

Capital Regional District Regional Foodlands Access Program Feasibility Study



Prepared by Upland Agricultural Consulting
For the Capital Regional District
January 2019



Table of Contents

Executive Summary.....	i
1.0 Introduction.....	1
1.1 Project Rationale.....	2
1.1.1 The Productivity of Foodlands.....	3
1.1.2 The Cost of Foodland Ownership.....	3
1.1.3 The Farm Tax Income Threshold.....	4
1.1.4 The Existing Farming Community: Context and Considerations.....	5
2.0 Public Amenity Benefits and Foodlands Access Programs.....	6
2.1 Natural Asset Value of Foodlands.....	6
2.2 Public Amenity Benefits and Land Use Planning.....	7
2.3 Rationale of Taxpayer Support for Foodlands Access Programs.....	7
3.0 Foodlands Access Strategies and Tools.....	9
3.1 Tool #1: Foodlands Trust.....	10
3.2 Tool #2: Public Land Bank.....	10
3.3 Tool #3: Land Connection Services.....	11
3.4 Tool #4: Incubator Farms.....	11
3.5 Tool #5: Farm Tax Policies.....	12
3.6 Tool #6: Land Ownership Policies.....	12
3.7 Tool #7: Regulation of Farm Leases.....	12
4.0 Governance Models.....	13
4.1 Local Government-Led Model.....	13
4.2 NGO-Led Model.....	14
4.3 Hybrid Model.....	14
4.4 Program Staffing Needs.....	14
4.5 Farmer Selection Criteria.....	15
4.6 Summary of Governance Recommendations.....	15
5.0 Community Partnerships and Foodlands Access Programs.....	17
5.1 Indigenous Food Systems.....	17
5.2 Education, Research, Celebration.....	17
5.3 Summary of Partnership Recommendations.....	18
6.0 Foodlands Access Program: Estimates of Costs and Revenues.....	19
6.1 Variable Cost Estimates.....	20
6.2 Fixed Cost Estimates.....	21
6.3 Variable Revenue Estimates.....	23
6.4 Net Revenue or Deficit.....	24
6.5 Foodland Access Program Net Costs: 3 Scenarios.....	24
6.6 Summary of Program Budget Recommendations.....	28
7.0 Cost Summary for a Foodlands Access Program.....	28
7.1 Funding Through a Levy.....	28
7.2 Accounting for the Status Quo.....	28
7.3 Overall Economic Justification.....	29
8.0 Program Impact and Timing.....	29
8.1 The Approach with the Greatest Impact.....	29
8.2 Timing of Implementation.....	30
9.0 Conclusions.....	30
Appendix.....	i

Table of Tables

Table 1. Summary of Foodlands Access Tools and their Potential Level of Impact..... 9

Table 2. Stability, Lease Terms, Land Use, and Costs Associated with Foodlands Access Models 16

Table 3. Potential Roles of Local Government, NGO, Academic, and First Nation Partners..... 18

Table 4. Estimated Variable Infrastructure Costs Range for Foodlands Access Program Establishment on a Hypothetical 80-Acre Site..... 20

Table 5. Estimated Fixed Equipment Costs and Potential Equipment Rental Income' 21

Table 6. Fixed Costs for the Foodlands Trust Establishment (Year 1) and Ongoing/Annual (Years 2 onward) 22

Table 7. Estimated Returns Based on Lease Rates for Different Parcel Sizes (in acres) and Agricultural Activities 23

Table 8. Variable Revenue Estimates for a Foodlands Trust..... 24

Table 9. Summary of Revenues and Expenses for Scenario 1: Five acres of vegetable production in good soil.... 25

Table 10. Summary of Revenues and Expenses for Scenario 1: Twenty acres of hay production in moderate soil. 26

Table 11. Summary of Revenues and Expenses for Scenario 1: Eighty acres of mixed production in good soil.... 26

Table 12. Summary of Program Net Deficit Over 5 Years for Three Agricultural Scenarios 27

Table 13. Ranking of Foodlands Access Tools, Jurisdiction, and Overall Level of Impact..... 30

Acknowledgements

This report was developed by Upland Agricultural Consulting in partnership with Farm|Food|Drink.

Invaluable input was provided by Capital Regional District staff and the Regional Food and Agriculture Strategy Task Force.

Feedback on an earlier draft was provided by K. Nixon, Foodlands Cooperative of BC.

Editing services provided by Interwoven Editing. Photos from [Unsplash.com](https://unsplash.com)

A number of stakeholders and experts were consulted throughout the course of this project, and we sincerely thank them for the time and resources that they were able to contribute. They are referenced throughout the report in the footnotes and Aa complete listing of stakeholders can be found in the Appendices.

Acronyms

ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
BC	British Columbia
BCA	BC Assessment
CAC	Community Amenity Contribution
COCS	Cost of Community Services
CRA	Canada Revenue Agency
CRD	Capital Regional District
CRFAIR	Capital Region Food and Agriculture Initiatives Roundtable
FTE	Full-time equivalent
GCL	Garden City Lands
KPU	Kwantlen Polytechnic University
NGO	Non-governmental organization
PAC	Program Advisory Committee
RFAS	Regional Food and Agriculture Strategy
TLC	The Land Conservancy
UBC	University of British Columbia

Conversion Units

1 acre	=	0.40 hectares
1 hectare	=	2.47 acres

*While both area units are used in this report, acres are used primarily within the discussion of lease rates.

Executive Summary

Over the last 10 years, four municipalities and many community stakeholders have supported an increase in access to farmland in the Capital Regional District (CRD). The support is due in large part to the high cost of farmland. This report explores the rationale and financial summary for options that would allow local government to increase foodlands access.

Rationale for Foodlands Access

The Agricultural Land Reserve (ALR) totals just over 16,000 ha and represents only 7% of the CRD's area¹. The region's population is expected to increase by 27% by 2038², which will put significant pressure on foodlands. Meanwhile, the CRD's 2018 Regional Growth Strategy includes a target to increase productive foodlands by 5,000 ha by 2038³. The ALR has helped stem the loss of farmland, but there is a need for further action to ensure that farmland is used for its intended purpose.

Farmland Productivity

Only 50% of the CRD's ALR is in production⁴. The underutilization of farmland, both now and in the future, is a lost regional opportunity. With over 50% of the region's farmers retiring in the next 10 years, there is concern that new farmers will not be able to afford to enter the sector to replace them. ALR landowners who do not farm, but lease their property to other farmers, can obtain the benefits of farm class status with low levels of production. Landowners with less than 25% of their property being farmed demonstrate little interest in making it more productive⁵.

Cost of Foodlands

Vancouver Island has had the greatest increase in farmland value in BC, where it currently sells for up to \$100,000 per acre, an increase of nearly 25%⁶ over two years⁷. The high cost of land is a barrier not only to new farmers, but also to those wishing to expand their business. This is due in part to agricultural lands being purchased by non-farmers and held with low risk for speculative purposes^{8,9}.

¹ [Agriculture in Brief: CRD, 2016](#). Census of Agriculture Data.

² Capital Regional District. 2018. Regional Growth Strategy.

³ The "Policy Discussion Paper #1: Role of Local Government in Promoting Farmlands and Farm Viability" by CRFAIR, provides in-depth justification for why food security and building local food production capacity are in the public interest for local governments to address

⁴ BC Ministry of Agriculture, 2016. Agriculture in Brief, Census of Agriculture, British Columbia Provincial Profile.

Implications for the Farm Community

Local farmers are not concerned about competition from a regional foodlands access program because:

- The cost of land is rising fast and they were able to buy or lease land for lower prices years ago.
- New farms and farmers are not immediately profitable – it will take years of improvements and experience to become competitive.
- Land trust lease rates would be in line with rates offered on private land.
- Existing farmers would like mentor new farmers.
- There is an unmet demand for local food.
- There is a need for a new generation of farmers in the region to fill leadership roles in farmers' institutes and 4-H clubs.

Foodland Access Tools

There are seven land access tools assessed in this report. They represent opportunities that various levels of government and non-governmental organizations (NGOs) can employ. The seven tools are:

1. Land trusts
2. Land banks
3. Land connecting services
4. Incubator farms
5. Farm tax policies
6. Farmland ownership restrictions
7. Regulation of farm leases

These tools range in their applicability based on:

- Relative Cost: amount of sustained support required.
- Lead Agency: organizational leadership required.
- Timeframe: short (1–3 years), medium (3–5 years), or long term (>5 years).
- Level of Effort: local government capacity.
- Level of Impact: relative amount of land and/or farmers that will benefit.

Table i (next page) provides a ranking of each tool, in terms of how useful it is for the CRD.

⁵ [ALR Landowner Survey](#). Prepared for Metro Vancouver by Ipsos Reid. 2013.

⁶ Farm Credit Canada, 2018. [2017 FCC Farmland Values Report](#). Covering the period from January 1 to December 31, 2017.

⁷ Ibid.

⁸ Curran, D., & Stobbe, T., 2010. Local government policy options to protect agricultural land and improve the viability of farming in Metro Vancouver.

⁹ Farm Credit Canada, 2018. 2017 FCC Farmland Values Report. Covering the period from January 1 to December 31, 2017.

Table i: Summary of Foodlands Access Tools and their Potential Level of Impact.

Rank	Tool	Relative Cost	Lead Agency	Timeframe	Level of Effort	Level of Impact
1	Land trusts	High	Local governments and/or NGOs	Short (1 to 3 years)	Easy	High
2	Land banks	Medium-High	Local governments and/or NGOs	Short (1 to 3 years)	Easy	High
3	Land connecting	Medium-Low	NGOs	Short (1 to 3 years)	Easy	Low
4	Incubator farms	Medium	NGOs and/or academic institutes	Medium (3 to 5 years)	Challenging	Moderate
5	Farm tax policies	Low	Federal and/or provincial govt	Medium (3 to 5 years)	Difficult	High
6	Restrictions on farmland ownership	Medium	Provincial government	Medium (5 years)	Difficult	High
7	Regulation of farm leases	Low	Provincial government	Medium (3 to 5 years)	Difficult	Low

*Green indicates good candidate as a tool for local governments; yellow indicates a possible tool to be used within a broader strategy; orange indicates a limited ability for local governments to use the tool.

Although land connecting services (e.g. Young Agrarians) require a lower level of funding from local governments than a land trust or land bank¹⁰, the overall level of impact is also lower. Land matching takes time, and results are difficult to track. The BC Government has recently taken on a more direct role in land connecting services by providing a financial contribution to Young Agrarians¹¹.

A Land Trust vs. A Land Bank

The land trust and land bank ranked as the first and second-best tools available for local governments, respectively. While land trusts and land banks are operationally similar, a trust will functionally achieve the objectives for long term land access in a way that a land bank would not. While land banks may work well for other initiatives, such as parks programs, they do not achieve the same outcomes for farmland access programs. This is in part because the Canada Revenue Agency has a specific program for gifting ecologically sensitive land with associated tax credits, but there is no similar program for agricultural lands¹². A trust model that would protect farmland in perpetuity offers an additional motivation and benefit for land donees over and above minimal tax credits.

It is recommended that the farmland trust program initially target existing lands that are municipally-owned, thus reducing the need to acquire private lands. A trust also allows for a greater sense of security for the farmer, and better achieves the goal of providing long term leases for the purposes of agricultural production. The

trust approach therefore provides the best benefits for foodlands access.

Provincial Government Role

A farmland trust was previously undertaken by the provincial government in the 1970s alongside the adoption of the ALR. This program has since ended without a replacement. There are several lessons to be learned from the province's experiences, and these are taken to heart in this report. One of the most important takeaways was that housing within the land trust caused problems whenever a trust property was transferred from one lessee to another. For this reason, it is not recommended that a regional foodlands trust include a residential component. Farmers will be expected to reside elsewhere. A regional foodlands trust would therefore not meet the needs of all farmers. However, along with other existing programs, such as land connecting services, it will remain an important piece of the overall land access solution. Other experiences from the provincial initiative indicate that a Program Advisory Committee (PAC) should be established to oversee decision-making, including a transparent process to determine farmer membership.

Local Government and NGO Roles

Regional problems require innovative regional solutions. It is recommended that a partnership be struck between the CRD and one or several NGOs (e.g. Farmlands Trust (Greater Victoria) Society, Sooke Region Farmland Trust Society, and/or the Foodlands Cooperative of BC) for the effective delivery of the

¹⁰ Young Agrarians estimates an annual budgeting requirement of approximately \$70,000 to fund a regional Land Matchmaker program in Metro Vancouver. Less than 10 matches have been made since 2016. Individual municipalities are approached for funding assistance at the \$5,000-\$10,000 level. A similar level of

funding would be sought within the CRD. Source: S. Dent, personal communication.

¹¹ [Ministry of Agriculture commits \\$300,000 to help BC farmers obtain land.](#)

¹² Canada Revenue Agency, 2017. Gifts and Income Tax. P113(E). Rev.17.

foodlands trust. By partnering with an NGO (hybrid model), greater opportunities for program grant funding will be possible. However, a base of financial support is required from the CRD, otherwise the trust would be placed in a vulnerable position over the long run. A hybrid model would ensure that the CRD's role in the trust remains limited to policy development, property and lease management, and overall administration (e.g., overseeing the legal aspects of the land trust, coordinating land use agreements with municipalities for publically-owned parcels, and providing a meeting space for the PAC). The NGO would take control of the operational needs (e.g., employing a full time Program Manager and a part time Farm Caretaker, and oversee the administration of the PAC).

A regional approach will present significant cost efficiencies over and above the alternative option of several municipalities embarking on their own land trust initiatives. Local governments could remain involved as the owners of public land included in a regional trust and could retain control of infrastructure, such as drainage.

Community Partnerships

A foodlands trust provides an opportunity to work with First Nations to restore traditional food practices and integrate Indigenous food production values into the program. Academic partnerships are also key. Education and research goals can be built into the program. Potential academic partners include the University of Victoria, Royal Roads University, and Camosun College.

Program Costs and Revenues

There are two types of revenues and costs associated with a foodlands trust program: variable and fixed. It is important to note that the cost of land is not included in these calculations. This is because it is anticipated that existing public lands capable of sustaining agriculture would form the basis of a farmland trust.

Variable costs and revenues are those that are contingent on the characteristics of the site(s) selected. These include the costs associated with infrastructure needs and potential revenues through farm lease income. They are variable because the site(s) will be unique relative to their size, soil quality, existing fencing, access to water, surface drainage, etc.

Variable Costs: Basic infrastructure includes fencing, irrigation, and drainage. The costs associated with a typical site would range from \$1,950 per acre to \$6,450 per acre (with an average of approximately \$3,000 per acre) for the first year of site preparation, depending the level of existing services. Some of these costs can be shared with municipalities and a portion will be able to

be compensated for when the lease is transferred to the next lessee and a higher lease rate can be charged to better reflect the servicing improvements.

Variable Revenue Sources:

- Lease rates will be in line with those currently paid by farmers in the region. They will range from \$100/acre/year to \$800/acre/year, depending on soil quality and type of agricultural activities, as arranged through the lease agreements. These lease rates will not include housing. A residential component of the land trust is not recommended.
- Grant applications are expected to be most successful at the start of the initiative and will help cover the establishment costs. These are expected to bring in approximately \$40,000/year.
- Donations are most likely to be used for equipment or public land. As noted, it is anticipated that existing public lands capable of sustaining agriculture would be used to launch the farmland trust. Any additional land donations would need to be accepted by a charitable organization. Municipalities are qualified donees under the Canada Revenue Agency's Gifts Program.
- Corporate sponsorships could be provided for equipment, or for specific programming. These are more likely to be successful in the initial establishment phase (Year 1).
- Depending on the zoning of the land in question, hosting events on site may be a revenue source. Fees could be charged for the use of the space and/or any equipment or infrastructure.
- In-kind contributions could be provided by hosting a website, advertising, supplying meeting-room space, and covering other overhead costs. This support could be provided by the local government and/or community partners.

Fixed Costs: These are associated with the program itself, not the land, and include operational needs, such as staff time, insurance, marketing, equipment, etc. Fixed costs, by their very nature, are less challenging to estimate and do not tend to fluctuate based on the land parcels incorporated in the program. The estimates for operational costs are broken into "establishment" (the cost to get the program up and running during Year 1) and "ongoing" (annual costs incurred in Year 2 and beyond). They include legal and professional costs (e.g. to establish the trust), staffing needs, equipment, marketing & promotion, and insurance.

Establishment costs (Year 1):

- Staff salaries and legal fees: \$70,000
- Equipment (purchase): \$40,000

- Marketing and promotion: \$5,000
- Insurance: \$4,000

Total establishment costs: \$119,000

Ongoing (Year 2 and beyond):

- Staff salaries: \$170,000
- Equipment (maintenance): \$10,000
- Marketing and promotion: \$6,000
- Insurance: \$4,000

Total ongoing costs: \$190,000

Land taxes are not included in fixed costs. This is because it is anticipated that existing public lands will be used for the land trust, therefore no new additional taxes are expected. In fact, if land is brought into production existing land taxes may decrease.

Fixed Revenues: The program is not a revenue-generating initiative, however a long term funding commitment by local government, if offered, could be considered as a fixed revenue. Fixed revenue is therefore the amount of funding that would be sought from local governments on an annual basis.

Revenues and Costs: 3 Scenarios

In order to further illustrate how site selection impacts the overall budget of the foodlands access program, three scenarios are provided to show the estimated expenses and revenues associated with:

1. 5 acres of vegetable production
2. 20 acres of hay production
3. 80 acres of mixed production

The associated variable costs, fixed costs, and variable revenues (including lease income) are presented in the following Tables ii - iv. Details regarding all estimates are provided in section 6 of the report. The biggest discrepancies in the scenarios relate to infrastructure investments, which vary based on the needs associated with individual land parcels.

Beginning in Year 2, each production system would incur lease income at the following rates: \$4,000/year for 5 acres of vegetables, \$2,000/year for 20 acres of hay, or \$20,000/year for 80 acres of mixed production.

The calculations are predicated on the assumption that, once established, the program will be able to raise approximately \$60,000 per year by partnering with an

NGO for grants, donations, sponsorships, user fees, and in-kind support.

As the scenarios indicate, once the program stabilizes at the end of Year 3, the anticipated program costs (which are equivalent to the net deficit) range from approximately \$127,500 per year to \$143,500 per year. Providing funds to cover this deficit could be considered as a form of regional investment, whereby the funds are being re-invested into the protection of natural asset services and into the development of community partnerships for greater food security.

Table ii. Estimated net income (deficit): 5 acres of vegetable.

Year	Variable Costs	Fixed Costs	Variable Revenues	Net Income or Deficit
1	\$15,000	\$119,000	\$275,000	\$141,000
2	\$7,500	\$190,000	\$66,500	\$10,000
3	\$4,000	\$190,000	\$66,500	(-\$117,500)
4	\$4,000	\$190,000	\$66,500	(-\$127,500)
5	\$4,000	\$190,000	\$66,500	(-\$127,500)

Table iii. Estimated net income (deficit): 20 acres of hay.

Year	Variable Costs	Fixed Costs	Variable Revenues	Net Income or Deficit
1	\$40,000	\$119,000	\$275,000	\$116,000
2	\$15,000	\$190,000	\$64,500	(-\$24,500)
3	\$7,000	\$190,000	\$64,500	(-\$132,500)
4	\$7,000	\$190,000	\$64,500	(-\$132,500)
5	\$7,000	\$190,000	\$64,500	(-\$132,500)

Table iv. Estimated net income (deficit): 80 acres mixed use.

Year	Variable Costs	Fixed Costs	Variable Revenues	Net Income or Deficit
1	\$140,000	\$119,000	\$275,000	\$16,000
2	\$56,000	\$190,000	\$82,500	(-\$147,500)
3	\$36,000	\$190,000	\$82,500	(-\$143,500)
4	\$36,000	\$190,000	\$82,500	(-\$143,500)
5	\$36,000	\$190,000	\$82,500	(-\$143,500)

Overall Financial Summary

Most people place high value on living near farming areas¹³, however the community benefits of foodlands are often excluded from policy decisions. Many natural asset services, such as nutrient cycling, carbon sequestration, water filtration, and pollination, are supported by farming. In the CRD, the value of these natural assets on agricultural land are estimated at over

¹³ Robbins, M., Olewiler, N., and M. Robinson. 2009. An Estimate of the Public Amenity Benefits and Ecological Goods provided by Farmland in Metro Vancouver, 2009.

\$11 million per year¹⁴. Farmland is also a net contributor to the tax base, even when taxed at a lower valuation¹⁵.

