

PREAMBLE

PARTNERSHIP

The Richmond Farmers' Institute (RFI), the City, the Provincial Land Reserve Commission, and the Ministry of Agriculture and Food are partners in the Agricultural Viability Strategy.

THE AGRICULTURE VIABILITY STRATEGY (AVS)

The purpose of the Agricultural Viability Strategy is to provide a 2021 vision and guiding principles, objectives, and practical strategies for the future growth and viability of the agricultural sector in the City.

CONTEXT

Richmond's Agricultural Strategy's 2021 Vision is:

"The City and the farm . . . working together for viable agriculture."

Currently, Richmond's Agricultural Land (ALR) is a finite, unique, valuable and under-utilized resource.

As 38% of the land in the City is designated as Provincial Agricultural Land Reserve (ALR), it is important that this resource be well managed and that farming be enhanced.

In managing these lands:

- Step 1 was to designate the farmland for agricultural use. This was achieved in 1972 with the establishment of the ALR;
- Step 2 has been to maintain the protection of the ALR (1972 to present);
- Step 3 is to now make better use of this resource (2001 and to the future).

Richmond's Official Community Plan (OCP), March 1999, establishes policies to enhance the viability of farmland and farming.

Opportunities to enhance farming viability include:

- Increasing farmed land;
- Identifying agricultural opportunities;
- Removing constraints to farming;
- Diversifying agriculture;
- Improving services.

PURPOSE OF PROFILE

The purpose of this profile is to provide a unique ALR database by which the City, the Richmond Farmers' Institute, and stakeholders can better:

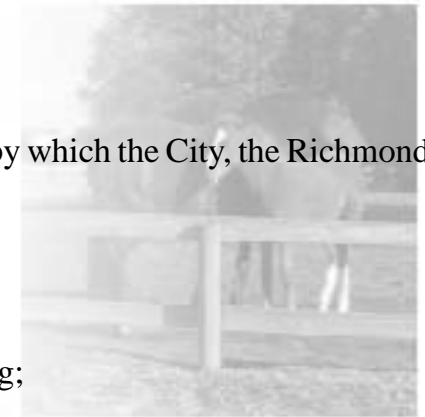
- Collect, manage and present Richmond ALR information;
- Understand farmers, farming and the ALR;
- Identify ALR opportunities, issues and constraints to farming;
- Support ongoing agricultural research;
- Prepare an effective Agricultural Viability Strategy.

This profile will be updated periodically.

CONTRIBUTORS

The profile has been prepared with financial, statistical and mapping support from the:

- Richmond Farmers Institute (RFI);
- City of Richmond;
- Provincial Land Reserve Commission (PLRC);
- Provincial Ministry of Agriculture and Food;
- Federal Ministry of Agriculture and Agri-Food Canada (A&AFC).



EXECUTIVE SUMMARY

Without agriculture, there would be no Richmond. The fertile soils of Lulu and Sea Islands attracted settlers here. Outside of the residents of Steveston, who depended on the sea, Richmond lived off the land. The first Councillors, and the first warden, were farmers. As the Lower Mainland grew, so did Richmond's role as a supplier of produce to the burgeoning communities of New Westminster and Vancouver. When the Depression hit, Richmond's residents were insulated from hunger by local produce.

Since World War II, Richmond has developed into a cosmopolitan city, and residents are more likely to be bankers, artists, or computer technicians than farmers or fishermen. Much of the City's former farmlands now lie under residential areas, roads and highways, office buildings, and the airport.

Luckily, visionaries in Victoria had the foresight to protect the province's agricultural lands back in the early 1970s. Today, amid the bustling urban development of Richmond lies 4,916 ha of protected Agricultural Land Reserve (ALR). This profile describes this agricultural land, the agricultural produce, the agricultural economy, and the farms and farmers who depend upon it.

THE AGRICULTURAL LANDS

Richmond's Agricultural Land Reserve lands are uniquely suited to farming. Richmond's cool summers and mild winters are ideal for growing, and the land is level. Richmond's deltaic soils are fertile. If given some moderate improvements, mainly drainage, 100% of Richmond's ALR is considered to be "prime" farmland. Unfortunately, little is currently known about the cumulative impacts of human interactions with this farmland. For instance, we only have cursory information about the extent of soil placement or removal in the farmlands. Information such as this is critical to determining the actual suitability of Richmond's ALR for farming.

