or other local processing options at this time.
- Research and Information: The previous attempt to establish a shared community kitchen did not receive adequate support. Gathering information on the various inspectedî kitchen resources in the Valley, and the needs of farmers and other potential users in the community may be useful step toward an alternate solution.

4.6 Promotion of Local Products

There is no information base in the Comox Valley that would allow those interested in purchasing local products for consumption or processing to find out what products are available to them and at what quantity, quality and price. A Farm Product Guide was done in the past and was well received. However, it takes considerable time and resources to assemble, publish and maintain. There is also an opportunity to use on farm and roadside signage to identify the location of on-farm sales locations and other farm activities such as B&B. There may also be an opportunity to make use of the old Dairyland billboard on Dyke Road. It hasnít been refreshed in the past 15 years.

Solution Options:

- Do nothing. Farmers and consumers are each doing what is needed to address their respective needs.
- Marketing: Co-op advertising to increase the recognition of the Fresh From the Island Logo!
- Marketing: Perhaps the message on the billboard could be changed to a buy local food products message, such as Farmers Market locations and times.
- Marketing: Promote Valley food products to the expanding tourism market that visits the Valley and region.

4.7 Agricultural Awareness / Cultural Activities

Farmers have generally relied on others to make the public aware of their concerns, products, etc. For example, BCMAFF staff did much of the work at Fall Fair and Great Taste of the Comox Valley events. There are examples of events that can improve awareness and generate revenue, such as Art on the Farm (Cowichan Bay Farm), and Feast of the Fields (Farm Folk/City Folk, Vancouver), Octoberfest and other farm festivals (Oldfield Orchard, Sidney). Generation of revenue from events can help awareness efforts by making resources available for staffing and advertising. There may be potential to consider similar events in the Comox Valley.

The events above (the Open Houses and the Food For Thought, the Fall Fair, the Farmersí Market) are all examples of the public going to the farm or to farmers rather than farmers going to the public. To be effective in creating public awareness, the agricultural sector must make more effort to go directly to the public.

Another component of agricultural awareness and marketing that has been successful is Farm Tours and Open Houses. The annual Farm Tour in August usually attracts over 3,000 people to several farms around the Valley. Likewise Open Houses at Oyster River Research Farm and other local dairy farms generally attract 2000 or more participants. The Agricultural Awareness Committee, chaired by the District Agrologist, has in the past organized and hosted, &Food For Thoughtí workshops and bus tours to educate politicians and policy makers in the Valley. These were copied by other jurisdictions including the GVRD and Creston Valley.

A focus for awareness programs should include not only the type, quality and safety of food produced locally, but also the contribution the industry makes to the local economy and the business opportunities available.

Solution Options:

- Do nothing. There is enough being one by IFA and BCMAFF.
- Partnership: Increase involvement in organizations like the Chamber of Commerce, Economic Development Society, and Rotary Clubs.
- Investment: The agricultural industry in the Valley could benefit from a icentreî that is
 recognized by both the farm community and by consumers. Such a centre could be
 a meeting place, a source of information for consumers and producers, and an iconî
 to promote local agriculture and locally grown products.
- Education: The Agriculture in the Classroom program needs the attention and support of the agriculture community. Resources such as farms for farm tours, contacts, and speakers are continually needed to help promote and inform the youth of the Valley about agriculture.
- Education: Rejuvenate the Food For Thoughtí workshops and bus tours.

5.0 Policy Issues/Opportunities

There are a number of policy issues that affect agriculture, but which are better suited to provincial or regional advocacy or action through the IFA or provincial Framers Institute. These include: supply management issues and quota allocation for Vancouver Island, provincial policies on land stewardship and the Agricultural Land Reserve, property taxation for agricultural enterprises, government regulation and ired tapeî and some

research and development concerns. There are two general policy issues that do require further local discussion and perhaps some specific local actions. These are access to water for irrigation, and meat inspection.

5.1 Access to Water for Irrigation

Irrigation would significantly increase the yields of most crops grown in the Comox Valley. This would allow farmers to increase their productivity and viability without clearing additional land. In most of the Valley, irights to surface water from watercourses have already been allocated through licensing. In addition, limits for water removal are being refined based on the needs of the fishery. This means that in the driest season, when irrigation water is most needed, water allocation is likely to be prioritized to the fishery. The Forest Practices Act states that, unless otherwise proven, any stream with a gradient of less than 20% is assumed to have fish in it. Based on this all streams across farmland in the Comox Valley, should be assumed to be fish bearing streams, unless a fish barrier is installed.

The easiest options available to farmers for access to water for irrigation are to access groundwater, or to capture the surface runoff during the winter (periods of excess precipitation) and store it in off-stream reservoirs for use during the dry times of the year. Given that irrigation requirements are in the order of 16 inches per acre of crop, off-stream storage can be very expensive for storage of adequate water for irrigation of large areas. Nevertheless there are on farm edugoutsí in the Valley that hold in excess of 40 acre-feet of water for irrigation.