Some potential farmland projects in the region, such as Sandown in North Saanich, are proposing to operate on a revenue neutral (or income generating) model. This is not the case for the foodlands trust. The scope of the trust is to address regional land access and production needs, while the goal of Sandown is to create and grow value-added agri-businesses. Furthermore, the Sandown model is built on the premise of receiving tax revenue from a commercial property, thereby creating a subsidy. To be clear, a foodlands trust program will require sustained financial support over the long term. If a trust was a potentially independently viable endeavour, it is very likely that it would have been already initiated by a private sector enterprise. Committing financial support to a foodlands trust provides investment in the community, which is one of the clearest benefits.

The trust will result in:

- Improved regional food security.
- Partnerships with First Nations.
- Preservation of natural asset services.
- Job creation and spin-off enterprises.
- Stimulation of support sector businesses.
- Increased agri-tourism opportunities.
- New education and learning programs.
- Protection of undeveloped green space.
- Reduced need for ongoing maintenance (such as mowing, ditches, fence repairs).

In order to maintain the value of natural asset services associated with greenspace (including foodlands) in the CRD, a net input of resources is already being invested by local government. By increasing this level of support incrementally, land use can be opened up to provide a much wider extent of community benefits.

The application of a household levy was calculated to determine if it could be applied as a possible tool to help fund the foodlands trust. The results indicate that the levy would be relatively low. For example, a level of \$127,500/year of funding would require:

- \$0.70 per household/year for all areas of the CRD
- \$0.76 per household/year for all areas of the CRD except the Southern Gulf Islands and Salt Spring Island; or
- \$1.91 per household/year for North Saanich, Central Saanich, Sidney, and Saanich.

This levy could be viewed as an investment in the natural asset services of the region, as well as providing an indication of support for cultivating Indigenous food system projects with First Nation partners, and providing support for regional food security.

Timing

Since 2009, significant work has created momentum towards a regional foodlands trust. The District of Saanich, District of Central Saanich, Town of Sidney, and District of North Saanich have all contributed letters of support. North Saanich has also indicated support for an accompanying farmland acquisition fund. Saanich has recently contemplated initiating its own farmland trust. In the meantime, the price of farmland continues to rise. Now would be an ideal time for the CRD to implement a foodlands trust, to coordinate individual initiatives.

Conclusion

This report provides a set of financial projections that are based on a robust yet conservative analysis for the implementation of a regional farmland trust.

Recommendations include:

- Target existing public lands to be used for the trust, in order to minimize the need for land acquisition.
- Have the CRD take on a lead role with support for operational tasks and fundraising by NGOs.
- Establish a Program Advisory Committee and hire a Program Manager and Farm Caretaker.
- Work with First Nations, academic agencies, and other stakeholders to ensure partnership benefits.
- Explore the possibility of funding the program through a household levy.

These recommendations align with the CRD's goals as set forth in the Regional Food and Agriculture Strategy and the 2015-2018 Board Priorities. The establishment of a foodlands trust will advance progress on Regional Growth Strategy goals and make good on previous indications of commitment and support for establishing a foodlands access program. This report provides the rationale and implementation strategy needed to establish the trust as efficiently as possible while ensuring that it achieves the maximum benefits for all community members.

¹⁴ Wilson, S. J. [Natural Capital in BC's Lower Mainland: Valuing the Benefits from Nature](#). 2010. Natural Capital Research & Consulting for the David Suzuki Foundation.

¹⁵ [Red Deer County Cost of Community Services Report](#), 2004. Miistakis Institute, Red Deer County, and Alberta Real Estate Foundation..

1.0 Introduction

The goal of this feasibility study is to provide the Capital Regional District (CRD) with a comparative analysis of foodland access tools and recommend a strategy to improve land access for agricultural production. This report compares a foodlands trust, a public land bank, and other initiatives such as land connecting services, incubator farming, and agricultural policy options (see section 3) as potential “tools” in the “toolbox” of a foodlands access program.

In addition to the comparative analysis (sections 3 and 4), there is a presentation of the rationale for the feasibility study and an overview as to how foodlands can benefit the wider community (section 2). Partnership opportunities with NGOs and with First Nations to enhance Indigenous food system objectives are also explored (section 5).

The financial summary portions of the report (sections 6 and 7) outline possible funding options and assess overall costs and benefits of different foodlands access program approaches. The report ends with a set of specific recommendations as to how best to initiate and manage a successful foodlands access program (sections 8 and 9).

Definition: Foodlands

The Foodlands Cooperative of BC and CRFAIR note that dialogue with the *Working Group on Indigenous Food Sovereignty*, lead to changing “farmland” to “foodlands”, which recognizes the diversity of food growing and harvesting systems, colonial history of agricultural land policies, and further opens a dialogue between and across communities and initiatives around land access and Indigenous land rights.

Throughout this report “foodlands” include land designated as farmland within the ALR as well as lands that are potentially productive outside the ALR.

Food and agriculture are important aspects of the CRD’s history, its visual identity and ongoing sustainability initiatives¹⁶. Public appreciation and concern for the health and well-being of the region’s food and agriculture systems is rising. As a result, there are a number of foodlands access–related goals, objectives, strategic priorities, and recommendations embedded within the planning and policy directions that guide the CRD.

The Capital Regional District Board’s strategic priorities include the following actions:

- 4d. Develop a regional agricultural land banking solution.
- 4e. Establish additional incentives and new policies to promote and encourage farming in the region.
- 6c. Investigate ways to best support First Nations economic development activities in cooperation with local government partners.

In 2016, the CRD acknowledged through the CRD Regional Food and Agriculture Strategy (RFAS), that:

“The cultivation and provision of healthy food and the long-term development and care of local farms and farmland—regardless of whether farmland is currently used to grow food—contributes to the development of a healthy culture and a livable, resilient, secure and sustainable community¹⁷.”

Furthermore, the goals embedded within the RFAS include the following:

- Encourage a place-based regional food culture by building relationships between Indigenous and non-Indigenous communities (Recommendation 7).
- Increase access to agricultural and foodlands (Recommendation 9).

RFAS Recommendation 9, Action 1, is to explore the feasibility of the CRD managing a public land bank, or foodlands trust. Since that time, the municipalities of North Saanich, Central Saanich, Saanich, and Sidney, have all referred letters of support to the CRD with a request for the creation of a regional farm and foodlands trust program, and in the case of North Saanich, indicated support for an accompanying farmland acquisition fund.

¹⁶ Capital Regional District, 2016. [Setting the Table: Food and Agriculture Strategy](#).

¹⁷ Ibid.

1.1 Project Rationale

Within the CRD, productive foodlands surround communities, feed residents, provide green jobs, attract tourism, and provide spin-off economic opportunities. However, farmland is scarce in the CRD, representing only 7% of the total land base. Furthermore, over 1,400 ha of the CRD's Agricultural Land Reserve (ALR) has been lost to development since the 1970s. Local governments, including the CRD, are increasingly looking to employ additional tools above and beyond the ALR designation to ensure that agricultural lands remain both productive and in production.

The CRD's population is expected to increase by 27% by 2038¹⁸. That rate of growth will put additional development pressure on the region's foodlands. At the same time, the CRD's 2018 Regional Growth Strategy includes a target to increase the amount of land in food production by 5,000 ha by 2038¹⁹.

Predicted changes in climate, energy costs, and water availability have drawn attention to the ongoing resilience of the region's food system. As such, the CRD is engaged in several activities connected to food and agriculture, including:

- Support of local government work on watershed management and drainage.
- Provision of water services across the region and maintaining agricultural water rates to rural producers.
- Collection and maintenance of agriculture information.
- Management of problem wildlife and invasive species.
- Collection and distribution of climate-related indicator data.
- Provision of organic matter collection and recycling services.
- Support for and administration of agriculture-related planning processes and policies for a number of Electoral Areas.

The region's population is increasingly interested in, and concerned about, food security and the importance of maintaining the capacity to produce local food. For instance, a 2014 survey of BC residents reported that 92%²⁰ believe local food production and the reduction of dependency on food imports is very important. It was also found that respondents identified "food and farming" as the second most important land use in the province after "natural fresh water systems."²¹

Support for a Land Bank or Land Trust

The following municipalities have referred letters of support to the CRD with a request for the creation of a regional farm and foodlands trust program.

- District of North Saanich;
- District of Central Saanich;
- District of Saanich; and
- Town of Sidney.

The District of North Saanich also indicated support for an accompanying farmland acquisition fund.

There is also a compelling economic argument to be made for preserving existing foodlands. Residents recognize that regional food systems allow a greater portion of food system profits to flow through the local economy, increasing the economic benefit for the entire region²². The underutilization of farmland can be considered a lost regional economic opportunity. Therefore, it is worthwhile exploring why land that is capable of agricultural production is not being used for farming, or is not being used to its greatest production potential.

There are several policy-based and economic factors that influence the likelihood that a parcel of farmland will be used to its fullest agricultural potential. These factors include, but are not limited to:

- Whether or not the land is within the ALR.
- The cost of the land.
- The farm tax income threshold levels.

¹⁸ Capital Regional District. 2018. [Regional Growth Strategy](#).

¹⁹ The "[Policy Discussion Paper #1: Role of Local Government in Promoting Farmlands and Farm Viability](#)" by CRFAIR, provides in-depth justification for why food security and building local food production capacity are in the public interest for local governments to address

²⁰ McAllister Opinion Research. (2014). BC Public Attitudes Toward Agriculture and Food 2014.

http://www.refbc.com/sites/default/files/BC-Poll-Agriculture-and-Food-Detailed-Topline-Report-Aug-2014-PUBLIC_0.pdf

²¹ Ibid.

²² Tatebe, K, N. Robert, R. Liu, A. dela Rosa, E. Wirsching, & K. Mullinix. 2018. Protection is Not Enough: Policy Precedents to Increase the Agricultural Use of BC's Farmland. Institute for Sustainable Food Systems, Kwantlen Polytechnic University.

While local governments can advocate for changes and regulate some permitted uses in the ALR, they do not have full jurisdiction over the ALR, nor farm tax income thresholds—those responsibilities lie with provincial agencies (e.g., the Agricultural Land Commission and BC Assessment) and ministries (e.g., BC Ministry of Agriculture and BC Ministry of Municipal Affairs and Housing).

While changes may eventually be made at the provincial and federal levels, time is of the essence. A regional foodlands access program would provide local government with a lever to help to alleviate the pressure on the farmland base and boost production.

1.1.1 The Productivity of Foodlands

There were 1,003 farms reporting through the 2016 Census of Agriculture in the CRD, with average gross farm receipts of approximately \$64,000²³. With over half of the region's farmers reaching the age of retirement (or beyond) in the next decade, there is an expectation that there may be a further loss in production capacity if new farmers are not assisted in entering the sector. A foodlands access program could help address this wave of farmland succession as current producers reach retirement.

At a total of 16,396 ha, the ALR represents only 7% of the CRD's total jurisdictional area²⁴, however, not all of that land is used for agricultural production. Only 50% of the province's ALR is in production, a figure that mirrors the level of production of farmland in the CRD²⁵. Therefore, farmland protection through the ALR alone is not sufficient to ensure its productive use²⁶. That is in part because BC's ALR zone protects farmland by regulating land uses, but its premise is based on restrictive policies, rather than on motivational policies.

The ALR can be enforced by the Province to ensure that non-farm uses do not proliferate on farmland, but it cannot be used to require that farming activities be undertaken.

Therefore, there is a need for additional policies and actions to ensure that protected agricultural land is used for its intended purpose—farming and food production. A provincial, or even a federal, solution to foodlands access may be developed at some time in the future, but there are no indicators that this will occur in the near-to-medium term (i.e., within the next 5 years). While the federal and provincial governments necessarily have a role to play in boosting farmland productivity, local governments are at the forefront of land use planning and community planning.

1.1.2 The Cost of Foodland Ownership

The cost of land in BC has become prohibitive to those wanting to farm²⁷. While the assessed value of ALR land is relatively low, the market value of farmland is no longer solely based on its intended agricultural use or potential farm business income. A recent report by Farm Credit Canada²⁸ noted that Vancouver Island's farmland market is also influenced by the growing market of farmland in Greater Vancouver. This has created greater demand on the Island for the limited number of farmland parcels on the market, resulting in the province's largest regional average increase in farmland value of 23.6% in one year (from 2016 to 2017).

As a result of this pressure, farmland in the region currently sells for up to \$100,000 an acre, a market value which is equivalent to land used for residential and industrial uses²⁹. Farm businesses can rarely provide adequate short- and medium-term returns to justify this up-front investment. Financial principles suggest that the value of an asset, such as farmland, should be based on its income earning potential. To measure this, the ratio of farmland values to farm cash receipts (land-to-revenue ratio) is a useful indicator. The 2016 land-to-revenue ratio was higher in every province than its 25-year average value. In BC, the 2016 ratio was 50% higher than the 25-year average value (9.40 vs. 6.10)³⁰. This suggests that farmland is much more expensive now than it has been from a historical standpoint. The proportion of

²³ Statistics Canada. 2016. Census of Agriculture

²⁴ Agriculture in Brief: CRD. 2016. Census of Agriculture [Summary Data](#).

²⁵ BC Ministry of Agriculture, 2016. Agriculture in Brief, Census of Agriculture, British Columbia Provincial Profile.

²⁶ Mullinix, K., C. Dorward, M. Shutzbank, & P. Krishnan. 2013. Beyond protection: delineating the economic and food production potential of underutilized, small-parcel farmland in metropolitan Surrey, British Columbia. *Journal of Agriculture, Food Systems, and Community Development*: New Leaf Associates, Inc.

²⁷ *Ibid.*

²⁸ Farm Credit Canada, 2018. 2017 [FCC Farmland Values Report](#). Covering the period from January 1 to December 31, 2017.

²⁹ Geggie, L. & Platt, K. 2009. Our farmlands, Our foodlands, Our future: a findings report on tools and strategies for ensuring productive and accessible farmlands in the CRD. Victoria, BC, Canada

³⁰ Farm Credit Canada Agricultural Economics. [Outlook for Farm Assets and Debt: 2017-2018](#).

farmland to total assets has been increasing since 1994 and is now almost 70% of total farm assets.

Speculation in the development of large country estate homes, potential exclusion of the land from the ALR, and industrial and non-agricultural commercial uses of farmland (e.g., truck parking) have served in part to inflate the values of farmland. For some, farmland is viewed as a relatively risk-free place to sequester and protect one's wealth³¹. While the ALR exclusion success rate may be low, the potential return on investment is worth the risk for many investors. This results in agriculturally viable land selling for many times its assessed value, which limits the purchase opportunities for those interested in entering farming as a livelihood³².

The unattainable price of farmland makes it inaccessible not only to new (entrant) farmers, but also to those who wish to expand their farm business³³. When interviewed for this report, a Central Saanich strawberry farmer³⁴ noted that he had been trying to access (lease) more land to expand his business for years, but that several parcels owned by non-farmers are left to simply sit fallow. The end result is that the land is held for non-farming uses, or for a low level of production in order to attain farm tax income levels (see discussion on farm tax thresholds, section 1.1.3). These properties are often advertised as "good holding properties" or "potential for future development."

Farm Credit Canada's 2017–2108 Farmland Values Report³⁵ notes that the strongest demand for farmland is from producers looking to expand their operations. Speculation from non-traditional buyers (those who invest in farmland, but are not active farmers) also contributes to higher farmland values.

Encouraging ALR landowners who do not farm to make their land available to a farmer can be challenging. An *ALR Landowner Survey*³⁶ conducted by Ipsos Reid in 2013 determined that landowners with less than 25% of their property being farmed generally demonstrate little interest in leasing their land to make it more productive. The reasons for this included: enjoying the property as it is; not needing

the additional income; using the property for other purposes; farming is not financially viable; unsure how to find a good lessee; and lack of privacy. Some also felt that their property would require a significant amount of work (e.g., infrastructure investment) before it could be leased and they were not ready to make that investment.

1.1.3 The Farm Tax Income Threshold

Farm tax income levels refer to the amount of farm-based income that must be generated to acquire lower agricultural property taxation rates. These levels are notably low, as indicated by a recent report conducted for Metro Vancouver³⁷.

In order to obtain farm class status, a farm must provide evidence to BC Assessment that they have reached "income thresholds" that are prescribed as:

- a) Minimum of \$10,000, if the total area of land is less than 0.8 ha (2 acres). This higher level of income associated with a smaller parcel is intended to discourage hobby farming within agricultural areas.
- b) Minimum of \$2,500, if the property is between 0.8 ha (2 acres) and 4 ha (10 acres).
- c) Minimum of \$2,500 plus 5% of the farmland value of the land for farm purposes in excess of 4 ha (10 acres).

There are two levels of benefits that are conferred when properties achieve farm class status. One level of benefits is directly awarded to the farmer or the ALR landowner (not always the same person) and the other level is indirectly awarded to society more generally. These public amenity benefits are further discussed in section 2. ALR landowners who do not farm, but rather lease their property to farmers, can obtain farm class status with relatively low levels of production. The above thresholds were originally set in 1995 and have never been raised. One of the recommendations arising from the *2009 BC Farm Assessment Review Panel report* was to establish a single farm income threshold of \$3,500 and to review this threshold every 5 years. Without raising these thresholds on a regular basis, they are kept artificially low, and this minimizes the incentive to use farmland to its fullest potential by either the farmer or the

³¹ Sussmann, C., C. Dorward, W. Polasub, K. Mullinix, & B. Mansfield, 2016. Home on the Range: Cost Pressures and the Price of Farmland in Metro Vancouver.

³² Ibid.

³³ Curran, D., & Stobbe, T., 2010. Local government policy options to protect agricultural land and improve the viability of farming in Metro Vancouver.

³⁴ Satnam Deenshaw, Gobind Farms, personal communication.

³⁵ Farm Credit Canada, 2018. [2017 FCC Farmland Values Report](#). Covering the period from January 1 to December 31, 2017.

³⁶ [ALR Landowner Survey](#). Prepared for Metro Vancouver by Ipsos Reid, 2013.

³⁷ Upland Agricultural Consulting, 2015. [Farm Tax Class Income Threshold Investigation](#).

lessee, therefore further contributing to the underutilization of farmland.

1.1.4 The Existing Farming Community: Context and Considerations

It is widely agreed upon that the cost of land has outpaced most other agricultural expenses over the last few decades, and in fact, Statistics Canada Agricultural Census data backs this up³⁸. At the same time, there is occasionally uncertainty regarding whether government-based support for a foodlands access program would result in the promotion of a subsidy or unfair competitive advantage over those farmers who have had to purchase land or lease land through private arrangements in the past. In this regard, it is important to note that consultation with CRD farmer stakeholders indicates that this is not a concern among existing farm operators for several reasons, as discussed below³⁹.

Rising Cost of Land: Most established farmers bought land at a time when the cost of land was much more affordable (e.g., 10 acres for \$60,000 about 20 years ago). Several other established operators have been able to secure long-term leases at very affordable rates (e.g., \$100 or less per acre per year).

Competitive Lease Rates: Competitive lease rates are one of a number of controls to level the playing field. For instance, if land that is made available through the program includes good soil, fencing, irrigation water source, and basic drainage, then lease rates in the neighbourhood of \$500/acre/year to \$800/acre/year are not unusual. This would be comparable to current market rates.

Historical Resources are Now Gone: Established farmers had access to helpful resources that are no longer available. At around the time that the ALR was established (early 1970s), several other supportive policies were introduced that have been slowly eliminated. These included a provincial land access program, minimum price guarantees, and supply management for several products⁴⁰. Since that time, new regulations such as the provincial *Meat Inspection Regulation*, have placed further constraints on new operators, making them at a competitive disadvantage, when compared to farmers of previous generations.

Lack of Mentorship Opportunities: New farmers need mentors, and this has been identified as a critical gap in the current culture of farming in BC. Without mentors, incubator farms and other hands-on training grounds are required. Established growers recognize that this gap, if unaddressed, could prevent the next generation of farmers from thriving.

Good Farmers Take Time to Grow: Skills are not built overnight. New entrants will not be in direct competition with established growers because new farmers take time to build their cultivation skills. Neither yields nor product quality from the foodlands access program will threaten the market share of existing operators.

Rural Extension Opportunities: New entrants bring innovative growing techniques, while established producers often grow using conventional practices. A foodlands access program could include partnerships with agricultural education institutions that bring rural extension and innovative growing techniques to the wider farming community. This would benefit all those involved in food production.

Lack of Assets on Leased Land: New farmers who lease land (whether the land is privately or publicly held) do not hold any of the assets related to infrastructure investments on the land, nor do they benefit from capital appreciations. While some tools exist to work capital repayments back through a lease, this generally means that the land cannot be used by the lessee as collateral to leverage loans or other financing. Most established farmers own land and a farm residence, and many have in fact inherited that land or were able to purchase it or otherwise acquire it through a family estate.

It Takes a Village: If more land is made available for more producers, it creates a larger thriving regional agricultural economy, attracting more secondary services and growing the agri-tourism sector and overall marketing base. It also provides benefits to agricultural organizations as there are more individuals able to participate as volunteers, board members, and other representatives for groups, such as 4-H clubs, agricultural societies, and farmer institutes.