FARMS

Approximately 3,012 ha of Richmond's ALR is farmed, by 247 farms. With an average size of 12.2 ha, these farms tend to be small as compared to the provincial average of 115.8 ha. The greatest number of Richmond's farms are owned by sole proprietors (104), with family farms and partnerships also common (67 and 54, respectively). Increasingly, Richmond's farms are operated on owned land, as land for lease has become less available in the last 30 years. The number of farms in Richmond has decreased steadily since 1961.

FARMERS

Richmond has 350 farm operators (defined as "the persons responsible for the day-to-day management decisions of a farm"). An additional 32,184 weeks of paid labour was hired to work on Richmond's farms. These persons, and their families, are dependent upon farming for a living. Like the number of farms, the number of farmers in Richmond has decreased steadily since 1961.

AGRICULTURAL PRODUCE

Cranberries are king in Richmond, with 854 ha (or 17.4% of Richmond's ALR) devoted to their production. Still, outside cranberries, Richmond farms produce a wide array of agricultural produce, including blueberries, potatoes, forage crops, pumpkins and squash, cabbage, various tree fruits, sweet corn, cucumbers, green peas, and many other vegetables, hens and chickens, beef and dairy cattle, sheep and lambs, novel species like llamas and alpacas, and other agricultural products such as honey, flowers, and Christmas trees. Cranberries are on the rise in Richmond, while livestock are declining.

AGRICULTURAL ECONOMY

The above crops earned Richmond's farms \$56,338,204 in gross revenue in 1995. \$9,398,342 of this was profit. Although the number of farms and farmers have been decreasing, gross agricultural revenues have been rising steadily since at least 1985. And although they are much smaller than the provincial average, Richmond's farms earn far higher gross farm receipts (\$228,292 on average) than the average for the province (\$84,233).

The markets for Richmond's produce vary, but Richmond is ideally situated to take advantage of local urban markets, and international markets via the airport and other transportation infrastructure. Organic markets seem to be expanding in this area, and Richmond's farms may have opportunities in this regard as well. Currently, there seems to be little local processing of farm produce.

Agriculture has and will continue to be important to Richmond's economy, community, and lifestyle. This profile assists in ensuring and enhancing the viability of farming in Richmond in the years to come.

TABLE OF CONTENTS

PREAMBLE	I	4.2 Non-farm Usage of ALR Land	33
EXECUTIVE SUMMARY	II	4.2.1 Residential Properties	33
LIST OF MAPS, FIGURES AND TABLES	V	4.2.2 Environmentally Sensitive Areas (ESAs)	34
1.0 THE AGRICULTURAL LAND RESERVE	1	4.3 Government Properties in the ALR	35
1.1 Introduction to the Agricultural Land Reserve (ALR)	1	4.4 Summary: Agricultural Land Capability Revisited	35
1.2 The Agricultural Land Reserve in the City of Richmond	2	5.0 AGRICULTURAL PRODUCTION	41
1.2.1 Maintaining Agricultural Land in an Urban Environment	2	5.1 Crops	41
1.2.2 Strengthening Agriculture on the Agricultural Lands	4	5.1.1 Land in Crops	41
2.0 BIOPHYSICAL CHARACTERISTICS OF RICHMOND’S ALR	9	5.2 Greenhouses and Nurseries	42
2.1 Pre-European Vegetation	9	5.2.1 Greenhouses	42
2.2 Climate	9	5.2.2 Nurseries	42
2.3 Geology and Soils	10	5.3 Livestock	42
2.4 Land Systems	11	5.4 Organic Production	44
2.5 Land Capability for Agriculture	11	6.0 FARMS AND FARMERS IN RICHMOND	49
2.6 Land Systems and Crop suitability	13	6.1 Total Farms	49
2.7 Summary	14	6.2 Farm Size	49
3.0 HUMAN MODIFICATIONS TO THE AGRICULTURAL LANDS	19	6.3 Farm Systems	49
3.1 Water Management	19	6.4 Farm Ownership Arrangements	50
3.1.1 Flood-proofing: Dykes	19	6.5 Farm land Tenure	51
3.1.2 City Drainage Infrastructure	19	6.5.1 Land Costs	51
3.1.3 Private Drainage	20	6.5.2 Parcelization	52
3.1.4 Irrigation	20	6.5 Farmers in Richmond	52
3.1.5 City Water	21	7.0 RICHMOND FARM ECONOMICS	57
3.2 Sewer Service	21	7.1 The Economic Health of Richmond’s Agricultural Industry	57
3.3 Roads	21	7.1.1 Overall Profitability of the Sector	57
3.4 Treatments to the Agricultural Lands	22	7.1.2 Average Gross Farm Receipts	58
3.4.1 Commercial Fertilizers and Manure	22	7.1.3 Distribution of Farms Earning Different Levels of Gross Farm Receipts	59
3.4.2 Herbicides, Insecticides, and Fungicides	22	7.1.4 Revenue per Hectare	59
3.4.3 Organic Farming and Integrated Pest Management (IPM)	22	7.1.5 Farm Capital	60
3.5 Soil Removal and Placement	22	7.2 Individual Farm System Analysis	60
3.6 Summary	23	7.3 Markets and Local Processing	62
4.0 LAND USES IN RICHMOND’S ALR	31	7.3.1 Markets for Richmond Produce	62
4.1 What is an Agricultural Use?	31	7.3.2 The Green Market	63
4.1.1 Census Farms	31	7.4 Farm Produce Processing / Value Added	64
4.1.2 Farm Class Properties	32	7.5 Summary	64