From the information on available land in the ALR, there is opportunity for significant expansion of the industry. But, if 60% of the soils in the study area have aridity limitations, then approximately 4,000 hectares (10,000 acres) of land currently assessed as farmland could benefit from irrigation. There are no specific statistics on the land area irrigated in the study area, but it can be assumed that most of the 1104 ha reported as irrigated is located in the study area. That means that approximately 3,125 acre feet of water are currently used for irrigation, and an additional 9,375 acre feet would be required to bring all current agricultural operations to maximum productivity

Solutions Options:

- Do nothing. Individual farmers will find their own solutions to aridity concerns.
- Research and Information: Ground truth the watercourses and fish bearing streams throughout the Comox Valley that are identified in the sensitive habitat atlas.
- Investment: Landowners could choose enterprises that suit the resources of their farms. For example, grass species could be used that are very well suited to droughty soils.
- Management: Employ management practices that enhance the soils ability to produce without irrigation, e.g., increased organic matter, well-designed drainage systems, and careful management of soil fertility.
- Investment: Drainpipes improve soil aeration and encourage deeper root growth. This allows the plant to access more water during dry periods.
- Management: Proper soil fertility (and lime) improves plant health and vigour and encourages root growth.
- Research: Review the recent Regional District Report on the feasibility of reusing wastewater from municipal waste treatment systems, along with storm water

discharge (areas), or other large water using activities in the Valley for the feasibility of implementing these options for additional irrigation water.

5.2 Food Safety

Successful marketing of local products over the long term will depend on safety of the products and well as quality. Raw and processed products that can pose a threat to human health if not handled or processed appropriately are of specific concern.

For example, most meat products are processed at Gunter Bros Meats, the only commercial slaughterhouse in the study area. Some livestock is shipped live to the mainland for sale. The only Federally Inspected plants on the Island are in Duncan and Port Alberni.

The Comox Valley is not a meat inspection area, which means that meat products can be sold locally without federal inspection. The CRD and GVRD are both inspected areas, which means that all meat sold through retail outlets and restaurants must be federally inspected. This also applies to any meat products crossing provincial or international boundaries. If Valley producers wish to access these non-local markets, they must have inspected products.

Federal regulations for processing are very specific so conversion of existing facilities often requires major renovations plus the plant must pay part, if not all, of the wages and benefits of the inspector. As a result, some slaughter businesses and farmers argue that Federal inspection is too costly to implement locally. Also, the local plant appears to have enough local business without worrying about shipping to the major urban markets.

However, if developing the local agricultural sector means an increase in local marketing of fresh meat products, meat inspection may become an important protection for consumers. This is a particularly important issue in considering the potential for idirecti fresh meat sales through the Farmersí Market.

Solution Options:

- Do nothing. There is not enough interest to pursue meat inspection at this time.
- This is an issue that requires further discussion between producers and potential and existing processors. There may not be sufficient production, consumer concern, or non-local market demand at the present time to warrant inspection or other quality control services or standards.

6.0 Producer Issues/Opportunities

Pressures for change on the agricultural sector are significant and ongoing. There is a need for continuing public education and political advocacy on the issues affecting agriculture and the impacts of related political decisions. Public education is addressed in this report as agricultural awareness. Political advocacy is generally provincial and/or federal in focus and is best accomplished by provincial level organizations such as the IFA and farmers Institute. The local Institute and the regional Agricultural Advisory Committee can best focus on the issues within the region. Local advocacy is addressed under agricultural awareness. There may be changes needed within the local Institute that would strengthen its role and capacity to carry out this responsibility, but no specific

concerns or suggestions were raised in the Phase 1 activities. Two specific opportunities that were discussed are producer training and agritourism.

6.1 Producer Training

To improve access to local markets, farmers need to become more involved with processing and marketing. For most farmers, the skills required to be effective processors and marketers have not been seen a having a high priority, and opportunities to develop these skills have been limited.

Training is needed is several areas such as marketing, customer service and sales and employee management. Some related skill development training is available through Malaspina College. Producers need to be aware of both the need for these skills and the opportunities to develop them. Training programmes need to be closely adapted to the specific needs and resources of farmers.

Solution Options:

- Do nothing. Adequate training opportunities are already available.
- In partnership with MAFF, Malaspina College, North Island College and the Farmers Institute, develop training programs related to priority initiatives in the Agricultural Plan.

6.2 Agritourism

Comox-Strathcona already enjoys a healthy tourism industry based on access to recreational opportunities such as skiing, golf and other outdoor activities. There is an opportunity to build in an agritourism component to the local tourism experience. In particular, new accessibility of the region to Alberta residents, thanks to the *West Jet* service from Calgary, may provide the opportunity to market fresh local products to tourists.