³⁸ Statistics Canada. 2016. Census of Agriculture. Capital costs and expenditures.

³⁹ Satnam Deenshaw (Gobind Farms), Bob Maxwell (Fieldstone Garlic), Mary Alice Johnson (ALM Farms), personal communication.

⁴⁰ D. Sheffield, previous administrator of the provincial farm property program. Personal communication.

2.0 Public Amenity Benefits and Foodlands Access Programs

Studies indicate that people assign great value to living near farming areas⁴¹. Farms provide direct benefits to residents including food security and jobs, as well as ecological goods and services (natural assets). A thriving agricultural land base also directly benefits the local economy through the stimulation of agri-business (both primary and secondary businesses—storage, processing and distribution—and associated services).

While society may place high value on the proximity of farmland and on its natural capital, this value is not traded in the marketplace and therefore it tends to be excluded from the calculation of the land's value. A similar argument can be made regarding a community's values with respect to recreation and natural ecosystems, hence the development of parks programming (such as regional parks programs) and land conservation policies (such as development permit areas that protect natural areas).

The attributes contributing to the public benefits of farmland can be considered as either “ecological services” (or “natural assets”) and “amenity benefits”. The value of natural assets, such as wildlife habitat and groundwater recharge, are influenced by the amount of land and how it is managed. The value of amenity benefits, such as greenspace, lifestyle, and views, are determined by the number of people who receive the benefits.

The Intrinsic Value of Foodlands

Intrinsic value is calculated such that the enjoyment or benefit to one person is not reduced by another person also enjoying that benefit. An example would be enjoying a view of agricultural landscapes, or benefiting from a reduction of flooding in urbanized areas due to the mitigation of farmland.

Amenity benefits of farmland have been calculated in Metro Vancouver at \$58,000 per acre and a value in perpetuity of over \$1 Million per acre⁴².

The Public Amenity Value of Foodlands in the CRD

The public amenity value has been calculated at \$58,000 per acre (\$143,000 per hectare) for farmland in Metro Vancouver.

The public value in perpetuity was calculated at **over \$1 Million per acre.**

Source: An Estimate of the Public Amenity Benefits and Ecological Goods provided by Farmland in Metro Vancouver, 2009.

2.1 Natural Asset Value of Foodlands

Climate change and other stresses have the potential to have major impacts on key ecosystem functions⁴³. Many key ecosystem services (natural assets), such as nutrient cycling, carbon sequestration, water filtration, and pollination, are supported by agricultural activities.

Natural assets provided by agricultural land include:

- Soil formation and nutrient cycling
- Climate regulation
- Water purification
- Flood regulation
- Pest management
- Pollination
- Recreation (swimming, hunting)
- Wildlife habitat

Over 30% of agricultural land in Canada is comprised of wildlife habitat, much of which is natural land used for pasture, as well as woodlands and wetlands⁴⁴. Moreover, it has been estimated that 33% of all the food we eat has come from plants that were pollinated by insects, thereby further confirming the importance of well-maintained farmland habitat⁴⁵. If it

⁴¹ Robbins, M., Olewiler, N., and M. Robinson. 2009. An Estimate of the Public Amenity Benefits and Ecological Goods provided by Farmland in Metro Vancouver.

⁴² Ibid.

⁴³ Food and Agriculture Organization. 2018.

⁴⁴ Agriculture and wildlife: A two-way relationship. 2012. Statistics Canada.

⁴⁵ Buchmann, S.L. and G.P. Nabhan. 1996. The Forgotten Pollinators. Island Press, Washington, DC.

were not for the presence of pollinator-friendly habitat, such as foodlands, our diets would be severely restricted.

Many studies exist regarding the natural asset capital that active foodlands can provide. While the value amounts vary, one of the most applicable estimates is from a study⁴⁶ based on the Lower Mainland of BC, which estimated the natural asset capital of farmland at \$698 per hectare per year (or \$44 million per year for the entire Lower Mainland). If this figure were applied to the CRD's farmland area of 16,396 ha, the natural asset value of farmland in the region could be worth up to \$11.4 million per year.

The Natural Asset Value of Foodlands in the CRD

Studies indicate the value of ecosystem services of farmland at approximately \$698 per hectare. If applied to the more than 16,000 hectares of farmland in the region, this would amount to **over \$11.4 million per year.**

Residents recognize this asset value and are willing to place monetary value on protecting farmland for ecosystem services. For instance, one study in Michigan found that the average resident placed a value of \$175 per household per year for a program that would support maintaining farmland practices for the provision of ecosystem services⁴⁷. If applied to the 170,000⁴⁸ households in the CRD, this would amount to a value of over \$29 million per year.

2.2 Public Amenity Benefits and Land Use Planning

In addition to providing natural asset value, the public value of foodlands is also often excluded from land use policy considerations. In 2009, a study conducted by the BC Ministry of Agriculture, Fraser Basin Council, and Simon Fraser University explored the public amenity benefits associated with farmland⁴⁹. While the study focused on the Metro Vancouver region, many of the findings and observations are relevant to the CRD.

⁴⁶ Wilson, S. J. [Natural Capital in BC's Lower Mainland: Valuing the Benefits from Nature](#). 2010. Natural Capital Research & Consulting for the David Suzuki Foundation.

⁴⁷ Swinton, S.M., C.B. Jolejole-Foreman, F. Lupi, S. Ma, W. Zhang, & H. Chen. 2015. Economic value of ecosystem services from agriculture. Pages 54-76 in S.K. Hamilton, J.E. Doll, and G.P. Robertson, editors. [The Ecology of Agricultural Landscapes: Long](#)

The study found that the value that members of the public placed on having farmland within the community surpassed the market value of the farm products the land produces. In the absence of a specific estimate of the public value of farmland in the CRD, decision makers can follow the general conclusions of the 2009 report, which suggests that the public values of farmland are much higher than the values generated through private sales.

This is an important point when making land use policy and planning decisions: when taking the amenity benefits into consideration, the value of farmland to the community as a whole is much higher than just the fee-simple value. This means that resources applied to a foodlands access program by the CRD is an investment of public dollars.

2.3 Rationale of Taxpayer Support for Foodlands Access Programs

Decision-makers may be fiscally wary of spending taxpayer money on a foodlands access program. However, a large capital investment to acquire land need not be necessary. In most communities, there are already vacant (or underutilized) publicly owned lands that could be coordinated as the basis of an access program. For example, within the CRD there are Sandown, Maber Flats, and Panama Flats, which could be used to start a foodlands access program.

Lending financial support is not simply an expense, rather it can be viewed as reallocating resources to manage vacant lands and providing an investment of taxpayer dollars into the following:

- Improved regional food security.
- Partnerships with First Nations to grow projects regarding Indigenous food systems.
- Preservation of natural assets.
- Job creation for the food agriculture sector, and spin-off enterprises.
- Stimulation of agricultural support sector businesses (e.g., seed companies, soil amendments).
- Increased agri-tourism opportunities.
- New education and learning programs.
- Protection of undeveloped green space.

[Term Research on the Path to Sustainability](#). Oxford University Press, New York, New York, USA.

⁴⁸ Statistics Canada, [2016 Census](#).

⁴⁹ Robbins, M., Olewiler, N., and M. Robinson. 2009. An Estimate of the Public Amenity Benefits and Ecological Goods Provided by Farmland in Metro Vancouver.

2.3.1 Costs of Community Services

Determining the Costs of Community Services (COCS) is a useful tool in determining whether the level of taxation for a certain type of land use is appropriate (e.g., residential; commercial and industrial; agricultural and open space). Tax revenues generated by each land use are compared to dollars spent to provide public services, such as road maintenance, schools, water/wastewater, and law enforcement to these land uses.

A number of COCS studies have been undertaken across Canada (particularly in Alberta and Nova Scotia⁵⁰) and in the USA. For example, a 2004 COCS study conducted in Red Deer County, Alberta, found that for every dollar that agricultural lands provide in revenue, they demand only \$0.70 in services. On the other hand, while residential lands generated significantly more dollars in property taxes, they required even more in services (\$1.81 for every \$1.00 paid in taxes)⁵¹. Time and again, in community after community, the COCS ratios show that agricultural land and open space more than pay for themselves, even when those lands are taxed at a lower agricultural valuation⁵².

Therefore, agricultural landscapes pay more in local tax revenues than they receive back in services. A program that invests in foodlands can therefore be

justified as a cost-effective incentive to keep land in active agricultural use.

COCS investigations indicate that as population continues to grow, the land use policies and decisions that leaders make will have important economic consequences for the future quality of life of residents.

Example: Sharing Benefits of Foodlands Access: Garden City Lands, Richmond, BC

The Garden City Lands (GCL) are owned by the City of Richmond and are approximately 136.5 acres (55.2 hectares) located entirely within the ALR. Farming is being established on the site in partnership with Kwantlen Polytechnic University (KPU) through a program that applies sustainable practices and education into the overall food production goals.

The City of Richmond funded the costs associated with site preparation (e.g., clearing, levelling, soil amendments). In most cases, a nominal lease fee is charged and the City expects that it will need to provide support over the long term. There is an understanding that the community benefits outweigh the required services and fair market lease value of the land over the long term.

⁵⁰ G. Greenaway and S. Sanders, 2005. [Report on the Cost of Community Services Multi-Municipality Workshop](#). Red Deer County. Miistakis Institute, Calgary.

⁵¹ [Red Deer County Cost of Community Services Report](#), 2004. Miistakis Institute, Red Deer County, and Alberta Real Estate Foundation.

⁵² American Farmland Trust, 2004. [Cost of Community Services: The Value of Farmland and Open Space in Bexar County, Texas](#).

3.0 Foodlands Access Strategies and Tools

There are a number of strategies, policies, and regulations that governments and NGOs can initiate to make foodlands available and affordable for farmers. These can be used as stand-alone tools or be embedded within a more comprehensive strategy.

The tools that are included within this comparative analysis include:

1. Foodlands trusts
2. Land banks
3. Land connecting services
4. Incubator farms
5. Farm tax policies
6. Farmland ownership restrictions
7. Regulation of farm leases

These tools range in their applicability as indicated in Table 1, which includes a description of:

- Relative Cost: amount of sustained support required.
- Lead Agency: identification of organizational leadership.
- Timeframe for Adoption: ability for the program to be implemented over the short (1–3 years), medium (3–5 years), or long term (>5 years).
- Level of Effort: jurisdictional capacity of local government for implementation, assuming funds are available.
- Level of Impact: relative amount of land and/or number of farmers that will benefit from the program.

Table 1. Summary of Foodlands Access Tools and their Potential Level of Impact

Number	Tool	Relative Cost to Local Government	Lead Agency	Timeframe for Adoption	Level of Effort	Level of Impact
1	Foodlands trusts	High	Local governments and/or NGOs	Short (1 to 3 years)	Easy	High
2	Land banks	Medium-High	Local governments and/or NGOs	Short (1 to 3 years)	Easy	High
3	Land connecting services	Medium-Low	NGOs	Short (1 to 3 years)	Easy	Low
4	Incubator farms	Medium	NGOs and/or academic institutes	Medium (3 to 5 years)	Challenging	Moderate
5	Farm tax policies	Low	Federal and/or provincial government	Medium (3 to 5 years)	Difficult	High
6	Restrictions on farmland ownership	Medium	Provincial government	Medium (3 to 5 years)	Difficult	High
7	Regulation of farm leases	Low	Provincial government	Medium (3 to 5 years)	Difficult	Low

*Green indicates good candidate as a tool for local governments; yellow indicates a possible tool to be used within a broader strategy; orange indicates a limited ability for local governments to use the tool.

Each of the seven tools are described further, below, and examples are provided within the Appendix.

3.1 Tool #1: Foodlands Trust

Definition: Land Trust

A land trust is a legal term that describes an agreement whereby one party (the trustee) agrees to hold ownership of a piece of property for the benefit of another party (the beneficiary), usually for a specific use.

The term “land trust” can also describe an organization (usually a non-profit) with a mandate to conserve or protect land.

A foodlands trust is based on the principle of managing farmland as a community asset for the public good. Through partnerships and programming, these trusts facilitate and enable foodlands protection while promoting environmentally sensitive farm practices, supporting new farmers in accessing land, securing long-term farm use on agricultural land, and retaining farmers.

Foodlands trusts (sometimes referred to as farmland trusts) operate as organizations that maintain land for agricultural and food provisioning activities in perpetuity. Trusts can be led by government or NGOs, or as a partnership between both and can include publicly-owned and/or privately-owned lands. Farmland is typically acquired by way of gift (donation), transfer of property rights, or direct purchase and its use is restricted by the trust organization to activities that encourage (or require) farming. This land can then be made available through a land use agreement to farmers at competitive rates⁵³. A land trust is a tool that can protect existing foodlands over the long term while supporting the succession process between retiring and new farmers.

- Relative cost to local government: High
- Lead agency: Local government and/or NGOs
- Timeframe for adoption: Short term (1–3 years)
- Level of effort: Easy
- Level of impact: High

⁵³ The Land Conservancy, 2010. A review of farmland trusts: Communities supporting farmland, farming, and farmers.

⁵⁴ Hartvigsen, M., 2015. Experiences with land consolidation and land banking in central and eastern Europe after 1989 (Land Tenure

3.2 Tool #2: Public Land Bank

Definition: Land Bank

Land banking refers to the process of the public acquisition of underdeveloped or underutilized land for future development purposes. Land banks and land banking authorities are typically set up as separate and distinct entities. These entities are enabled through legislative documents, municipal policies and by-laws to manage lands either by the way of surplus acquisition, transfer, or tax foreclosure for future use.

Land banking as a land management tool has three major goals:

- Managing urban growth patterns
- Ensuring land availability for specific uses
- Capturing capital gains due to increases in land values created by government investments

A land bank is operated by a government agency or an NGO with a mandate to acquire land and resell or rent it out, usually for the purpose of land consolidation or land ownership reform⁵⁴. A public land bank with a focus on foodlands would acquire underutilized farmland and promote productive agricultural use of the land. The government or NGOs that control the land bank are responsible for acquiring land through donation or purchase, and, in turn, leasing it back to farmers who wish to start farming or expand their operations. If managed by a local government, the land bank could include both publicly owned lands (as a basis for a new foodlands access program) with the goal of acquiring private lands over a longer period of time.

- Relative cost to local government: Medium-High
- Lead agency: Local government and/or NGOs
- Timeframe for adoption: Short term (1–3 years)
- Level of effort: Easy
- Level of impact: High

Working Paper no. 26). Rome: Food and Agriculture Organization of the United Nations.

3.3 Tool #3: Land Connection Services

The bottom line for all land connection services is to help land seekers and land owners find and connect to one another. There are three of common land connection services:

1. Land *listing* services are "low touch": provide and maintain a list of available agricultural properties available for through rental/lease or purchase⁵⁵.
2. Land *linking* services are "medium touch": information regarding land owners and land seekers screened and sorted by a third party.
3. Land *matching* services are "high touch": actively facilitating customized connections, negotiations and agreements.

Often all approaches provide resources such as land use agreement templates, and many deliver networking events. Connection services usually focus on land that is privately-owned, although public lands could be included

Land matching services led by NGOs often involve local governments playing a supportive role through funding. While the annual level of funding required is relatively low⁵⁶, land matching takes time, to complete for a single match. Furthermore, once the funding is allocated, local governments have very little control over the outcomes of the match, which does not always result in a long term lease agreement⁵⁷.

A key challenge for land connection services is program continuity. Secure multi-year funding is needed to retain knowledgeable staff and cover overhead management and administrative costs. Furthermore, it does not assist with land preservation or associated benefits over the longer term.

The BC Government has recently taken on a more direct role in land connecting services by providing a financial contribution to Young Agrarians⁵⁸.

- Relative cost to local government: Medium-Low
- Lead agency: NGOs
- Timeframe for adoption: Short term (1–3 years)
- Level of effort: Easy
- Level of impact: Low

⁵⁵ FarmLINK.net is an example of a national farmland inventory that enables landowners to advertise available farm properties and land seekers to post what they are looking for. Young Agrarians U-Map is another example of a platform that allows land access opportunities to be posted alongside other resources such as agricultural training, services and suppliers and markets. These resources are already available as a service for landowners and land seekers on Vancouver Island.

⁵⁶ Young Agrarians estimates an annual budgeting requirement of approximately \$70,000 to fund a regional Land Matchmaker

3.4 Tool #4: Incubator Farms

An incubator farm is a land-based multi-grower project that provides training and technical assistance to aspiring farmers. Farm incubator projects (e.g., Haliburton Farm) aim to help new farm entrepreneurs establish their own successful businesses by providing specific resources and services that are difficult for start-up food producers to access on their own⁵⁹. It can also serve as a powerful public education tool, where events and demonstrations assist in advancing the understanding of local food production for the general public.

Most incubator programs offer infrastructure, equipment, and other supports that allow start-up producers to access small land plots (5 acres or less) at a competitive lease rate. Farm leases are often staggered such that there is a variety of experience levels within the program at any given time. Infrastructure, such as irrigation, fencing, greenhouse, storage, and shared equipment, as well as marketing support are often included⁶⁰.

An incubator farm program in the CRD could take on many forms. An organization could initiate an incubator farm program in the CRD on lands held within either a trust or land bank model, or an NGO or academic institute could purchase land outside a trust or bank for this purpose.

- Relative cost to local government: Medium
- Lead agency: NGOs and/or academic institutions
- Timeframe for adoption: Medium term (3–5 years)
- Level of effort: Challenging
- Level of impact: Moderate

program in Metro Vancouver. Less than 10 matches have been made since 2016. Source: S. Dent, personal communication.

⁵⁷ The Land Matchmaker program in Metro Vancouver, lead by Young Agrarians, has resulted in 10 matches since 2016 putting 22.5 hectares (55.5 acres) of land in agricultural production.

⁵⁸ [Ministry of Agriculture commits \\$300,000 to help BC farmers obtain land.](#)

⁵⁹ [New Entry Sustainable Farming Partnership:](#)

⁶⁰ CRFAIR, 2015. Farmland Trust Findings Report.

3.5 Tool #5: Farm Tax Policies

The current property tax regime is intended to benefit farmers and encourage farm activity on ALR land, but in practice, it can provide significant benefits to those using the land for non-farm purposes, and may encourage farmland speculation⁶¹.

Reform is needed to ensure that tax benefits go to those who are investing in agriculture and food production over the long term. Existing tax policy has the following challenges⁶²:

- A primarily residential property can qualify for farm class status with minimal farming activity.
- Of the \$4 million in tax exemptions in Metro Vancouver in 2015, 78% went to residential class properties.
- Buildings constructed for farm use may continue to receive tax exemptions even when they are converted to non-farm use.

Reviews⁶³ of BC's farm class tax policies have recommended the following:

- Increase the farm income threshold.
- Establish a multi-tier system that awards greater benefits to farms that achieve higher income thresholds.

One of the recommendations from the 2009 BC Assessment Review Panel was to harmonize farm income reporting with the Canada Revenue Agency (CRA). While the reporting period has been changed to match the CRA's, the income used to determine farm class is not shared between the CRA and BC Assessment.

- Relative cost to local government: Low
- Lead agency: Federal and/or provincial governments
- Timeframe for adoption: Medium term (3–5 years)
- Level of effort: Difficult
- Level of impact: High

⁶¹ Metro Vancouver, 2016. [Encouraging agricultural production through farm property tax reform in Metro Vancouver](#).

⁶² Ibid.

⁶³ BC Farm Assessment Review Panel report, 2009; Curran, D., & Stobbe, T., 2010. Local government policy options to protect agricultural land and improve the viability of farming in Metro Vancouver; Colliers International, 2014. Property Tax Scenario Analysis for Agricultural and Industrial Lands in the Metro Vancouver Region; Upland Agricultural Consulting, 2015. [Farm Tax Class Income Threshold Investigation](#); Metro Vancouver, 2016. [Encouraging agricultural production through farm property tax reform in Metro Vancouver](#).

⁶⁴ Tatebe, K, N. Robert, R. Liu, A. dela Rosa, E. Wirsching, & K. Mullinix. 2018. Protection is Not Enough: Policy Precedents to

3.6 Tool #6: Land Ownership Policies

Due to a lack of data, it is difficult to assess the legal ownership of BC's farmland and determine who may be benefiting from farmland tax exemptions. Title information is currently collected by BC Land Title and Survey, but it is not made available publicly, aggregated, or analyzed. For example, it is not known how much property in BC is owned by individual people versus incorporated entities, even though that information is collected on title documents⁶⁴.

Tracking and reporting ownership information could give policy-makers the ability to assess trends and address concerns about farmland investment, speculative ownership, and farmland consolidation⁶⁵.