TABLE OF CONTENTS - CON'T

8.0 CONCLUSION	67	A3. Federal Legislation	72
8.1 Perspective	67	Agriculture and Rural Development Act (1999)	72
8.2 What the Profile Tells Us	67	Canadian Agricultural Products Act (1999)	72
8.3 Choices for the Future	67	Export and Import Permits Act (1999)	72
Option 1: Managing for Increased Viability	67	Fisheries Act (1999)	72
Option 2: Status Quo - Managing for Protection	68	Migratory Birds Convention Act (1999)	72
8.4 Summary	68	Pest Control Products Act (1999)	72
APPENDIX A: LIST AND SUMMARIES OF RELEVANT LEGISLATION	69	APPENDIX B - FARMER PROFILES	73
A1. City of Richmond Bylaws and Policies	69	A. Steve Easterbrook, Rabbit River Farms	73
Annual Property Tax Rates Bylaw: Bylaw 7129	69	B. Bill Jones, Jones Nurseries	74
City of Richmond Official Community Plan (OCP)	69	C. Todd May, Maybog Farms	75
No. 5 Road Backlands Policy: Policy 5037	69	D. Trudy Peters, Peters Blueberry Farm	77
Zoning Bylaw: Bylaw 5300	70	E. Bill Zylmans, W & A Farms	78
A2. Provincial Legislation	70		
Land Reserve Commission Act [RS 2000]	70		
Assessment Act [RS 1996]	70		
Drainage, Ditch and Dyke Act [RS 1996]	71		
Environment Management Act [RS 1996]	71		
Farm Practices Protection (Right to Farm) Act [RS 1996]	71		
Health Act [RS 1996]	71		
Highway Act [RS 1996]	71		
Land Title Act [RS 1996]	71		
Milk Industry Act [RS 1996]	71		
Motor Vehicle Act [RS 1996]	71		
Local Government Act [RS 2000]	71		
Natural Products Marketing Act [RS 1996]	71		
Pesticide Control Act [RS 1996]	71		
Soil Conservation Act [RS 1996]	71		
Trespass Act [RS 1996]	71		
Waste Management Act [RS 1996]	72		
Weed Control Act [RS 1996]	72		
Wildlife Amendment Act [RS 1996]	72		
Workers Compensation Act [RS 1996]	72		