Solution Options:

- Do nothing. Farmers who have an interest in tourism can work with Tourism Comox Valley, the Chamber of Commerce and regional tourism promotion organizations such as Tourism Association of Vancouver Island.
- Market Research: Although events and activities in other areas such as the Cowichan Valley seem to be successful, it is not clear if there is sufficient tourist interest for these to be duplicated in the Comox Valley.
- Training and Education: Farm stay and farm Bed and Breakfast enterprises could benefit from management and service training such as isuper host.i

6.3 Farm Labour

An ongoing concern for farm business is the availability and quality of local labour to assist in the farm operation. There are several related concerns such as adequate training for farm labour, costs of insurance such as workers compensation and the seasonality of labour requirement. There are also possibilities of focusing on youth as a potential labour pool for agriculture, as they are normally not in school during high demand labour periods. There is no immediate short or long term solution

apparent to resolve this concern. It will need further attention in Phase 2 of development of the Agricultural Plan.

7.0 Infrastructure Issues/Opportunities

Input and marketing costs are generally beyond the scope of local action. However, improvements to agricultural infrastructure can help by potentially reducing these costs or by creating higher value market opportunities. The infrastructure concerns and opportunities identified are all currently actively being addressed by various organizations in the Comox Valley. The Airport Authority is perusing a storage facility, the Montfort Legacy Association is addressing the Oyster River Research Farm issue, and the Economic Development Society is advocating for the barge facility. The key issue for all three is finding investors or the capital to develop the infrastructure.

The Steering Committee also discussed the value of a icentrei for agriculture in the Valley. The concept of a icentrei is that it would be a location where local consumers and the industry could go to sell and purchase food and related products, and get information. A centre could also provide office space and support for local agricultural organizations and their activities.

The Comox Valley Exhibition grounds and farmers market, and the former Farquharson's farm, now owned by Ducks Unlimited and the location of Norms Farm Market are the two best known locations with a focus on agriculture. The farmers market is discussing the option of construction of a permanent facility at the Exhibition grounds that could provide an additional focus for that location. This idea needs further discussion as part of Phase 2 of development of the agricultural Plan.

Solution Options:

- Do nothing. There are activities and initiatives underway that will adequately address the needs of agriculture in the planning and development of new infrastructure.
- Advocacy: The farm community needs to continue to be involved in the organizations that are addressing these initiatives.
- Investment: A cooperative or other alternate financing structures that involve the farm community could be investigated, especially for the barge and storage facilities.
- Research: Investigate options for an Agricultural Centre as part of or in conjunction with a permanent farmeris market facility.

8.0 Summary and Next Steps

Comox Valley agriculture has a long history and a demonstrated an ability to be resilient in the face of ongoing economic and structural changes in the agricultural sector. This industry has a good resource base that includes:

- A good range of quality soils and environments that support a wide range of activities
- Protection of these soils through ALR designation and local planning policy,

- A large enough resource base to not only support current activities, but also to provide opportunities for industry expansion
- A favourable climate in terms of, daylight hours, length of growing season, and temperature.

On the strength of this resource base, the current industry has developed:

- Strong dairy, livestock and poultry sectors,
- Several large scale fruit and vegetable operations (cranberries, potatoes, corn)
- A growing and diverse small farm sector with a range of products including fruit, vegetables, horticultural products, iexoticsî (e.g., emu, wasabi), unique plants and animals and home processed products,
- A good local marketing base through retail outlets, Farmers Market, and farm gate sales,
- Services in the area or accessible in other areas of Vancouver Island to support these activities.
- Community and organizational interest in developing supportive infrastructure such as a permanent facility at the UBC Research Farm, air cargo facility and a barge facility.

There are future opportunities in the area based on significant opportunities for replacement of imported products, a growing interest by consumers in both fresh products and in organically grown products, and a supply of land that is currently not used for production.

That said, there are concerns that need to be addressed if these opportunities are to unfold. From local focus groups and a review of other recent studies and reports, there are six areas that need may need attention. These include:

- Resource, Land Use Issues/Opportunities
- Economic Issues/Opportunities
- Infrastructure Issues/Opportunities
- Policy Issues/Opportunities
- Marketing Issues/Opportunities
- Producer Issues/Opportunities

For these opportunities and concerns to be addressed, the farm and local community will have to agree that these are real issues, and if they are not, identify additional issues or opportunities that need to be addressed. Within the various organizations and the Regional District of Comox Strathcona, there will have to be agreement on the priority issues and opportunities, how they should be addressed and who should be responsible for dealing with them. Those activities will be the basis for Phase two of this project. Key components of Phase 2 will include two public meetings and open houses, task groups, workshops, and ongoing consultation with the project Steering Committee.

Appendices

Appendix A: Steering Committee Membership

Jack Turner Electoral Area A
Barbara Price Electoral Area B
Kel Kelly Electoral Area C
Brenda Leigh Electoral Area D
Rob Milne RDCS staff
Beth Rees RDCS staff

Niels Holbek BC Land Reserve Commission

Barry Smith Ministry of Agriculture, Food and Fisheries Jill Hatfield Ministry of Agriculture, Food and Fisheries

Scott Crawford Island Farmers Alliance

Dave Hansen Agricultural Advisory Committee

Gerry McClintock Farmers Institute
Len Lightfoot Farmers Market