Unlike other jurisdictions (e.g., Quebec, PEI, New Zealand, France), BC does not currently restrict individuals, companies, trusts, or other legal entities, whether foreign or domestic, from purchasing land⁶⁶. Local governments can advocate for BC Assessment or another provincial agency to collect and distribute this information.

- Relative cost to local government: Medium
- Lead agency: Provincial government
- Timeframe for adoption: Medium term (3–5 years)
- Level of effort: Difficult
- Level of impact: High

3.7 Tool #7: Regulation of Farm Leases

While a 2014 survey of BC farmers found that the preferred choice of land access was ownership, long-term, transferable, and intergenerational leases are a desirable alternative to ownership especially for start-up farm businesses⁶⁷. Leasing is an important component of land access, especially for new farmers and those expanding existing farm businesses. Aspects of farm lease regulation include requiring longer lease terms, tenant rights to purchase, rent

Increase the Agricultural Use of BC's Farmland. Institute for Sustainable Food Systems, Kwantlen Polytechnic University.

⁶⁵ Holtslander, C., 2015. Losing our grip 2015 update: How a corporate farmland buy-up, rising farm debt, and agribusiness financing of inputs threaten family farms and food sovereignty. National Farmers Union. Saskatoon, Saskatchewan.

⁶⁶ Tatebe, K, N. Robert, R. Liu, A. dela Rosa, E. Wirsching, and K. Mullinix. 2018. Protection is Not Enough: Policy Precedents to Increase the Agricultural Use of BC's Farmland. Institute for Sustainable Food Systems, Kwantlen Polytechnic University.

⁶⁷ Wittman, H and J. Dennis, 2014. Farmland access in British Columbia project summary report. Faculty of Land and Food Systems, University of British Columbia.

control, and inheritance of contracts. The insecurity of short-term leases discourages farmers from investing in farmland improvements, or in utilizing more costly stewardship practices that promote long-term ecosystem health. Short-term leases can also jeopardize farm business planning by limiting a farmer's ability to secure a bank loan, or to engage in farming enterprises with longer-term investment payback horizons (e.g., perennial crops, such as tree fruit or hops).

Other local governments, such as Metro Vancouver⁶⁸, have proposed amendments to ALC and BC Assessment regulations, in order to promote longer farmland lease terms. They recommend registering the lease to the title of the land so that it is transferred to the new owner if the land is sold. This is not compulsory in the current legislative framework.

- Relative cost to local government: Low
- Lead agency: Provincial government
- Timeframe for adoption: Medium term (3–5 years)
- Level of effort: Difficult
- Level of impact: Low

4.0 Governance Models

The foodlands trust and land bank ranked as the first and second-best tools available for local governments, respectively. While land trusts and land banks are operationally similar, a trust will functionally achieve the objectives for long term land access in a way that a land bank would not. While land banks may work well for other initiatives, such as parks programs, they do not achieve the same outcomes for farmland access programs. This is in part because the Canada Revenue Agency has a specific program for gifting ecologically sensitive land with associated tax credits, but there is no similar program for agricultural lands⁶⁹. A trust model that would protect farmland in perpetuity offers an additional motivation and benefit for farmland donees over and above minimal tax credits. It is recommended that the farmland trust program initially target lands that are municipally-owned, thus reducing the need to acquire private lands.

⁶⁸ Metro Vancouver, 2016. [Encouraging agricultural production through farm property tax reform in Metro Vancouver](#).

⁶⁹ Canada Revenue Agency, 2017. Gifts and Income Tax. PI 13(E). Rev.17.

A trust also allows for a greater sense of security for the farmer, and better achieves the goal of providing long term leases for the purposes of agricultural production. The trust approach therefore provides the best benefits for a foodlands access program.

The farmland trust will require a host organization, or lead agency, to manage a program advisory committee (PAC), hire staff, fundraise, select new farmers, manage infrastructure, liaise with community groups, and develop partnering relationships with mentors and existing agricultural organizations.

The possible governance approaches are listed below and investigated in the following sections. Table 2 provides a summary of these findings.

Approach 1: Local government–led model: Land trust managed and operated by the CRD.

Approach 2: NGO-led model: Land trust managed by NGOs with minor support from CRD.

Approach 3: Hybrid model: Land trust managed by the CRD with significant involvement and support from NGO partner(s).

4.1 Local Government-Led Model

A farmland trust is best managed within a legal trust held by local government, who would also be the trustee. Land trusts are commonly managed by NGOs, however, governments can also act as a land trust and hold and manage the land as a public service. The stability of a land trust is enhanced when managed by government.

While an NGO's ability to provide management may change depending on funding availability, a government-led trust would have a more stable base of long-term funding. Also, unlike land use zoning, which may change based on political direction, land held in a trust by a government is maintained in perpetuity.

The land for a trust could be acquired by donation, by Community Amenity Contribution (CAC)⁷⁰, or by

⁷⁰ Community Amenity Contributions (CACs) are agreed to by the applicant/developer and local government as part of a rezoning process. CACs can be obtained through voluntarily negotiated contribution or through density bonus zoning. CACs can include a

fee-simple acquisition. The trust would hold title to the land and make it available to a beneficiary (or several beneficiaries), such as a farmer or community group, through long-term leases. Partnering with an NGO with charitable status, such as the Foodlands Cooperative of BC or the Farmlands Trust (Greater Victoria) Society, could help to attract land donations.

4.2 NGO-Led Model

This model would be similar to the approach previously used by TLC and which is currently being used by the Farmlands Trust (Greater Victoria) Society and is advocated for by FarmFolk/CityFolk. The role of local government would be supportive, through financial or human resources capacity. Land that is already publicly owned by local government could be managed by the NGO, such that administrative tasks (e.g., lease agreements, dispute resolution, community programming) are undertaken by the NGO.

The role of local government would be to potentially be a co-trustee. Commitments of financial support would need to be arranged in partnership with the NGO, so the program could be adequately managed over the long term.

4.3 Hybrid Model

By having local government partner with an NGO (hybrid model), greater opportunities for program grant funding will be possible. This hybrid model would ensure that the CRD's role in the trust remains limited to policy development, property/lease management, and overall administration (e.g., overseeing the legal aspects of the land trust, coordinating land use agreements with municipalities for publically-owned parcels, and providing a meeting space for the PAC).

A regional hybrid approach will present significant cost efficiencies over and above the alternative option of several municipalities embarking on their own land trust initiatives. Local governments could remain involved as the owners of public land included in a regional trust and could retain control of infrastructure, such as drainage.

The hybrid approach would also allow for the CRD to have control over how the foodlands access program activities could best meet its goals. This would require secure, long-term core funding. Most foodlands access programs are run, at least in part, by a non-profit NGO. This involvement can provide more fundraising opportunities (through foundations and other granting agencies). However, there are also significant potential constraints: NGOs require constant fundraising and long-term funding may be problematic. For example, The Land Conservancy of BC (TLC), with a similar foodlands access mandate, faced this ongoing funding challenge in recent years, leading to a termination of the organization.

Several farmland trust societies exist within the southern Vancouver Island region and have indicated an interest and willingness to participate in a regional trust model. These include:

- Foodlands Cooperative of BC
- Farmlands Trust (Greater Victoria) Society
- Sooke Region Farmland Trust Society

4.4 Program Staffing Needs

Based on staffing at other programs^{71,72,73}), a full-time program manager and a part-time farm caretaker are recommended. This level of staffing would likely suffice for up to approximately 32 hectares (80 acres) of land in total. This land may be comprised of several parcels in the range of 4 to 8 hectares (10–20 acres; e.g., Maber Flats) or as a single parcel (e.g., Sandown).

4.4.1 Program Manager

The program manager would be a full-time position (1.0 FTE), with responsibilities including: managing (and raising) funding, providing outreach to partner organizations, communicating with other partner groups, developing annual reports, managing the PAC, developing public outreach events, and assisting with the selection of farmers. The program manager may also be responsible for attending conferences, workshops, or other professional events to promote the foodlands access program. It is expected that the duties associated with the program manager will shift over time, and while the initial three years will be particularly busy, the position will likely require full-time attention over the long term. For instance, as more land is brought into the foodlands access program, more lease agreements will be required. As leases

diversity of amenities and, importantly, can include those that Development Cost Charges (DCCs) cannot be applied towards.

⁷¹ [Plate-forme agricole de L'Ange-Gardien](#), Quebec.

⁷² [The Sharing Farm Society](#), Richmond, BC.

⁷³ [Intervale Center](#), Vermont.

end, or when it is time for them to be renewed, this will again require attention. The program manager will also be responsible for the program budget and managing farmland use and planning issues as they arise.

4.4.2 Farm Caretaker

The farm caretaker would be a part-time position (0.5 FTE), and responsibilities will depend somewhat on the skill set of the person who is hired. Main responsibilities would involve oversight of day-to-day operations, such as plowing and water scheduling, assisting in troubleshooting problems with infrastructure, coordinating tool and equipment sharing, providing tours and participating in public outreach events. The farm caretaker would visit the sites on a rotating basis and the overall part-time work would likely be full time (4 to 5 days a week) during summer months and part time (1 to 2 days a week) during winter months.

4.5 Farmer Selection Criteria

Farmer selection will need to be based upon a clear and transparent process steered by the PAC. A key consideration will be regarding the proposed agricultural land use and how it best suits the specific land parcel that is available. For instance, haying may be more appropriate to large parcels with moderate soil capability, while intensive vegetable or berry production may be more suited to smaller parcels with good soil capability.

Once the selection criteria have been established, it is recommended that the application process include the following steps:

- 1) Call for applications.
- 2) Opportunity for prospective farmers to visit the site.
- 3) Business plan presentation to the PAC.
- 4) Interviews by the PAC.
- 5) Follow-up meetings with top prospects.
- 6) Land tenure contract negotiation.

The application process may include a request for the following information:

- Detailed description of agricultural experience and/or education.

- Knowledge of sustainable farming practices.
- Description of alignment with indigenous food system restoration goals.
- Experience working in a cooperative/collaborative environment.
- Business plan and value proposition, alignment with the parcel's agricultural capability.
- Availability for onsite non-farming activities, such as community-based programming.
- References.

Due to the unique nature of the foodlands access program, potential members should demonstrate an interest and willingness to engage in practices that adhere to Indigenous food system restoration goals. Farmers will also be encouraged to engage with members of the public.

4.6 Summary of Governance Recommendations

The following recommendations are provided for governance of the farmland trust program:

- A foodlands trust is model recommended in part because it is the least likely model to be subject to political influence over time.
- The government & NGO hybrid model represents a "best of both worlds" land trust approach, whereby economic efficiencies are maximized and program stability over the long term is ensured. This could include a partnership between the CRD and one or several NGOs (e.g. Farmlands Trust (Greater Victoria) Society, Sooke Region Farmland Trust Society, and/or the Foodlands Cooperative of BC).
- The program should be staffed with a full time Program Manager and a part time Farm Caretaker.
- A Program Advisory Committee (PAC) should be established to oversee the functioning and decision-making of the land use access program.

Table 2. Stability, Lease Terms, Land Use, and Costs Associated with Foodlands Access Models

Foodlands Model	Governance Approach	Stability	Land Use	Cost to Local Government
Land Trust	Local Government	Moderately stable. Specific land uses (e.g., food production) will legally run with the land, will not change over time. The trustee is the local government.	Food production is required now and into the long-term future. Community events and educational programming are incorporated into the access program.	Moderate to High, specifically during establishment for legal fees, operations, and administration. A long-term financial commitment would be required.
	NGO	Weak. Specific land uses (e.g., food production) will legally run with the land, will not change over time. NGO as a lead trustee is less stable than a local government trustee, as it is more vulnerable to changes in funding.	Food production is required now and into the long-term future. Community events and educational programming are incorporated into the access program.	Moderate. The NGO would be expected to lead the operations of the land trust. Local government may still assist with providing support for legal and administrative oversight, and may also want to participate in community programming.
	Hybrid	Very Stable. Committed funding from local government ensures long term stability.	Community events and educational programming may be possible. Will depend mainly on zoning.	Low to Moderate. The NGO would be expected to lead the operations of the land bank. Funding opportunities are maximized through the NGO.

*Colours: Green indicates best option for the farming community, yellow indicates moderate option, orange indicates least preferred option. In terms of land use, the community at large benefits most through a land trust model managed by a local government. Funding requirements indicates that the trust model would require a greater level of investment from the local government



5.0 Community Partnerships and Foodlands Access Programs

Foodlands access program partnerships can occur with a number of different community groups, organizations and agencies. Examples of successful community partnerships and food production programming are provided in this section to indicate the breadth and depth of possibilities. A summary of foodlands-trust and land-bank approaches and the corresponding roles of local government, First Nations partners, and NGO partners can be found in Table 3. A list of examples of existing foodlands access programs and community partners in other jurisdictions is included in the Appendix.

5.1 Indigenous Food Systems

The First Peoples of this region have a 14,000-year relationship with food, land, and sea. Southern Vancouver Island is the traditional territory of the Songhees, Tsawout, Tsartlip, Pauquachin, Tseycum, and Malahat First Nations. For hundreds of generations, local Indigenous communities have looked after the lands and waters of this territory, and in return, food was and continues to be a vital and inseparable part of Nuu-chah-nulth and Coast and Straits Salish health, culture, and spirituality. Settlement patterns, associated infrastructure, and pollution have rendered many local foods unharvestable.

There are 10 Nations with reserve lands within the CRD, including Esquimalt, Pauquachin, Sc'ianew (Cheanuh) Beecher Bay, T'Sou-ke, and Pacheedaht. Depending on where a foodlands access program takes place, it will be important to work with the neighbouring Nations to understand their interests in relation to the program.

The CRD as a region is also home to thousands of Indigenous peoples who migrated here from other territories. Where possible, a foodlands access program must seek partnerships with those communities as part of its community outreach work. This in turn will meet RFAS recommendation 7's three identified desired outcomes: improved relations with Indigenous communities, improved understanding and appreciation of traditional food knowledge, and increase the number of successful Indigenous food and agriculture initiatives.

Initial outreach to some members of these communities suggests that the following project partnerships could emerge through a foodlands access program:

- Some of the foodlands could be managed by Indigenous organizations for the cultivation of traditional foods, as well as locally produced fruits and vegetables. Access to affordable healthy food remains an important issue for First Nation communities.
- Restoration of land to support and promote the return of native plant species for ceremony, medicine, and habitat restoration.
- Co-management of the land to ensure that medicinal plants, such as GUXMIN, are allowed to grow.
- Incubator farms and/or community gardens could include plots for First Nation community members, elders, and/or Indigenous organizations.
- Educational programs (e.g., UBC Indigenous Health Research and Education Garden).
- Partnerships could be forged with the ŁÁU,WELNEW_ Tribal School, which offers students a cultural education in addition to the standard provincial curriculum, emphasizing the revitalization of the SENĆOŦEN language, as well as traditional skills and practices.
- As many green spaces are now privatized and off-limits to hunting, possible partnerships around the harvesting of animals, such as deer or geese, on foodlands could provide a location for First Nations to harvest safely.
- Access for traditional foodways, including traditional harvesting methods of gathering plants or fungi, for food, social, or ceremonial purposes and in accordance with conservation, public health, and public safety regulations.

A formal recognition of the Territory and history of the land will help to build a greater respect for how it is used for food and medicinal purposes. If specific parcels of land are selected for a foodlands program it will be important to understand and incorporate the history of that land, what it was used for, what plants existed there, and so on. Several successful examples of First Nation partnerships and foodlands already exist in the region and in the Lower Mainland and a summary is provided in the Appendices.

5.2 Education, Research, Celebration

The integration of education and research goals will help to build partnerships with academic institutes and the foodlands access program. Education is essential to help reconnect the public with where

their food comes from. Public outreach will be an important component for a foodlands access program, however new farmers may not have the time or expertise to effectively interact with visitors themselves. Furthermore, the CRD has a direct mandate to ensure that all activities on public lands elevate the public benefit.

Education, research, and celebration activities may include:

- Partnerships with University of Victoria, Royal Roads University, and other academic institutions.
- Pollinator and bird habitat workshops.
- Biking or hiking tours (guided and unguided) on trails with interpretive signage.
- Special events, such as a “Farmers in the Park” day, garlic festivals, volunteer days.
- Inviting the public to some mentoring events or guest speaker engagements.
- A demonstration area that showcases sustainable farming practices.
- Small farm business planning.
- Land access workshops (buying/leasing foodlands, land readiness, tenure agreements, etc.).
- Clinics on specific pest, weed, and disease concerns.
- Equipment safety courses (necessary if tractors and large equipment are available for rent/use).
- Local wildlife groups providing orientation to the sites.
- Partnerships with BC Ministry of Agriculture, NGOs, commodity associations, and other non-profit organizations providing guest speakers (low-cost or cost-recovery model).
- A farm library of region-specific resources (either physical or online) for farmers.

integrating Indigenous food production into local food farming practices.

Table 3. Potential Roles of Local Government, NGO, Academic, and First Nation Partners

Role of Local Government	Role of NGO and Academic Partners	Role of First Nation Partners
<ul style="list-style-type: none"> - Financial contributor - Trustee - PAC chair or co-chair - Operational oversight - Administrative support 	<ul style="list-style-type: none"> - Program development - Co-trustee (potential) - PAC member or co-chair - Seek land donations - Marketing and promotion - Farmer recruitment - Administrative oversight - Education and research 	<ul style="list-style-type: none"> - Assist in goal setting - PAC member or co-chair - Contribute to program development and planting - Integration of land-based education programming and food production
<ul style="list-style-type: none"> - Financial contributor - Trustee - PAC chair or co-chair - Marketing and promotion 	<ul style="list-style-type: none"> -Trustee - Program coordination and development - PAC member or or co-chair - Operational oversight - Administrative oversight - Education and research 	<ul style="list-style-type: none"> - Assist in grant application and fundraising - PAC member or co-chair - Assist in goal setting - Contribute to program development and planting - Integration of land-based education programming and food production

5.3 Summary of Partnership Recommendations

The following recommendations regarding community partnerships are provided:

- Foodlands access program partners should meet in person at least twice a year. These meetings could be arranged by the PAC.
- The program must recognize and reflect the opportunity to work with interested First Nations in restoring traditional food practices, as well as

6.0 Foodlands Access Program: Estimates of Costs and Revenues

This section of the report forecasts investment requirements, identifies potential funding streams, and concludes with a series of budgetary recommendations. This analysis is critical to the planning, operation, and decision-making around providing support for a foodlands access program. However, in measuring the value of this project, the focus must not be only on financial impact, as this oversimplifies the issue. As previously outlined, natural asset management and community partnerships are also important investments to consider. In order to incorporate these investments into the discussion, the triple bottom line approach is taken - an accounting framework comprised social, environmental, and economic components. Many organizations have adopted this framework to better evaluate objectives and outcomes using a broader, more comprehensive perspective⁷⁴.

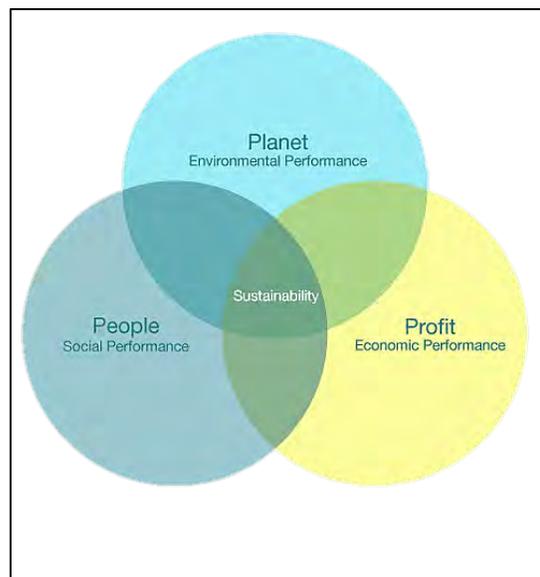


Figure 1. Triple bottom line: where planet, profit, and people meet.

Productive Foodlands Create Jobs

A team of researchers from Kwantlen Polytechnic University conducted an analysis to determine how Surrey's underutilized ALR land could potentially contribute to the community, in terms of production value and employment, if that land was farmed. They assessed four different scenarios of farm types. It was determined that if 113 ha (279 acres) of private and municipally owned farmland that is currently underutilized were brought into production, it would have the potential to contribute **\$8-16 million in gross receipts** to Surrey's agriculture sector. Furthermore, the agricultural enterprises on this land could employ **100-136 full-time employees**.