LIST OF MAPS, FIGURES AND TABLES

MAPS

Map 1.1	Agricultural Land Reserve in British Columbia	5
Map 1.2	Agricultural Sub-Areas and Buffer Zones	6
Map 1.3	Richmond’s Agricultural Land Reserve, 2000, Including Lands Excluded	7
Map 2.1	Pre European Vegetation	15
Map 2.2	Land Systems in Richmond	16
Map 2.3	Capability of Land for Agriculture (Unimproved)	17
Map 2.4	Capability of Land for Agriculture (Improved)	18
Map 3.1	Flood Protection Features	24
Map 3.2	Storm Drainage and Irrigation Infrastructure	25
Map 3.3	Water Supply	26
Map 3.4	Sanitary Sewer Distribution	27
Map 3.5	Richmond’s Road System	28
Map 3.6	Sites of Activity Requiring a Soil Conservation Permit	29
Map 4.1	Farm Class Properties in the Agricultural Viability Strategy Study Area, 2000	36
Map 4.2	Housing in the Strategy Study Area, 2000	37
Map 4.3	Environmentally Sensitive Areas in and Near the Strategy Study Area, 2000	38
Map 4.4	Government-Owned Properties in the Strategy Study Area, 2000	39
Map 5.1	Outside Crop Production	45
Map 5.2	Greenhouses and Commercial Nurseries in the Strategy Study Area, 2000	46
Map 5.3	Livestock and Horse Activity in the Strategy Study Area, 2000	47
Map 6.1	Assessed Value of Properties in the Strategy Study Area, 2000	54
Map 6.2	Parcels Under 2 Acres in the Agricultural Land Reserve	55
Map 7.1	Farm Direct Marketing Activity in the Strategy Study Area, 2000	66

FIGURES

Figure 1.1	Population in Richmond, 1971-2000, and Projection for 2021	2
Figure 1.2	Total ALR Land in Richmond (ha), 1974-2000	4
Figure 3.1	Total Area of Census Farmland and Area Irrigated, 1991-1996	21
Figure 4.1	Total Area of Census Farms in Richmond, 1961-1996 (ha)	31
Figure 5.1	Change in the Number of Cattle (Total), Richmond, 1961-1996	43
Figure 5.2	Change in Number of Hens & Chickens, Richmond, 1991-1996	43
Figure 5.3	Change in Number of Horses and Ponies, Richmond, 1961-1996	44
Figure 6.1	Total Census Farms, Richmond, 1961-1996	49
Figure 6.2	Absolute Number of Farms Under 4 ha and Proportion of These Farms to Total Richmond Farms	49
Figure 6.3	Richmond Farm Land Tenure, 1961-1996	51
Figure 7.1	Difference Between Total Gross Farm Receipts and Total Operating Expenses, Richmond 1985-1995 (1995 Dollars)	57
Figure 7.2	Total Gross Farm Receipts, Richmond and GVRD, 1995 Dollars	58
Figure 7.3	Average Gross Farm Receipts, per Farm, 1985-1995 (1995 Dollars)	59
Figure 7.4	Percentage of Total Farms Earning Different Levels of Gross Farm Receipts, 1995	59
Figure 7.5	Richmond Total Farm Capital, 1985-1995, 1995 Dollars (,000)	60
Figure 7.6	Total Gross Farm Receipts and Operating Expenses, Richmond Farm Systems, 1995	61

TABLES

Table 1.1	Significant Blocks of Excluded (Former) ALR Lands	7
Table 2.1	BCLI Modified Classification System	12
Table 2.2	Suitable Crops for the Land Systems in Richmond	14
Table 2.3	Land Systems and Agriculture	16
Table 3.1	Explanation of Road Classification	28
Table 4.1	Land Use on Census Farms, Richmond, 1996	32
Table 4.2	Residential Properties, by Farm Class Status, in the Agricultural Viability Strategy Study Area	34
Table 4.3	Government-Owned Land in the ALR	39
Table 5.1	Hectares of Land in Crop Production, by Type, 1991 and 1996	41
Table 5.2	Top 10 Crops by Land Used in Their Production, Richmond, 1996	41
Table 5.3	Greenhouse Production in Richmond	42
Table 5.4	Livestock Raised in Richmond, By Number of Farms, 1996	43
Table 6.1	Farm Systems	50
Table 6.2	Farm Ownership Arrangements	50
Table 7.1	Average Gross Farm Receipts, Various Jurisdictions	58
Table 7.2	Revenue per Hectare: Richmond, GVRD, and Selected GVRD Municipalities, 1995	60