The triple bottom line dimensions are also referred to as the three Ps: people, planet, and profit (Figure 1). It can be argued that a well-balanced, well-structured, efficiently operated, regional foodlands access program would be an excellent example of a triple bottom line model. If fully functional and successful, the triple bottom line for the foodlands access program will provide the following balanced returns:

- Environmental/Planet: Reducing pollution, carbon emissions, and sequestering carbon develops healthy, rich soils that hold water and reduce the risk of flooding and erosion. In addition, natural asset management maintains biodiversity and encourages pollinators and the growth of beneficial plants and wildlife.
- Social/People: Healthy and sustainable farming contributes to better diets with more nutritious and safer food options for the community, while enhanced margins for local food support good farm jobs with fair pay. The agricultural community is reinvigorated by a new generation of growers who will benefit from mentorships from older farmers, and who will support organizations, such as farmers' institutes and 4-H Clubs.
- Economic/Profit: In addition to the direct jobs and revenues enjoyed by the farmers who are members of the foodlands access program, additional employment is stimulated regionally through the support of secondary agricultural businesses, such as equipment, servicing, retail, and restaurants.

⁷⁴ Source: Mullinix, K., Dorward, C., Shutzbank, M., Krishnan, P., Ageson, K., & Fallick, A. (2013). Beyond protection: Delineating the economic and food production potential of underutilized, small-parcel

farmland in metropolitan Surrey, British Columbia. *Journal of Agriculture, Food Systems, and Community Development*, 4(1), 33-50.

6.1 Variable Cost Estimates

Variable costs are those that are based on the site(s) selected. These include the costs associated with infrastructure needs and are variable because they are completely dependent on what site(s) are chosen to be part of the land trust (e.g. their size, soil quality, existing fencing, access to water, surface drainage). These features can vary widely from site to site. Examples of variable costs are provided in Table 4 (next page). It is important to note that associated lease income can help offset variable costs. Examples of three lease scenarios are provided in section 6.6.

Some of the variable costs associated with site infrastructure and maintenance are already included in municipal budgets, even when the properties are not in agricultural production or being used for the community. For example, the annual maintenance activities associated with a 19-acre field adjacent to Island View Park in Central Saanich includes mowing, ditch clearing, and routine maintenance (e.g., fencing inspections and repairs) and currently amounts to approximately \$3,400 per acre per year, or \$64,600 per year for the whole 19-acre site⁷⁵.

Similarly, in order to maintain Panama Flats in its current undeveloped state, the District of Saanich conducts regular tilling and mowing, particularly in the fall. The budget for this maintenance is approximately \$360 per acre per year, or \$20,000 per year for the 56-acre site⁷⁶. The discrepancy between the maintenance costs associated with the two sites is based on existing infrastructure and the amount of public access to the sites.

When evaluating variable costs, there are two key points to consider:

- 1) Economy-of-scale means that a 10-acre parcel would not necessarily have infrastructure needs that are double those of a 5-acre parcel.
- 2) Initial investments in infrastructure are valuable to those leasing the land. Therefore, higher lease rates can be charged for land that has improvements to drainage, fencing, and water. As the infrastructure is upgraded, the lease fees can be raised.

Table 4 provides estimates of the total variable infrastructure costs associated with a hypothetical 80-acre parcel, which is similar in size to Panama Flats or Sandown.

Table 4. Estimated Variable Infrastructure Costs Range for Foodlands Access Program Establishment on a Hypothetical 80-Acre Site.

Level of Pre-Existing Infrastructure	Fencing Costs	Irrigation Costs	Ditch Clearing and Surface Drainage Costs	Total Infrastructure Costs per 80 Acre site (Estimated)	Total Infrastructure Costs per Acre (Estimated)
None	Assume 1,600 ft per acre @ \$3.00/ft = \$4,800 per acre 80 acres = approximately \$384,000	Well drilled 100-ft @ \$120/ft = \$12,000 OR Water fees @ farm rate ⁷⁷ of \$0.2105/m ³ for 2,000 m ³ of water 5 acres = \$420 80 acres = approximately \$6,720	Estimate @ \$1,500 per acre for surface drainage (e.g. ditches, furrows) 80 acres = approximately \$120,000 *Note that subsurface drainage would be more expensive, about \$4,000 per acre	\$516,000	\$6,450
Surface drainage already on site	\$384,000	\$12,000	\$0	\$396,000	\$4,950
Some fencing and basic surface drainage on site	\$90,000	\$6,000	\$60,000	\$156,000	\$1,950

⁷⁵ Brian Barnett, Director, Engineering and Public Works, Central Saanich. Personal communication.

⁷⁶ Eva Riccius, Senior Manager of Parks, District of Saanich. Personal communication.

⁷⁷ [Agricultural water rates 2018](#). Capital Regional District.

6.2 Fixed Cost Estimates

Fixed costs are associated with the program itself, not the land. They include staff time, insurance, marketing, and equipment. These are less challenging to estimate and do not fluctuate between location or over time the same way that variable costs do.

6.2.1 Basic Equipment Costs

Although providing basic equipment is not required, it could be incorporated into the foodlands access program on a cost-share basis in order to minimize the number of tools being purchased on each site, as well as accommodating the transfer of equipment between lessees over time. Basic equipment could include a walk-behind tractor, rototiller, harrow, bed shaper, and trailer. The use of the equipment would be documented by the farm caretaker, so that rental rates could be accurately applied to members who choose to use the tools⁷⁸. Smaller tools and

equipment would need to be purchased and owned individually by farmers.

The need for on-site storage should be anticipated, so that products can be kept refrigerated on site and equipment can be secured. Both of these types of storage can be shared by several foodlands access members. For instance, Haliburton Farms recently presented a financial request that included funds for cold storage, in an effort to become financially self-sufficient⁷⁹.

A partnership could also be established with a commercial kitchen or other enterprise in order to share resources. This cost-sharing can help to minimize complications associated with the transfer of infrastructure values between farmers leaving the program and new farmers entering the program.

Estimated equipment costs and potential equipment rental income are presented in Table 5.

Table 5. Estimated Fixed Equipment Costs and Potential Equipment Rental Income^{80,81}

Equipment	Estimated purchase cost (new or used)	Rental rate	Estimated rental days/year	Estimated annual rental income	Estimated annual repair costs/ depreciation
Small tractor & fuel tank	\$6,900	\$40/day	100	\$4,000	\$4,500
Disc plow	\$5,000	\$25/day	30	\$750	\$200
30" tiller	\$1,250	\$25/day	50	\$1,250	\$1,400
32" power harrow	\$3,350	\$30/day	50	\$1,500	\$1,900
Mower	\$1,000	\$25/day	50	\$1,250	\$250
Plastic mulch layer	\$1,500	\$25/day	40	\$1,000	\$500
Trailer to haul tractor	\$1,000	With tractor	-	-	\$250
Equipment storage (two 12'x12' sheds)	\$20,000	\$100/year per farmer	N/A	\$1,000	\$1000
Total	\$40,000			\$10,750	\$10,000

6.2.2 Operational Costs

Staff Salaries and Legal Fees

In Year 1, initial program establishment will require local government staff services (e.g. several days of staff time from the planning division, financial services, legislative and corporate services, First Nations outreach, engineering, assets and risk management,

environmental protection, facilities management, and watershed protection). This is estimated at \$50,000 for Year 1, to be reimbursed from the project budget. Additional expertise, such as legal counsel, will also be required in Year 1, in order to establish the land trust's legal paperwork. It is estimated that this may cost \$20,000. These fees for Year 1 therefore amount to a cost of \$70,000 (Table 6).

⁷⁸ It may be possible to partner with an existing organization, such as the Victoria Tool Library, for management of equipment rentals. Some equipment could be acquired by donation or purchased second-hand at a reduced price.

⁷⁹ Eva Riccius, Planner, District of Saanich, Personal Communication and [District of Saanich Council Minutes March 6, 2018](#)

⁸⁰ [Highland Agricultural Fuels and Supplies](#), accessed May 14, 2018

⁸¹ [Kootenay Local Agricultural Society](#), accessed May 14, 2018

In Year 2, one FTE Program Manager and one 0.5 FTE Farm Caretaker will be hired to take on the majority of the operational staffing capacity. Local government staffing will continue to be required to assist on a part time basis. It is estimated that staff costs to establish and maintain a trust would be approximately \$170,000⁸² starting in Year 2 and thereafter as follows (Table 6):

- 1 FTE Farm Program Manager: \$70,000
- 0.5 FTE Farm Caretaker: \$30,000
- Local government staff time: \$40,000
- NGO staff time: \$30,000

It is expected that the duties associated with the Program Manager will shift over time. For instance, as more land is brought into the foodlands access program, more lease agreements, land use and planning issues will arise. It is possible that the needs for local government and NGO staff time may decrease over time, however it is included in these estimates in order to provide a conservative analysis and to err on the side of caution. Based on other land access program models in Vermont and Quebec, this amount of staffing appears to be typical.

Marketing and Promotion

Marketing is key to establishing a successful program, particularly if land donations are being sought. This type of promotion would reflect positively on the local government, whether the program is managed entirely by the government or in partnerships with an NGO. However, it will be important not to promote individual farmers or products deriving from the program, as that may raise concerns regarding unfair advantage for farmers who are not members of the foodlands access program. Community events and partnerships should be included in the promotional materials, so that the focus is not entirely on food production, but rather on greater public benefits.

It is expected that a budget of \$5,000 to start and \$6,000 per year thereafter will be required for marketing and promotion. This would include a program website and other digital needs. Lower costs are anticipated for Year 1 when the program would be set up, but there wouldn't be any products to market.

Insurance

Lease holders should be required, as a condition of their lease, to hold liability and tenants' insurance through an approved provider, including general liability coverage. This would not be part of the program costs.

Commercial General Liability insurance, with coverage for third-party injury or damages, will also be required to cover the host organization's assets in the case of any injury or event that may bring about a claim. Such a policy may also provide coverage for loss of use of the property, impacting the farmer's ability to use the land. Property Insurance for Chattel must be in place to provide replacement of any infrastructure lost through a catastrophic event.

An estimate of \$4,000 per year is expected to cover insurance needs for the host organization.

Property Taxes

If land included in the foodlands access program becomes agriculturally productive and is able to be classified as farmland, this may reduce property taxes below what is currently payable. Land classified as farmland is also eligible for the provincial farmland tax credit, which reduces the school tax payable by 50%. For new land acquisitions, this can result in significant savings over non-farmland. As a result, property taxes are not expected to be a new cost and are therefore included in Table 6.

Table 6. Fixed Costs for the Foodlands Trust Establishment (Year 1) and Ongoing/Annual (Years 2 onward).

Equip- ment	Staff Salary & Legal Fees	Promo	Insurance	Total
Year 1: \$40,000	Year 1: \$70,000	Year 1: \$5,000	Year 1: \$4,000	Year 1: \$119,000
Years 2 onward: \$10,000	Years 2 onward: \$170,000	Years 2 onward: \$6,000	Years 2 onward: \$4,000	Years 2 onward: \$190,000

⁸² Signe Bagh, Senior Manager Regional and Strategic Planning, Capital Regional District. Personal communication.

6.3 Variable Revenue Estimates

In addition to lease income, funds will be required to cover the expected operational and administrative costs associated with establishing and running the program and equipment purchase. Program funding opportunities in this section include:

- Lease Rates
- Donations
- Grants
- Sponsorships
- Membership fees
- In-kind contributions

These revenues are considered variable, because they are expected to fluctuate from year to year. For the purposes of this report, estimates are calculated for potential revenues received in Year 1 (establishment), Year 2 (initial farm production), and thereafter. Each are described in more detail below.

Lease Rates

Based on average lease rates for farmland in the region with basic drainage, water hookups, and fencing provided, it is reasonable to suggest a range of \$100/acre/year to \$800/acre/year, depending on the quality of the soil and type of agricultural products being cultivated.

Instead of charging a lease rate by year, another option is to charge a lease rate based on a portion (e.g., 5–10%) of the expected gross farm income. Both options are detailed in Table 7 for different agricultural activities, see section 6.5 for a full discussion of the three scenarios.

Donations

Donations are most likely to be garnered for equipment or land. Any land donations would need to be accepted by a charitable organization, whereby the land trust approach is used. Attracting donations requires an ongoing marketing campaign and/or fundraising events. Donations are not always a reliable source of funding to meet operating expenses, as they may fluctuate with changes in the economy and shifts in public priorities. Therefore, for the purposes of this report, donations are considered a budgetary “bonus”, and no hard figures are presented in the expected revenues for donations.

Table 7. Estimated Returns Based on Lease Rates for Different Parcel Sizes (in acres) and Agricultural Activities

Examples of Parcel Size and Agricultural Activity	Lease Rates by Set Rate per Acre	Lease Rates by 4% of Gross Farm Income^{83,84}
5 acres of intensive vegetable production on good soil	\$800 × 5 acres = \$4,000/year	Gross Farm Income: \$100,000 * 4% = \$4,000/year
20 acres of hay production and/or grazing on marginal soil	\$100 × 20 acres = \$2,000/year	Gross Farm Income: \$50,000 * 4% = \$2,000/year
80 acres of mixed agricultural use on mixed soil (some good, some marginal)	\$250 × 80 acres = \$20,000 /year	Gross Farm Income: \$500,000 * 4% = \$20,000/year

Grants

It is expected that \$150,000 of grant funding can be successfully obtained to help establish the program in Year 1. However, it can be challenging to find grants that allow the funds to be used to cover staff time, operational costs, core administrative and other ongoing expenses. By involving an NGO, the program will be eligible for funds that are available to charitable and/or non-profit societies. It is expected that \$40,000 of grant funding could be obtained annually starting in Year 2.

A full list of potential granting agencies and funders is provided in the Appendix.

Sponsorships

Corporate sponsorships either for the entire foodlands access program or for specific partnership programming, or equipment, may be a viable funding opportunity. It is anticipated that a foodlands access

⁸³ Agriculture in Brief: CRD. 2016. [Census of Agriculture Summary Data](#).

⁸⁴ BC Farmers Market Association: [Vendor business case](#). Estimates from data tables provided.

program could garner \$100,000 at establishment and \$10,000 per year thereafter in sponsorships.

User Fees

Depending on the zoning of the land in question, a number of opportunities may present themselves for hosting events that could incur a user fee. These nominal fees would be charged for the use of the space and/or any equipment or infrastructure. It is anticipated that a foodlands access program could raise \$2,500 per year in user fees (Table 8).

In-Kind Contributions

This type of support could be provided by hosting a website, providing advertising, supplying meeting-room space, and other overhead and administrative needs. This support could be provided by the local government and/or community partners. It is anticipated that the program would be able to raise approximately \$25,000 per year through in-kind support (Table 8). In-kind support would not include staff time, which is accounted for under separately "Staff Salaries" as a fixed cost.

Summary of Variable Revenues

A summary of variable revenue estimates (except leases) is provided in Table 8.

Table 8. Variable Revenue Estimates for a Foodlands Trust.

Grants	Sponsorships	User Fees	In-Kind	Total Estimated Revenue
Year 1: \$150,000	Year 1: \$100,000	Year 1: N/A	Year 1: \$25,000	Year 1: \$275,000
Year 2 and beyond: \$40,000	Year 2 and beyond: \$10,000	Year 2 and beyond: \$2,500	Year 2 and beyond: \$10,000	Year 2 and beyond: \$62,500

6.4 Net Revenue or Deficit

It is immediately clear that a foodlands trust has the potential to bring in more revenue than is required during the first year of operation (Establishment Revenues = \$275,000 (Table 8) while Establishment Costs = \$119,000 (Table 6)). That is because granting agencies are more likely to provide funding to new, innovative programs, therefore grants and sponsorships are likely to be higher in Year 1 than in subsequent years.

The foodlands trust could use this potential surplus revenue from Year 1 to offset additional costs after

this initial establishment year (section 6.5 for more details). The program costs are likely to be higher than program revenues after Year 1. Therefore, by Year 2 or Year 3 (depending on the site and production model), there will be a net annual deficit.

In summary, costs and revenues include:

Costs:

- Site infrastructure upgrades
- Equipment costs
- Operational costs

Revenues:

- Lease income
- Donations
- Grants
- Sponsorships
- User fees
- In-kind support

To be clear, a foodlands trust program will likely never become revenue neutral, let alone a revenue generator. It will require sustained financial support over the long term. If a trust was a potentially financially viable endeavour, it is very likely that it would have been already initiated by a private sector enterprise. Committing financial support to a foodlands trust provides investment in the community, which is one of the clearest benefits of the program.

6.5 Foodland Access Program Net Costs: 3 Scenarios

In order to further illustrate how site selection impacts the overall budget of the foodlands access program, three scenarios are provided to show the estimated variable expenses, fixed expenses, and variable revenues associated with each of the following:

1. 5 acres of vegetable production in good soil
2. 20 acres of hay production in marginal soil
3. 80 acres of mixed production in good soil

Each of the scenarios are further explained below. As the scenarios indicate, once the program stabilizes in Year 3, the anticipated program costs (which are equivalent to the net deficit) range from approximately \$127,500 per year to \$143,500 per year. This depends primarily on the size of the parcel, the amount of basic infrastructure required, and the crops being grown (and therefore the lease rate income). It will be predicated on the assumption that, once established, the program will be able to raise

approximately \$60,000 per year through a combination of grants, donations, sponsorships, user fees, and in-kind support.

6.5.1 Scenario 1: Five acres of Vegetable Production

In this first scenario, the land included in the foodlands access program would be 5 acres of good quality soil in need of some minor infrastructure upgrades, including surface drainage (digging ditches and connecting them to culverts) and fencing repairs. This would incur approximately \$15,000 of variable (site) costs in Year 1, or \$3,000 per acre (Table 9). After this initial investment, infrastructure costs are expected to drop in Year 2 to \$7,500 (\$1,500 per acre) primarily for basic water hookups. In Year 3 and beyond there is \$4,000 per year (\$800/acre/year) allocated to infrastructure in order to maintain fencing, clear ditches, and take care of other maintenance needs.

Fixed (program) costs, as detailed in Table 6, would be \$119,000 in Year 1 and \$190,000 per year

thereafter. The variable revenues associated with the program would be \$275,000 in Year 1, and can be expected to drop to \$62,500 per year thereafter (Table 8).

The rental income associated with the lease would be added to this variable revenue. Lease income would be anticipated as \$4,000 per year as per Table 7, starting in Year 2 (there would be no lease income in Year 1 as the program would be just getting established). This is recommended as a set annual lease rate of \$800/acre/year (\$4,000 for 5 acres).

Therefore, total variable revenues would be expected to amount to \$66,500 in Year 2 and beyond. The net income in Year 1 would be \$141,000. This income can be rolled over to help cover costs in Year 2, therefore by the end of Year 2 there would be a net income of \$10,000. However, by the end of Year 3 a deficit occurs as the initial bump in variable revenues levels off at a net deficit of \$127,500/year for 5 acres of vegetable production.

Table 9. Summary of Revenues and Expenses for Scenario 1: Five acres of vegetable production in good soil.

Year	Variable (Site) Costs	Fixed (Program) Costs	Variable Revenues	Fixed Revenues	Net Income (Deficit)
1	\$15,000	\$119,000	\$275,000	\$0	\$141,000
2	\$7,500	\$190,000	\$66,500	\$0	\$10,000
3	\$4,000	\$190,000	\$66,500	\$0	(-\$117,500)
4	\$4,000	\$190,000	\$66,500	\$0	(-\$127,500)
5	\$4,000	\$190,000	\$66,500	\$0	(-\$127,500)

6.5.2 Scenario 2: Twenty acres of Hay Production

In this second scenario, the land included in the foodlands access program would be 20 acres of moderate quality soil in need of minimal infrastructure. This would include surface drainage (digging ditches and connecting them to culverts) and a water hook-up in Year 1. Due to the size of the parcel there would be some economies of scale and the infrastructure costs could be anticipated to be approximately \$2,000/acre or \$40,000 for the entire site. In Year 2, \$15,000 is allocated for additional water hookups and drainage maintenance. In Year 3 and beyond there is \$7,000 per year (\$350/acre/year) allocated to infrastructure in order

to clear ditches, and take care of other maintenance needs. Lease income for hay would be \$100 per acre per year, or \$2,000 total per year for 20 acres as per Table 7. Therefore, total variable revenues would be expected to amount to \$64,500 in Year 2 and beyond.

The net income in Year 1 would be \$116,000 (Table 10). This income can be rolled over to help cover costs in Year 2, therefore by the end of Year 2 there would be a net deficit of \$24,500. By the end of Year 3 the annual program deficit stabilizes at \$132,500 per year for 20 acres of hay production.

Table 10. Summary of Revenues and Expenses for Scenario 1: Twenty acres of hay production in moderate soil.

Year	Variable (Site) Costs	Fixed (Program) Costs	Variable Revenues	Fixed Revenues	Net Income (Deficit)
1	\$40,000	\$119,000	\$275,000	\$0	\$116,000
2	\$15,000	\$190,000	\$64,500	\$0	(-\$24,500)
3	\$7,000	\$190,000	\$64,500	\$0	(-\$132,500)
4	\$7,000	\$190,000	\$64,500	\$0	(-\$132,500)
5	\$7,000	\$190,000	\$64,500	\$0	(-\$132,500)

6.5.3 Scenario 3: Eighty acres of Mixed Production

In this third scenario, the land base is larger, and consists of more than one crop. For example, the production may be a mix of hay, vegetables, and berries. The lease income is higher but the initial infrastructure requirements are also more substantial. This would include surface drainage (digging ditches and connecting them to culverts) and water hook-ups, such that infrastructure costs would amount to a total of \$140,000 or \$1,750/acre in Year 1. The per acre infrastructure costs are at the low end due to economies of scale based on the large parcel size.

In Year 2, \$56,000 is allocated for additional water hookups and drainage maintenance. In Year 3 and beyond there is \$36,000 per year (\$450/acre/year) allocated to infrastructure in order to clear ditches, mend fences, add water hook-ups, and take care of other maintenance needs. Fixed (program) costs, as detailed in Table 6, would be \$119,000 in Year 1 and

\$190,000 per year thereafter, as per the other scenarios.

The rental income associated with the lease would be an average of \$250 per acre per year, or \$20,000 per year for 80 acres, starting in Year 2. Therefore, total variable revenues would be expected to amount to \$82,500 in Year 2 and beyond for 80 acres of mixed production.

The net income in Year 1 would be \$16,000. This is lower when compared to the other scenarios primarily due to the fact that the site is so large that the initial infrastructure investment may be high. This \$16,000 of net income can be rolled over to help cover costs in Year 2, therefore by the end of Year 2 there would be a net deficit of \$147,500. By the end of Year 3 the annual program deficit stabilizes at \$143,500 per year for 80 acres of mixed production.

Table 11. Summary of Revenues and Expenses for Scenario 1: Eighty acres of mixed production in good soil.

Year	Variable (Site) Costs	Fixed (Program) Costs	Variable Revenues	Fixed Revenues	Net Income (Deficit)
1	\$140,000	\$119,000	\$275,000	\$0	\$16,000
2	\$56,000	\$190,000	\$82,500	\$0	(-\$147,500)
3	\$36,000	\$190,000	\$82,500	\$0	(-\$143,500)
4	\$36,000	\$190,000	\$82,500	\$0	(-\$143,500)
5	\$36,000	\$190,000	\$82,500	\$0	(-\$143,500)

6.5.4 Summary of Scenarios

As the three scenarios indicate (Table 12), once the program stabilizes in Year 3, the anticipated program costs (which are equivalent to the net deficit) could range from approximately \$127,500 per year to \$143,500 per year, depending on the lease rate, which is dependent on size of the parcel and quality of the soil. Therefore, after Year 2, a secure source of long-term funding ranging from \$127,500 to \$143,500 per year will be required. This underscores the value and need for government involvement in program administration.

This is a critical component of ensuring that the foodlands access program would be viable over the long term, and speaks to the reasons why other

similar initiatives (e.g., TLC) have failed. This also underscores the value and the need for government involvement in administering the program.

Other potential farmland projects in the region, such as Sandown in North Saanich, are proposing to operate on a revenue neutral (or income generating) model. This is not the case for the foodlands trust. The scope of the trust is to address regional land access and production needs, while the goal of Sandown is to create and grow value-added agri-businesses. Furthermore, the Sandown model is built on the premise of receiving tax revenue from an adjacent commercial property, thereby creating a subsidy.

Table 12. Summary of Program Net Deficit Over 5 Years for Three Agricultural Scenarios

	Variable Costs	Fixed Costs	Variable Revenues	Fixed Revenues	Net Income or Deficit
Scenario 1 5 acres veggies					
Year 1	\$15,000	\$119,000	\$275,000	\$0	\$141,000
Year 2	\$7,500	\$190,000	\$66,500	\$0	\$10,000
Year 3	\$4,000	\$190,000	\$66,500	\$0	-\$117,500
Year 4	\$4,000	\$190,000	\$66,500	\$0	-\$127,500
Year 5	\$4,000	\$190,000	\$66,500	\$0	-\$127,500
Scenario 2 20 acres hay					
Year 1	\$40,000	\$119,000	\$275,000	\$0	\$116,000
Year 2	\$15,000	\$190,000	\$64,500	\$0	-\$24,500
Year 3	\$7,000	\$190,000	\$64,500	\$0	-\$132,500
Year 4	\$7,000	\$190,000	\$64,500	\$0	-\$132,500
Year 5	\$7,000	\$190,000	\$64,500	\$0	-\$132,500
Scenario 3 80 acres mixed					
Year 1	\$140,000	\$119,000	\$275,000	\$0	\$16,000
Year 2	\$56,000	\$190,000	\$82,500	\$0	-\$147,500
Year 3	\$36,000	\$190,000	\$82,500	\$0	-\$143,500
Year 4	\$36,000	\$190,000	\$82,500	\$0	-\$143,500
Year 5	\$36,000	\$190,000	\$82,500	\$0	-\$143,500

6.6 Summary of Program Budget Recommendations

To summarize, the following 7 recommendations regarding the program budget are suggested:

1. Basic equipment and storage should be purchased by the host organization and rented out to foodlands access farmers on a cost-recovery basis.
2. A more detailed parcel-based infrastructure cost analysis should be completed once specific parcel(s) have been identified.
3. Local case studies identify the costs incurred to maintain public lands “as-is” currently range from \$360 to \$3,400 per acre per year, depending on the site characteristics and the level of public access. These figures should be kept in mind when considering investment levels associated with the costs of running a farmland access program.
4. Resources should be spent on promoting the program itself, and the need for land donations if a trust model is used, rather than the products arising from the farms.
5. Lease rates must be aligned with those being currently paid by farmers in the region on private land. This will reduce real or perceived unfair competition between producers involved in the access program and those who farm outside the program.
6. Local government should partner with an NGO to apply for grant funding, particularly to help cover the costs associated with establishing the foodlands access program.
7. A secure source of long-term funding in the range of \$127,500 to \$143,500 per year will be required in order to cover annual deficits and provide program stability. The range is due to the unknown characteristics of the land quality and the type of agricultural production that will occur.

7.0 Financial Summary for a Foodlands Access Program

While the issue of agricultural land productivity, food security, and regional resiliency comes down to more than just dollars and cents (note the discussion on public amenity benefits in section 2 and the triple bottom line in section 6), it is important to consider the relative level of investment required by the host organization to operate a foodlands access program.

To be clear, a foodlands trust program will likely never become revenue neutral, let alone a revenue generator. Rather, it will require sustained financial support over the long term. If a trust was a potentially financially viable endeavour, it is very likely that it would have been already initiated by a private sector enterprise. However, committing financial support to a foodlands trust provides investment in the community, which is one of the clearest benefits of the program.

A net input of resources is already being invested by local government for regular mowing, fencing repairs, surface drainage, and other services, associated with public lands, which can cost thousands of dollars per year. By increasing this level of support incrementally, land use can be opened up to provide a much wider extent of community benefits.

7.1 Funding Through a Levy

The amount of funds required by local government to manage a foodlands access program is actually a small fraction of a local government’s annual budget. When viewed from the perspective of an investment in natural asset management, it can be seen as a very cost-effective initiative.

The application of a household levy or fee for service was calculated as a hypothetical tool to fund the foodlands trust. At a funding level of \$127,500 per year, this levy would be relatively low:

- \$0.70 per household per year for all areas of the CRD
- \$0.76 per household per year for all areas of the CRD except the Southern Gulf Islands and Salt Spring Island; or
- \$1.91 per household per year for the communities of North Saanich, Central Saanich, Sidney, and Saanich.

7.2 Accounting for the Status Quo

In order to provide a broader perspective on the costs of establishing and maintaining a foodlands access program, the natural asset value of the land (section 2) as well as the costs already incurred through the basic maintenance of public lands (section 6) is further explored.

As discussed in section 2, it is possible to estimate the per-acre value of the natural assets of foodlands

at approximately \$698 per ha or \$282 per acre⁸⁵. Furthermore, there are also costs associated with infrastructure (e.g., drainage, fencing), and maintenance (e.g., landscaping, mowing) of existing public greenspaces. It is estimated that these costs range from \$360 to \$3,400 per acre for municipalities within the CRD (see section 6.1 for details). Therefore, even a 'status quo' approach can be considered as a net requirement of annual investment in the range of approximately \$75 to \$3,100 per acre per year of public greenspace.

While these calculations and estimates require several assumptions and should therefore be used with caution, it is simply worth noting that in order to maintain the value of natural assets associated with public greenspace (including foodlands), a net input of resources is already being invested by local government.

7.3 Overall Economic Justification

Lending committed financial support to a foodlands access program can be viewed as providing an investment of taxpayer dollars into the following:

- Preservation of natural asset services.
- Job creation and spin-off enterprises.
- Stimulation of support sector businesses.
- Increased agri-tourism opportunities.
- Protection of undeveloped green space.
- Reduced need for ongoing maintenance (such as mowing, ditch maintenance, fence repairs).
- Improving partnerships with First Nation communities to collaborate on Indigenous food system projects.
- Providing on-site food system educational opportunities for schools.
- Allocating land for the production of fresh food for local food emergency services.
- Developing research projects in partnership with local colleges and universities.

While a long-term financial commitment is required to ensure the longevity of the program, this investment would be fairly modest, for such an impactful program, at approximately \$127,500 to \$143,500 per year. Revenue, in the form of annual lease rates, would offset some of the costs related to administration and management of the foodlands trust. Additional funds in the form of grants,

sponsorships, and event-based fees could be used to offset operational costs.

At a funding level of \$127,500 per year, a small household levy or free for service could be applied in the range of \$0.70 to \$1.91 per household (see section 7.1).

At this point in time, there have been several studies looking into the feasibility of foodlands trusts and other foodlands access mechanisms for local governments to implement. There have also been several surveys and public engagement initiatives that have all indicated strong support for a foodlands access program at the regional level. Further, the District of Saanich, District of Central Saanich, Town of Sidney, and District of North Saanich have all contributed letters of support for the establishment of a foodlands trust.

8.0 Program Impact and Timing

8.1 The Approach with the Greatest Impact

As shown throughout this report, and summarized in Table 13 (next page), the foodlands access tool with the greatest impact and that is within the jurisdiction of local government is the farmland trust model. Land trusts secure land in perpetuity for the purposes of increasing levels of agricultural production.

Shifting political priorities over time would not result in land held in a trust to be reallocated for another use. The protective nature of land trusts allows for donations of land and/or cash for land acquisitions or management. By partnering with an NGO to assist in administering the program, charitable donation receipts could be issued. The land-bank approach is less stable over time because the land could be reallocated for another purpose or sold, if desired in the future. Other tools that could be very impactful include making changes to farm tax income thresholds and placing restrictions on farmland ownership. These tools, however, fall outside the jurisdiction of local government. Additional initiatives, such as land connecting services and incubator farms, should be considered as important add-ons to a

⁸⁵ Wilson, S. J. [Natural Capital in BC's Lower Mainland: Valuing the Benefits from Nature](#). 2010. Natural Capital Research & Consulting for the David Suzuki Foundation.

foodlands trust, however these are not suitable replacements.

Table 13. Ranking of Foodlands Access Tools, Jurisdiction, and Overall Level of Impact

Foodlands Access Tool	Jurisdiction	Impact Rank (1 highest to 7 lowest)
Land trust	Local government Provincial government	1
Public land bank	Local government Provincial government	2
Farm tax policies	Provincial government	3
Land ownership policies	Provincial government	4
Land connecting services	NGOs Local government	5
Incubator farms	NGOs Local government	6
Farm lease regulations	Provincial government	7

8.2 Timing of Implementation

Since 2009, significant research and consultation work has created momentum resulting in several reports exploring the feasibility and best practices associated with a foodlands access program in the CRD. In the meantime, the cost of farmland has continued to rise dramatically and is now well out of the reach of those wishing to start growing food. By continuing to delay action, the costs associated with starting a foodlands access program will likely continue to rise as the cost of land continues to grow apace.

By capitalizing on the combined factors of existing NGO capacity and expertise, sustained public support for local government action, and the prolonged rise in the market value of farmland, now would be an ideal time for the CRD to implement a foodlands trust, to coordinate individual initiatives and start the access program before land becomes even more expensive.

It is recommended that a trust-based foodlands access program begin to be implemented within the next fiscal year. Monitoring the success of the program using measurable indicators will be key.

9.0 Conclusions

A foodlands access program, using a land trust model and led by local government, has the greatest potential to offer the biggest long-term impact to increasing the number of new farmers gaining access to land, and assisting those wishing to expand their operations onto new land.

Local government has the jurisdiction and the resources to lend long-term capacity and resources to manage and coordinate a foodlands access program. By partnering with local NGOs, efficiencies can be made in overall administration, and there is the potential for additional fundraising opportunities and the acquisition of land through donation.

A land trust with elements of land connecting services (matching potential growers with specific parcels of land through the PAC) and incubator farming (maintaining basic infrastructure and including basic equipment for rent for those who would like to use it) will allow for a diverse range of producers to succeed with their operations.

This report provides a set of recommendations for operational and financial management of a viable foodlands access program. The financial projections are based on a robust and conservative analysis. A set of measurable evaluation indicators suggested for the program are provided in the Appendix.

Key recommendations include:

- Establish the program as a land trust led by local government and supported by NGOs.
- Target existing public lands to be used for program, in order to minimize the need for land acquisition in the short term.
- Establish a program advisory committee to oversee the the program.
- Work with First Nations, academic institutes, and other community partners to ensure that the program effectively establishes partnership goals and supports projects and events that benefit the wider community.
- Hire a program manager and a farm caretaker.

- Acquire some basic farm equipment that could be rented out to farmer members on a cost-recovery basis.
- Explore the possibility of funding the program through a household levy or fee for service.

These recommendations align with the CRD's goals as set forth in the Regional Food and Agriculture

Strategy and the 2015-2018 Board Priorities. The establishment of a foodlands trust will advance progress on Regional Growth Strategy goals and make good on previous indications of commitment and support for establishing a foodlands access program. This report provides the rationale and implementation strategy needed to establish the trust as efficiently as possible while ensuring that it achieves the maximum benefits for all community members.



Appendix

See separate document.

Capital Regional District Regional Foodlands Access Program Feasibility Study and Business Case

SUPPORTING APPENDICES



Submitted by Upland Agricultural Consulting
To Capital Regional District
August 2018

Table of Contents

Acronyms..... i

Conversion Units i

Appendices iii

 A1: Examples of Foodland Access Tools..... iii

 A2: Stakeholders and Community Partnerships v

 A3: Land Acquisition Mechanisms and Land Tenure x

 A4: Existing Foodlands in the CRD..... xv

 A5 Foodlands Access Program Staff Needs..... xvi

 A6 Foodlands Access Infrastructure and Operations Cost Estimates xix

 A7: Foodlands Access Program Revenue Discussion and Calculations..... xxiv

 A8: Potential Funding Sources xxix

 A9 Indicators for Success xxx

Acronyms

ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
BC	British Columbia
BCA	BC Assessment
CAC	Community Amenity Contribution
COCS	Cost of Community Services
CRA	Canada Revenue Agency
CRD	Capital Regional District
CRFAIR	Capital Region Food and Agriculture Initiatives Roundtable
FTE	Full-time equivalent
GCL	Garden City Lands
KPU	Kwantlen Polytechnic University
NGO	Non-governmental organization
RFAS	Regional Food and Agriculture Strategy
TLC	The Land Conservancy
UBC	University of British Columbia

Conversion Units

1 acre = 0.40 hectares

1 hectare = 2.47 acres

*While both area units are used in this report, acres are used primarily within the discussion of lease rates.

Appendices

A1: Examples of Foodland Access Tools

Food and Farmland Trusts:

- Foodlands Cooperative of BC
- Farmland Trust Society (Greater Victoria)
- Bourgoyne (Salt Spring Island)
- Sooke Farmland Trust Society

Public Land Banks:

- The City of Zurich has used the green space management department to combine the responsibilities of land use planning, agriculture, and nature conservation. The department owns 500 ha (1200 acres) of farmland and leases to, or operates, a total of 10 farms¹.

Land-Connecting Services:

- L'ARTERRE, Québec (province wide program)²
- FarmLINK.net (national program)³
- FarmableNOW (local program in Surrey, BC)⁴
- Young Agrarians Umap and Land Matching Program, BC (province wide program)⁵

Incubator Farms:

- Kwantlen Polytechnic University (KPU) Incubator Program

The Incubator Program is an integral part of the KPU Farm School Program. While it is not mandatory for students to participate, it is highly recommended as students can apply all the knowledge and skills that they have learned in the associated farm school. Nearly all alumni who have since purchased farmland have completed 3 years of incubator farming. Upon completion of the school program, students are eligible to access up to 0.5 acre of land to start their own farm businesses in the incubator program. For a minimal fee, students can choose a plot on either of the farm school sites (Richmond and Tsawwassen). It is ideal for aspiring farmers to start their businesses, create their own network and their markets. Applicants must submit a business proposal that outlines their business goals and visions, market research, financial goals, production goals and marketing plan. Incubator plots are only available to graduates of either the Tsawwassen or Richmond Farm School programs. Incubator farmers get access to:

- 1/4 to 1/2 acre of arable land for up to 3 years
- Communal tool share
- Communal infrastructure
- Technical and mentorship support from teachers, farm staff, and other incubator farmers

¹ Source: Schmid, O., & Jahrl, I., 2014. WP2 final case study report: City region of Zurich (Switzerland). Frick, Switzerland: FiBL Switzerland and SUPURBFOOD Project.

² Arterre: Faciliter l'accès au monde agricole: <https://www.arterre.ca/>

³ FarmLINK: <https://farmlink.net/about/>

⁴ FarmableNOW: <http://farmablenow.ca/>

⁵ Young Agrarians Farmland and Land Access Tools: <http://youngagrarians.org/tools/land/>

- City water

Farm Tax Policies:

- Italy: As of 2017, Italy abolished all income tax for professional farmers. Designation of professional farmer requires that one spends at least 50% of work time and gets at least 50% of income from agricultural activity, and has farming expertise.
- Michigan, USA: Farmers receive a tax rebate if they can demonstrate that over half of their land has been farmed for the last 10 years.

Restrictions on Farmland Ownership:

- Prince Edward Island (PEI): Non-residents of PEI cannot own more than 5 acres of farmland and the province collects and reports on farmland ownership data. PEI's land identification program dates back to 1988 and requires non-residents and corporations to register with the province when acquiring aggregate farmland holdings⁶. Applications are also publicly accessible online. Collected data includes the purchaser's name, state/province, country (of residence) and intended land use.

Lease Agreement Restrictions:

- Belgium and France⁷: The minimum farmland lease terms in Belgium and France are 9 years, but longer terms up to 99 years exist. Tenants have the rights to purchase their rented land in case of land sale. Land rental prices may be controlled using a formula that is linked to farm income from the parcel, or linked to a state-set land price index.

⁶ Prince Edward Island Regulatory and Appeals Commission, 2017. LPA applications databank. <http://www.irac.pe.ca/land/data/>

⁷ EEIG Agrosynergie, 2013. Evaluation of the structural effects of direct support; Chapter 4 Review of national legal and institutional frameworks. https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/structuraleffects-direct-support-2013_en

A2: Stakeholders and Community Partnerships

The following stakeholders were contacted for their input into this report:

- ALM Farms
- BC Farm and Ranch Realty
- Close to Home Organics in Langley
- CR-FAIR
- District of Saanich
- Engineering Department, Central Saanich
- Engineering Department, Saanich
- Farm Credit Canada
- FarmFolk/CityFolk
- Fieldstone Garlic Farms
- Foodlands Cooperative of BC
- Gobind Farms
- KPU's Richmond Farm School
- KPU's Tsawwassen Farm School
- Lohbrunner Farm
- Metro Vancouver Planning
- Metro Vancouver Parks
- Peninsula and Area Agricultural Commission
- Sooke Farmland Trust
- Tsartlip FN
- UBC Farm
- University of the Fraser Valley
- Young Agrarians

Potential Indigenous Partnerships

Organizations and working groups associated with Indigenous food systems and food security within the region include (but are not limited to):

- WSÁNEĆ School Board (ŁÁU, WELNEW Tribal School)
- Tsartlip Health Centre
- SeaChange Marine Conservation Society (the society also works on land-based programming)
- PEPÁKEN HÁUTW ("Blossoming Place", a native plant and nursery garden)
- Saanich Native Plants Nursery and Consulting
- Indigenous Food Systems Network (Working Group on Indigenous Food Sovereignty)
- T'Sou-ke Nation Ladybug Garden & Greenhouse
- Salish Wolf Healing Centre
- Project Reclaim
- Community Tool Shed at Songhees First Nation
- Pacheedaht Nation's Seafoam Seafoods Co.

Examples of Foodland Access and Community Partnerships

Example: Loutet Park Urban Farm, North Vancouver

This urban farm is located within a municipal park in North Vancouver. The land use licence is arranged between the City of North Vancouver and the North Shore Neighbourhood House, which is a non-profit society. The Neighbourhood House uses a portion of the lands to grow produce as a fundraising enterprise. All the profits from the produce sold is returned and reinvested into Neighbourhood House programming. Their activities fall under the name of the “Edible Garden Project”, which is one program of the North Shore Neighbourhood House. Most of the farming staff are paid through grants. The Neighbourhood House also manages an education program on at Loutet Park. There is an education coordinator and part-time staff that are dedicated to touring school children and day cares and holding public workshops on the farm.

Example: Fresh Roots, Metro Vancouver

Fresh Roots is a non-profit organization working with educational communities towards cultivating engaging gardens and programs that catalyze healthy eating, ecological stewardship, and community celebration⁸. Fresh Roots is the first organization to help establish schoolyard market gardens in Canada. In addition, the organization fosters leadership and employment training through food literacy professional development for BC’s educators, manages a summer day camp for youth, and runs a 7 week summer leadership and empowerment program called SOYL. The program teaches high school students how to cultivate and manage ½ acre farms and develop skills in growing, cooking, and selling food. Fresh Roots is also working in partnership with the Delta School district, on a program called Farm Roots. This is an innovative, one of a kind school that directly links students to the multifaceted agricultural industry. While earning dual credits towards high school graduation and graduation from Kwantlen Polytechnic University, students design, plan and build a learning farm on 8 acres.

Example: Sole Food Street Farms, Vancouver

Sole Street Farms is wholly owned by the Cultivate Canada Society, a registered charity established to demonstrate and interpret connections between farming, land stewardship, and community well being; to model the economic and social possibilities for small and medium scale urban and rural agricultural and forestry projects, to address disparities in access to healthy food and the knowledge to produce it, and to nurture the human spirit through public programs, classes, and events. During the past seven years, Sole Food Street Farms, based in Vancouver, is North America’s largest urban farm project. Since 2011 it has worked with the City of Vancouver to identify vacant or underutilized lands and has transformed them into street farms. The initiative provides jobs, agricultural training, and has empowered dozens of residents of Vancouver’s downtown eastside with meaningful employment. The farms produce twenty-five tons of food annually, supplying Vancouver’s top restaurants and farmers’ markets⁹.

Example: Richmond Sharing Farm, Richmond

In 1996, voters approved the City of Richmond to borrow \$28.5 million to purchase 63-acres of privately owned land, made up of small farms. The City began to acquire properties including Terra Nova Rural

⁸ Fresh Roots Non-Profit Organization. <http://freshroots.ca/>

⁹ Sole Food Street Farms. <http://solefoodfarms.com/>

Park which is a unique, picturesque 63- acre site located in the northwest corner of Richmond. Many partners are involved in the delivery of programs at Terra Nova with all non-profit groups having operating agreements with the City. Almost all of the organized activities in the park are through community partners. These community groups create an environment that recognizes the value of farming and fresh food, healthy eating habits, urban wildlife appreciation and social responsibility. One partner of several years, The Sharing Farm, manages a 3-acre farm in the park. This group offers educational programs, fruit and vegetable markets, seed exchanges, community dinners and food festivals on-site. In addition, this group harvests approximately 10,000 pounds of fruit and vegetables annually for donation to the local food bank and community meal programs helping members of the community who are food insecure.

Example: Newman Farm – The Farmlands Trust Society (Greater Victoria)

This society manages land for food production (mostly charitable) on Central Saanich public lands. They have a MOU with Tsawout First Nation that “recognizes the mutual respect and interest of bringing together both First Nations and Western approaches to food security on the Saanich Peninsula¹⁰”. In the past, events have been held together with the Society and the Nation. A First Nations Outreach Committee develops and implements initiatives that integrate First Nations’ interests and knowledge in the management of agricultural corridor lands and promotes awareness and interest in Greater Victoria food security and works to encourage understanding of the FLT activities and encourage participation and support.

Example: UBC Farm – Indigenous Health Research and Education Garden¹¹

Part of the UBC Farm is dedicated to Indigenous food growing and learning. With an emphasis on teaching, community engagement, and research, the garden aims to serve the educational and research needs related to Indigenous knowledge and its intersections with other ways of knowing and praxis. Garden Programming and initiatives are particularly focused on food security, traditional plant knowledge, and land-based pedagogies while increasing participants’ knowledge and access to both traditional and non-traditional plants uses. The garden is guided by the principle that ‘food is medicine’ and follows the research ethic framework of the “4R’s: respect, relevance, reciprocity, and responsibility” and a holistic understanding of health and healing. In addition to its international, community-based research, the garden engages with numerous regional Aboriginal schools, communities, and organizations.

Example: Kwantlen Polytechnic University – Tsawwassen First Nation Farm School

The Tsawwassen Farm School is a collaboration between the Tsawwassen First Nation and the Institute for Sustainable Food Systems at Kwantlen Polytechnic University. The school fuses sustainable agriculture and traditional indigenous food systems as tools to build community and create dialogue around land stewardship for the future. The school program is open to all with curiosity to learn how to feed a growing population while restoring the land. The program takes place at a 20-acre certified organic working farm on traditional Tsawwassen First Nation lands. The farm boasts a traditional medicine garden, a mixed fruit orchard, a market garden, livestock including chickens, pigs and ducks, and incubator plots on which program graduates can launch their farm businesses. The farm is a gathering place to learn about human-scaled alternative food production systems¹².

¹⁰ The Farmlands Trust (Greater Victoria): Partners. <http://farmlandstrust.org/our-partners-1/>

¹¹ UBC: xwícíesem: Indigenous Health Research and Education Garden at UBC Farm: <http://ifs-iherg.sites.olt.ubc.ca/>

¹² Tsawwassen First Nation Farm School: <http://www.kpu.ca/tfnfarm>

Table A1. Potential partnering organizations for a foodlands access program.

Organization	Location	Contact	Website
BC Association of Farmers Markets (BCAFM)	Vancouver	info@bcfarmersmarket.org	http://www.bcfarmersmarket.org
Camosun College (Horticulture Technician Program)	Victoria	horticulture_program@camosun.ca	http://camosun.ca/learn/programs/horticulture-technician/
CR-FAIR	Victoria	info@crfair.ca	http://www.crfair.ca/contact-us/
FarmFolk/CityFolk – Farm Projects	Vancouver and Aldergrove	Heather Pritchard sustain@farmfolkcityfolk.ca	http://www.farmfolkcityfolk.ca
FarmLINK.net	Canada	info@farmlink.net	https://farmlink.net
Foodlands Cooperative of BC	Aldergrove	foodlandscoperative@gmail.com	http://www.foodlands.org/contact-us/
LifeCycles	Victoria	Matthew Kemshaw diggers@lifecyclesproject.ca	http://lifecyclesproject.ca
Peninsula & Area Agricultural Commission	Saanich	Isobel Hoffmann	http://www.saanich.ca/EN/main/local-government/committees-boards/peninsula-area-agricultural-commission.html
Royal Roads University – Green Learning Horticulture Programs	Victoria		https://secure.royalroads.ca/cscourses/horticulture-online
Sooke Farmland Trust	Sooke	Mary Alice Johnson sookeregionfarmlandtrust@gmail.com	https://sookefarmlandtrust.weebly.com
The Farmlands Trust (Greater Victoria) Society	Saanichton	farmlandtrust@gmail.com	http://farmlandtrust.org
University of Victoria (Course: Urban Restoration and Sustainable Agricultural Systems)	Victoria	Dr. Val Shaefer	https://continuingstudies.uvic.ca/science-and-ecological-restoration/courses/urban-restoration-and-sustainable-agricultural-systems
Victoria Urban Farming Society	Victoria	hello@urbanfarmers.ca	http://www.urbanfarmers.ca

A3: Land Acquisition Mechanisms and Land Tenure

Various options exist for land acquisition within the public sector, including using land already owned, obtaining amenity contributions from developers, donations of land, and outright purchase of land. Each has advantages and drawbacks, and are described below.

The methods by which farmland trusts and public land banks acquire land vary. Some farmers who are retiring and want their land to continue to be farmed may choose to donate or bequest their land, for example. In other cases funds can be raised to purchase farmland through campaigns (e.g. Madrona Farm), private donations, or from foundations. Governments may also fund the acquisition of lands via tax levies, development/amenity fees, or out of general revenue, with any such funds potentially being placed in a dedicated Foodlands Conservation Fund or Agriculture Legacy Fund. As well, land acquisitions can be supported by issuing shares in the land bank, or via the lease and sale revenues generated by the foodlands access program.

Table A2. Program Approaches Roles of Local Government and Partners.

Program Approach	Acquisition Options
Local Government Program (Land Trust)	-Start with existing public lands -Land donations -Community amenity contributions -Purchased lands
Local Government Program (Land Bank)	-Start with existing public lands -Community amenity contributions -Purchased lands
NGO-led Program (Land Trust)	-Private or public lands -Land donations -Purchased lands
NGO-led Program (Land Bank)	-Private or public lands -Purchased lands

Land Already Owned/Operated by Local Government

The lowest cost means of land acquisition is to identify and use land that is already owned by local government. This land may be sitting idle or currently used for another purpose. The cost of ownership is already being borne by the local government, including payment of property taxes, property insurance and some degree of maintenance on the property. Depending on the current use, available infrastructure and current maintenance costs, it may be possible to switch to agricultural use for little or no cost.

Three parcels of land have already been identified within the CRD for possible agricultural use:

- Maber Flats in Central Saanich, ~10 acres
- Panama Flats, Saanich, 56 acres
- Sandown, North Saanich, 95 acres

These parcels total approximately 160 acres. An assessment will need to be conducted to determine the suitability of these and any future identified parcels for food production and identify infrastructure requirements in order to prepare the sites for agricultural use.

Community Amenity Contributions

Community Amenity Contributions (CAC) are a low cost means of land acquisition. They are donations made by developers as part of development and rezoning proposals, in order to mitigate some of the impact of new developments or offset any real or perceived negative impacts of the development. Often the amenity contributions may be made in exchange for allowing a rezoning or other concessions in exchange for the land contribution. As such, they are not completely without cost, but there is little, if any, cash outlay required and the benefit to the community may be substantial. The municipality will be responsible for future costs, such as maintenance, property tax and insurance.

Community Amenity Contributions (CACs) are agreed to by a developer and local government as part of a rezoning process initiated by the developer.¹³ CACs are usually obtained through voluntarily negotiated contributions at the time of rezoning. CACs can include a diversity of amenities such as affordable housing, child care, infrastructure, recreation facilities and importantly can include amenities that Development Cost Charges (DCCs) cannot be applied towards. The extension of DCCs to farmland acquisition would require legislative change whereas CACs can currently include farmland. Local governments have the authority to negotiate CCs with developers but are not legislative requirements and cannot be imposed by government. Recently, the donation of Sandown Farm in North Saanich was included as part of a CAC, therefore precedence already exists within the region for this type of farmland acquisition.

Donations and Gifts

In Canada, the main method of donating land to local governments is through an “eco-gift”, which is a donation of land or an interest in land (e.g. a conservation covenant) that has been certified as “ecologically sensitive” according to specific national and provincial criteria. The Income Tax Act provides favourable income tax treatment for gifts of ecologically sensitive land and interests in ecologically sensitive land. Land trusts with charitable status may issue tax receipts for donations. This helps attract donations and expands your funding opportunities. The Canada Revenue Agency is responsible for granting charitable tax status to organizations, and the process may take six months to two years. This may be a good reason for a local government to partner with a NGO when developing a land trust model. The NGO (e.g. Farmlands Trust (Greater Victoria) Society) can then issue the tax receipt for the land donation while the trust itself is managed by the local government.

Donations and gifts may be made in order to preserve land for public use and to protect land from development for perpetuity. This may occur in two forms – outright donation of ownership of the land,

¹³ Ministry of Community Sport and Cultural Development. 2004. [Community Contributions Balancing Community Planning, Public Benefits and Housing Affordability](#).

or through setting up a conservation covenant, allowing the landowner to retain ownership of the land, while ensuring conservation values are protected, even if land is sold in the future. A conservation covenant can be registered against title to the land and be made binding on future property owners.¹⁴ A conservation covenant may only be modified in the future if all parties are in agreement, so may not offer the same degree of protection as outright donation of land to a land trust.

Regardless of whether donated outright or through a conservation covenant, generally, donations and gifts are not made without protective covenants in some form associated with them, so there will be acquisition costs of setting up protective covenants, likely survey and appraisal costs, and property transfer tax, in addition to ongoing costs of maintenance, property tax and insurance. Care should be taken to ensure there is no environmental contamination of donated land, which could incur substantial remediation costs. When considering accepting donations or gifts of land, it is essential that the local government consider the costs of acquisition and upkeep, as well as ensuring the land is suitable for the covenanted use and that the property meets identified goals within the region. Donors sometimes pay associated costs, including providing a stewardship endowment¹⁵ to be held in trust in a restricted account to ensure future upkeep of the land.

Fee-simple Purchase

The most expensive option of land acquisition, fee-simple purchase, allows the host organization to identify and choose properties to meet specific goals and objectives identified as desirable. Land may be purchased at market value (which range from \$11,900 - \$100,000/acre on Vancouver Island, per 2017 FCC Farmland Values Report)¹⁶. In addition to the purchase price, there are also legal fees, property transfer tax and possibly survey costs and environmental assessments associated with purchase of land. Although highest cost, this does allow the most control over what land is acquired, and ensures best suitability for the chosen purpose.

If a local government were to purchase private lands using a fee-simple approach, it would effectively bring privately-held land into public ownership and management. The downside is that fair market value would have to be paid for the land. Due in part to speculation, the market value of agricultural land in Southern Vancouver Island is much higher than its agricultural value. However, as previously discussed, the actual public amenity value of farmland is much higher than market value, therefore the acquisition of private farmland for public benefits remains a worthwhile investment of public funds.

Land Tenure and Farmland

The word “tenure” derives from the Latin word *tenir*, meaning to hold. With the RFAS recommendation to increase access to agricultural and foodlands, a key challenge lies in addressing the need to have land “held” with long term security to encourage both a diversity of food production activities and an investment into farm infrastructure. Secure tenure of agricultural land enables farmers to invest in this capital to improve land productivity and build an economically viable business. Due to the cost of

¹⁴ Natural Legacies: Your Educational Guide to Conservation in BC. 2017. Land Trust Alliance British Columbia <https://ltabc.ca/wp-content/uploads/2017/UP/Natural%20Legacies-%20Conservation%20Covenants%20in%20BC%20-%20Information%20for%20Landowners.pdf>

¹⁵ Edmonton & Area Land Trust. 2006. Land Trust Business Plan 2006-2010. https://www.edmonton.ca/city_government/documents/PDF/Business_Plan.pdf

¹⁶ 2017 FCC Farmland Values Report. 2018. Farm Credit Canada <https://www.fcc-fac.ca/fcc/about-fcc/reports/2017-farmland-values-report-e.pdf>

farmland, outright fee-simple ownership is out of reach for many farmers who are looking to either start producing or expand upon an existing operation. Without secure land tenure, farmers have more difficulty obtaining bank loans and cannot invest in facilities to increase yields and market options. In return, farm tax status provides the main financial benefit, where landowners will receive a property tax exemption.

Leases and Licences

Aside from fee-simple purchase, the most common forms of foodlands tenure are leases and licences. A lease transfers possession of a property or a portion of a property from a landowner to a tenant. A landowner's rights to actual possession of the land are suspended during a lease. Leasing is more affordable than fee-simple purchases, and it is therefore a strategy used by producers to gain land access and overcome the affordability gap of land ownership. The main downside to leasing is that secure long-term leases are hard to find and therefore there is minimal incentive to invest in infrastructure upgrades to the land (e.g., irrigation, drainage, fencing) is often lacking.

While leases tend to be more commonly used, licences have also been used by other local governments, such as Metro Vancouver in their regional parks, to make public land available to farmers¹⁷. Licences differ from leases in that they cannot be registered on title. They are considered contracts and fall under contract law if they meet certain criteria.

3.2 Land Lease Rates
Annual rental rates for agricultural leases on the southern part of Vancouver Island and in the Lower Mainland tend to range from \$100/acre/year to \$500/acre/year or more (approximately \$250/hectare/year to \$1,250/hectare/year) and may be calculated based on¹⁸:

- A per acre (or hectare) lease rate based on the BC Assessment agricultural value of the parcel.
- The agricultural capability of the land, including specific soil and water characteristics.
- The type of crop being grown (pasture lands and hay have a lower associated lease rate than vegetables and berries/fruit).
- A proportion of total sales or a set amount per bracket of total sales.
- The total size of the property (as the number of acres/hectares goes up the cost per acre/hectare tends to go down).
- The level of infrastructure upgrades (e.g., cold storage, greenhouses, drainage, irrigation) that have been made to the property.

A more detailed description of lease rates is provided in section 7 and in the Appendix.

Long Term Tenure and Agricultural Land Use

Land tenure is also related to land use. Livestock farmers and ranchers tend to prefer to own the land that their animals reside on, while leasing out additional pasture and rangelands for grazing needs. Unless leased lands include a residential dwelling, it can be challenging for producers to raise livestock. Animals, including poultry, require round-the-clock surveillance, or at least the ability to quickly respond to issues as they arise. A foodlands access program may need to consider that certain types of agricultural production could be limited, depending on the terms associated with the lease arrangements and the level of infrastructure provided. This is further discussed in section 7.

¹⁷ In some of Metro Vancouver's regional parks where there is ALR, portions of the park have been licenced to farm operators over the long term. Farm activities included hay and corn rotations, raspberries, and nursery crops. Examples of these parks include Matsqui Regional Park, Aldergrove Regional Park. D. Sheffield, personal communication.

¹⁸ D. Smith, Young Agrarians, & C. Bodnar, Glen Valley Farm Co-op, personal communication.

Agricultural activities taking place within a CRD foodlands access program would likely mirror existing regional farm practices. Within the CRD, the majority of farms do not include large numbers of animal livestock, although nearly half do have small poultry operations. The 2016 Agricultural Census indicates the following livestock and poultry data for CRD farms¹⁹:

- 46% include chickens in their operations (average of approximately 300 birds on those farms, which is considered small scale).
- 27% included sheep and/or goats.
- Less than 10% have cows (and only 1% are dairy cows) with an average of 35 cattle (which is considered small scale).
- Less than 5% have pigs.

¹⁹ Statistics Canada. 2016. [Census of Agriculture. Agriculture in Brief: Capital Regional District](#):

A4: Existing Foodlands in the CRD

Newman Farm (Central Saanich): Newman Farm is a multi-generational farm that was run by the Newman family from 1897 to 2011. The land was donated by the family to the Municipality of Central Saanich for public parkland use in 2011. A lease agreement exists between the District of Central Saanich and the Farmlands Trust (Greater Victoria) Society, which is responsible for the management of all activities on public land.

Haliburton Farm (Saanich): Haliburton Farm was purchased by the District of Saanich from the CRD in response to community request for the municipality to preserve the agricultural uses of the land. The land is leased to the Haliburton Community Organic Farm Society and managed by a volunteer board of directors, which in turn coordinates rental agreements to farmers on the land. Haliburton consists of multiple independent farm businesses sharing the land. Farmers rent sections of land for 4 years with an option to renew. Haliburton Farm provides an example of an existing lease template between a municipality and a non-profit society and has an established farmer application process and rental agreements that can be used as templates in future initiatives¹.

Madrona Farm (Saanich): Farmers leasing land at Madrona Farm in Saanich's Blenkinsop Valley were concerned that the land would be sold and developed after the landowner passed away. A community fundraising campaign was launched and The Land Conservancy (TLC) successfully purchased the property and placed it into a trust. Madrona Farm is managed in partnership with the Farmlands Trust (Greater Victoria) Society and is leased to the Chambers family, who operate an organic farm on the land. Since the TLC discontinued its farmlands trust program in 2012 there has been a lack of organizational capacity to hold and manage farmland in the region.

Burgoyne Farm (Salt Spring Island): The Salt Spring Island Farmland Trust Society was formed in 2009 to promote agriculture on the island. As a charitable organization, it acquires, manages, and leases land for farming. The Burgoyne Valley Community Farm is a 60 acre parcel within the ALR that has been farmed for over 100 years. The property was transferred from a developer to the society as a community amenity contribution as part of a rezoning application for a property in Fulford Harbour. Leases are available to farmers on up to 10 acres of land.

Welland Community Orchard (View Royal): This orchard was donated to the Town of View Royal after the landowner passed away. Welland Orchard is managed by a non-profit society, LifeCycles, who leases the land from the Town of View Royal. The site is used for a variety of community benefits, including education, community gardens, and food production.

Lohbrunner Farm: Joseph and Norma Lohbrunner bequeathed their land to TLC using a legal agreement called a life estate. After Joseph passed away, Norma was able to continue to live on the land. TLC held title to the property, known as Lohbrunner Farm, and assumed responsibility for land taxes, maintenance of the exterior of the house, and management of the land. In 2012 TLC The Land Conservancy officially folded as an organization. The land was transferred to FarmFolk/CityFolk, who manages a long term lease for farmers to produce food on the land, which will be held in perpetuity for agriculture and bird habitat protection.

There are additional parcels of land publicly held and within the CRD. These include:

Maber Flats, Central Saanich (9-10 acres): Maber Flats is an agricultural area that floods seasonally and is an important over-wintering and foraging area for waterfowl. Agricultural uses are found alongside second growth forest. Central Saanich is taking steps to address flooding on this property.

Panama Flats, Saanich (56 acres): This privately-owned farmland was purchased by the District of Saanich. It is now publicly owned land with potential for food production, partly within the ALR and partly outside of the ALR. The land is also a floodplain and any agricultural development will need to carefully consider drainage infrastructure.

Sandown, North Saanich (95 acres): Sandown was acquired by the District of North Saanich from a developer as a community amenity contribution, in exchanges for a rezoning application approval.

A5 Foodlands Access Program Staff Needs

Staffing

Based on staffing at successful foodlands access programs (La Plate-forme agricole de L'Ange-Gardien in Quebec²⁰; Sharing Farm Society²¹ in Richmond, BC; and Intervale Center in Vermont²²), a full-time program manager and a part-time farm caretaker would be recommended to start with, whether the program is hosted by a local government or an NGO. This level of staffing would likely suffice for up to approximately 32 hectares (80 acres) of land in total. This land may be comprised of several parcels in the range of 4 to 8 hectares (10–20 acres; e.g., Maber Flats) or as a single large parcel (e.g., Sandown). The program manager would be in charge of the program itself, while the part-time farm caretaker would be in charge of the use of land and the maintenance of infrastructure. These are further described below.

- Role of Program Manager

The program manager would be a full-time position, with responsibilities including: managing (and raising) funding, providing outreach to partner organizations, communicating with other partner groups, developing annual reports, managing the program advisory committee, developing public outreach events, and assisting with the selection of farmers. The program manager may also be responsible for attending conferences, workshops, or other professional events to promote the incubator foodlands access program and learn from other leaders.

- Role of Farm Caretaker

The farm caretaker would be a part-time position, and responsibilities will depend somewhat on the skill set of the person who is hired. Ideally, the farm caretaker would have a strong background in agriculture and would be interested in farming. Main responsibilities would involve oversight of day-to-day operations, such as plowing and water scheduling, assisting in troubleshooting problems with infrastructure (irrigation, fencing), coordinating tool and equipment sharing, providing tours and participating in public outreach events. The farm caretaker would visit the sites on a rotating basis and the overall part-time work would likely be

²⁰ Plate-forme agricole de L'Ange-Gardien, Quebec. <http://www.demarretafermebio.com/?lang=en>

²¹ The Sharing Farm Society, Richmond, BC. <http://www.sharingfarm.ca>

²² Intervale Center, Vermont. <http://www.vtfarmtoplate.com/organization/intervale-center#.W1Tkmi3My8o>

full time (4 to 5 days a week) during summer months and part time (1 to 2 days a week) during winter months.

Dispute Resolutions

An effective land use protocol and lease agreement used for the foodlands access program should help to minimize disputes. For example, the Foodlands Cooperative of BC works to include language around dispute resolution in their lease agreements²³. A mediation process is described within the agreement, though conflict mitigation is a priority so that disputes do not escalate. Cooperative models, or those that use consensus-based decision-making, usually generate the least conflict.

If a dispute needs to be resolved, it can be brought to the Program Advisory Committee that oversees the foodlands access program.

Farmer Selection Criteria

Farmer selection will need to be based upon a clear and transparent process. The foodlands access program advisory committee will need to articulate what information they require candidates to submit. It is recommended that the farmer selection criteria be established based on input from the program advisory committee. A key consideration will be regarding the proposed agricultural land use and how it best suits the specific land parcel that is available. For instance, haying may be more appropriate to large parcels with moderate soil capability, while intensive vegetable or berry production may be more suited to smaller parcels with good soil capability.

Once the selection criteria have been established, it is recommended that the application process include the following steps:

- 1) Call for applications.
- 2) Opportunity for prospective farmers to visit the property and ask questions.
- 3) Business plan presentation to the program advisory committee.
- 4) Interviews by the program advisory committee.
- 5) Follow-up meetings with top prospects.
- 6) Land tenure contract negotiation.

The application process may include a request for the following information:

- Detailed description of agricultural experience and/or education.
- Knowledge of sustainability practices and description of how they fit with proposed business.
- Description of alignment with indigenous food system restoration goals;
- Experience working in a cooperative/collaborative environment.
- Business plan and value proposition, alignment with the parcel's agricultural capability.
- Availability for onsite non-farming activities, such as community-based programming.
- References.

Due to the unique nature of the foodlands access program, potential members should demonstrate an interest and willingness to engage in practices that adhere to Indigenous food system restoration goals. Farmers will also be encouraged to engage with members of the public.

²³ Heather Pritchard, Foodlands Cooperative of BC, personal communication.

A6 Foodlands Access Infrastructure and Operations Cost Estimates

Fencing

Due to the prevalence of deer and other wildlife, fencing will likely be required to protect crops (including grains, vegetables, and berries), as well as poultry. If livestock is present then fencing will be required both to keep the animals secure on site and to deter predators. It is recommended that deer fencing (8 feet high) be installed around the perimeter of all vegetable crops. It is further recommended that electric fencing be installed around berry crops, fruit trees, honeybees, and laying hens (if applicable). This will be a fairly large investment in infrastructure that benefits the farmer, and should be reflected within the associated lease rates. For an average acre of farmland, the cost of fencing is expected to be approximately \$2,400 (Table 4).

Irrigation

Irrigation water sources may include municipal water, well water, or surface water depending on the individual land parcel in question. There may also be a need to investigate possible alternative irrigation sources, such as rainwater collection. Whenever possible, irrigation hookups should be provided by the local government, however, each farmer shall be responsible for basic equipment, such as drip tape, sprinklers, and hoses. It is recommended that lease agreements include commitments to using high-efficiency irrigation equipment and water metering, if possible. Washing station(s) hooked up to a municipal water source for safe washing of produce would be a great asset, especially if there will be a retail component on site. Irrigation costs vary widely. In order to provide a range of estimates, one of the most expensive options is included in Table 4 (two well heads drilled 100 feet deep each), which would come to about \$20,000, along with one of the most affordable options, municipal water at a farm rate. If municipal water is used for irrigation, there is a cost rebate from the CRD associated with the water, so long as the parcel has Farm Tax Classification Status as conferred by BC Assessment. For example, Haliburton Farms spends less than \$300 per year on water after the farm rebate²⁴. If the foodlands access program is initiated, it would be worthwhile to explore how this rebate could be regarded as an in-kind investment into the foodlands access program by the CRD.

Drainage

Once land is identified as being available for inclusion in a foodlands access program, it is assumed that a drainage system would be put in place by the host organization prior to, or during, the first year of operation. This will be a large capital expenditure (between \$1,000 and \$2,000 per acre), but it is expected to benefit not only farm operators, but also residents and businesses on surrounding lands. Some lands under consideration, such as Panama Flats, have existing drainage that needs to be repaired²⁵. Other lands may have minimal or no drainage installed. Even if the program is managed and operated by an NGO, it is recommended that local government remain in charge of surface drainage infrastructure, such as regional ditch systems, so that it can be consistent with infrastructure on surrounding lands. It is also worth noting that some form of land drainage would likely be required by local government, even without the goal of food production, in order to control flooding. The presence of drainage will be reflected in the associated lease rates.

²⁴ Haliburton Farms 2017 Financial Update. District of Saanich Council Minutes March 6, 2018: http://saanich.ca.granicus.com/Viewer.php?view_id=1&clip_id=118&meta_id=4371

²⁵ Eva Riccius, Senior Manager of Parks, District of Saanich. Personal communication.

Human Resources

It is recommended that 1.5 full-time equivalent (FTE) staff be assigned to the management and coordination of the foodlands access program. If a local government-led approach to the foodlands access program is chosen, then employees will be involved in the establishment and maintenance of a trust or land bank to manage the foodlands parcels. If an NGO-led approach is chosen, then local government employees will play more of a minor role, and the NGO staff will lead most of the administrative and operational tasks.

Initial program establishment could involve the services of the local government planning division, financial services, legislative and corporate services, First Nations outreach, engineering, assets and risk management, environmental protection, facilities management, and watershed protection. The staff time commitment and number of employees will depend on location of properties, the number and size of properties, existing infrastructure and amenities on the properties, current zoning, and the expertise and existing knowledge of staff involved. Additional expertise, such as legal counsel, is also recommended.

It is estimated that the establishment of Haliburton Farm (local government–managed non-trust farm property) required approximately \$25,000 to \$30,000 of District of Saanich staff time, and continues to necessitate an infusion of approximately \$15,000 annually over time²⁶. It is estimated that staff costs to establish a trust would be somewhat higher, due to the additional step of establishing the trust and transferring property into the trust. Therefore, an amount of \$170,000 for staffing resources has been included in the cost estimates for a local government–led land trust²⁷. Maintenance at Haliburton Farm is done by the NGO leasing the farm (Haliburton Community Organic Farm Society), with very little staff time or expense involved. If the foodlands access program is led by local government, partnering with an existing NGO for management services could reduce the amount of staff-related expenses by about 50–60% (see Table 6). However, the trade-off is that the local government loses a greater level of control over the operational aspects of the program.

Marketing and Promotion

Marketing is key to establishing a successful foodlands access program by advertising the existence of the program itself. Marketing and general communications is also important if land donations are being sought. This type of marketing and promotion would reflect positively on the local government, whether the program is managed entirely by the government or in partnerships with an NGO. However, it will be important not to promote individual farmers or products deriving from the program, as that may raise concerns regarding unfair competitive advantage for farmers who are not members of the foodlands access program.

It is therefore recommended that the local government spend resources on promoting the program itself, and the need for land donations if a trust model is used, rather than the products eventually arising from the farms. Community events and partnerships should be included in the promotional materials, so that the focus is not entirely on food production, but rather on greater public benefits.

²⁶ Richard Butler, Property Officer, District of Saanich. Personal communication.

²⁷ Signe Bagh, Senior Manager Regional and Strategic Planning, Capital Regional District. Personal communication.

If local government creates and manages most of the promotional materials internally with alignment to existing corporate branding, then costs can be kept to a minimum. To provide adequate funds for communication, the marketing budget could be taken as a percentage of the overall project budget (e.g., 3% of total project budget). If partnering with an NGO, costs may be further reduced by using existing communications channels and tools. However, costs will not be eliminated completely. While promotion through a wide variety of channels is expected, a regional land-trust could also tap into the existing wider network of land trusts on Vancouver Island and across BC to help spread promotional materials.

Estimates of costs associated with marketing and promotion include:

- Website: The costs associated with designing and publishing a website with several pages of content and photos could be affiliated with the main CRD website, therefore costs will be fairly low. It is estimated that a webpage will cost approximately \$1,500 per year for domain, hosting, content management, and support.
- Social media/Facebook page: If this is contracted out to a media consultant, the cost will be approximately \$4,800 per year. This may be reduced if it is handled by an NGO.
- Public relations: This includes press and media releases, interviews, and so on, estimated at \$1,000 per year. This may be reduced if handled by an NGO.
- Events: A budget of about \$2,000 for a launch event would be a conservative estimate.

Therefore, it is recommended that local government set aside funds for marketing and promotional costs at a level of \$5,000 to start and \$6,000 per year thereafter.

Insurance

Once an approach to the program is chosen, the existing insurance provider for local government should be consulted to determine whether additional insurance is required. This is recommended whether or not the local government leads the program, or whether or not a land-trust or a land-bank model is selected. Current policies likely exist for local government-owned and -operated properties and facilities, and it is possible that any future lease agreements may be covered by existing policies. However, it will be up to the specific municipalities within which the parcels are located to advise on the insurance they require, the limits of insurance, and the acceptable deductibles. It is important to note that, for insurance purposes, whichever entity owns the land must consider itself a legal entity unto itself, separate from the various community organizations or individuals that may hold future leases on individual properties. If the land is held in a trust, the trust will require specific trustee insurance, separate from the local government insurance policy.

Commercial General Liability insurance, with coverage for third-party injury or damages, will cover the host organization's (local government or NGO) overall assets in the case of any injury or event that may bring about a claim. Such a policy may also provide coverage for loss of use in the event an incident renders the property unusable for a period of time, impacting the farmer or the organization's ability to use the land. Errors and Omissions coverage will be required if the entity is providing any professional advice. Property Insurance for Chattel must be in place to provide replacement of any infrastructure lost through a catastrophic event.

Individual or organization-based lease holders should be required, as a condition of their lease, to hold liability and tenants' insurance through an approved provider. Individual tenants should be required to have adequate insurance to cover their business operations, including general liability coverage.

Interest

Local government borrowing rates for real estate are approximately 4%, but it fluctuates somewhat over the long term (e.g., the short-term rate is under 3%, and by 2020 the rate is expected to be 4.5%)²⁸. It is possible that a referendum would be required to borrow funds for program development (including any potential land acquisition) as this depends on when the capital drawdown is triggered or when it is actually taken out. The need to borrow funds may be reduced or eliminated through other sources of funding, as discussed in section 9.

Borrowing capital may be a viable option for establishment, but it is very risky strategy for satisfying the ongoing operating costs, and is therefore not recommended. Other organizations have found that fundraising events and donation drives have been successful prior to purchase of land, but it can take a long time to raise the sufficient funds²⁹. Furthermore, once land has been purchased, it is difficult to attract additional funds for ongoing administrative and operational needs. As a result, borrowing for land purchase is risky if the intent is to repay the loan with future cash donations or fundraising. It is essential to have a viable repayment plan prior to incurring any debt. For the purposes of this report, it is estimated that \$150,000 would be borrowed by local government from a lending agency during the first year to cover capital investments and that it would be paid off over time, resulting in approximately \$6,000 of interest per year based on an interest rate of 4% (Table 6). If an NGO leads the program it would be less likely to be able to successfully apply for a large loan and may be required to pay a higher interest rate (5%). Therefore Table 6 also indicates the lower interest payments associated with a smaller \$10,000 loan at an interest rate of 5%, if the program is led by an NGO.

Property Taxes

If land currently included in the foodlands access program is classified as farmland, this may reduce property taxes below what is currently payable. Land classified as farmland is also eligible for the provincial farmland tax credit, which reduces the school tax payable by 50%. For new land acquisitions, this can result in significant savings over non-farmland.

Land that is leased to a farmer may qualify for farm class if³⁰:

- The owner applies to have land classified as a farm.
- The owner and lessee enter into a lease agreement.
- The leased land makes a reasonable contribution to the farm operation.
- The lessee (farmer) meets the income and sales requirements.³¹

As it is assumed that foodlands access programs will be established from existing farmland, on which taxes are currently being paid, therefore no additional property taxes will result, and tax savings may even be possible. As a result, property taxes are not included in Table 6.

Examples of Loan Repayment Costs (Interest)

²⁸ Jeff Weightman, Planner, Capital Regional District. Personal communication.

²⁹ Mary Alice, Sooke Farmland Trust. Personal communication.

³⁰ BC Assessment: Classifying a Farm: fact sheet. <https://info.bcassessment.ca/Services-products/property-classes-and-exemptions/farm-land-assessment/farm-classification-in-british-columbia/Apply-for-farm-classification>

³¹ BC Assessment: Classifying land leased to farmers: fact sheet. <https://info.bcassessment.ca/services-and-products/Pages/Classifying%20Land%20Leased%20to%20Farmers.aspx>

Example: Interest Payments for \$500,000 Loan (High End Loan)

If a 5 acre parcel of land is purchased at \$500,000 and paid for with a 30 year mortgage at 4.5% interest.

- Total monthly payment of interest and principle is \$2,521
- Total interest paid over 30 year period \$407,589 (an average of \$13,586 per year in interest).
- If the entire 5 acres were farmed would require \$2,717 per acre ($5 \times \$13,586$) to cover the interest.
- This could be one way to calculate lease rates, but the amount would be much higher than typical lease rates.

Example: Interest Payments on a \$100,000 Loan (Low End Loan)

- \$100,000 loan
- 30 years paid quarterly at 4.5% interest
- Quarterly payments of \$1,518 or \$6,073 per year
- Total interest over 30 years would be \$82,192.
- Average interest per year would be \$2,740

A7: Foodlands Access Program Revenue Discussion and Calculations

In addition to lease income, funds will be required to cover the expected operational and administrative costs associated with establishing and running the program, in addition to infrastructure improvements and equipment purchase. Program funding opportunities are discussed in this section and include:

- Leases
- Grants
- Donations
- Sponsorships
- Membership fees
- In-kind contributions
- Loans

Other income considerations:

- Business licences may be required by individual municipalities for on-site commercial activities.
- Additional revenue sources (fundraising) could include: on-site farmer's market booth fees for crafters; seasonal events (e.g., garlic fests); fee-for-service activities, such as workshops, or facility rentals. This will depend somewhat on ALR and local/regional zoning.
- Creating a "friends of CRD Foodlands Program" could further build community engagement for building out a fundraising plan and promotion.
- Local government funds can be used to leverage matching funds from other levels of government, the private sector, and the NGO sector³². For instance, the District of North Saanich has provided a motion of support for a farmland acquisition fund³³. This is further explored in section 10.

A strong diversified funding strategy will be required and options should be considered concurrently.

Lease Rates

Annual lease fees will bring in reliable income to help offset the costs of program operations. Based on current market rates in the area, however, it is unlikely that this will be enough to completely cover program costs. Appropriate lease rates will aim to balance farmers' ability to pay with the objective of achieving revenue neutrality for the host organization in annual operating costs for lands managed through the foodlands access program.

Based on average lease rates for farmland in the region with drainage, water hookups, and fencing provided, it is reasonable to suggest \$400/acre/year to \$1,000/acre/year, depending on the quality of the soil and type of agricultural products being cultivated (e.g., marginal pasture and haying lands will lease for lower rates of \$50 to \$100/acre/year). The other option is to charge a lease rate based on a portion (e.g., 5–10%) of the expected farm product value. The latter method of charging the lease fee

³² CRFAIR, 2015. Exploring farm and food lands access in the CRD: A Local Government Farmland Trust Approach. Findings Report. http://static1.squarespace.com/static/56e5a1d4e321404618f47dc7/t/574d1918b09f953f2982a396/1464670511336/Local+Government+Farmland+Trust+Findings+Report+Final_CRFAIR2015.pdf

³³ District of North Saanich, 2014. Notice of Motion: Regional Farm Trust and Farmland Acquisition Fund. Staff report. <https://northsaanich.civicweb.net/document/6629/Rpt%20Farm%20Trust%20and%20Acquisition%20Fund.pdf?handle=B8D4E4F9FE1748FCBCD8D4BF5182B5E4>

may be considered more “fair”, as it will be based on the ability of the farm to bring in positive returns. However, the set fee is more stable, which may be a benefit to both the lessor and the lessee. Both options are detailed in Table 7 for different agricultural activities.

It may be appropriate to increase the set fee and/or the percent of the gross farm income charged, if a wash station, parking, and storage equipment are provided. For context, Haliburton Farm in Saanich rents 1-acre plots for \$600 per year and new farmers must purchase existing infrastructure from the previous farmer for about \$5,000 to \$10,000, and Madrona Farm leases farmland for approximately \$5000 per acre per year. See Appendix for additional examples.

Example: Haliburton Farm Lease Rates

- Leases are 5 years and are renewable for another 5 years if approved.
- Leases are not extended beyond 10 years.
- The size of the plots is 1 acre and there are 5 of them.
- Annual rent is \$600.
- New farmers purchase the infrastructure and business from the previous farmer. Typically this is around \$5,000 to \$10,000.
- The board does not have a formula for how much exiting farmers get to charge for their improvements.
- The Haliburton board is responsible for property management.
- The board is not required to make any annual payments to the District of Saanich, who is the owner of the property.

Example: Madrona Farm Lease Rates

- Lease rates are approximately \$500 per acre per year
- Farmer members must also share the cost of land taxes
- Price includes land, the farmhouse, barn and out buildings.
- Farmer members are responsible for all maintenance and caretaker work
- Agricultural water rates are an additional \$300 per year

Example: Salt Spring Island Farm Land Trust Burgoyne Farm Lease Rates

The following are examples of lease rate paid by farmers at Burgoyne Farm. Farmers pay for fencing and all irrigation costs while the land trust pays all other costs such as road repairs, administration, and outhouses.

- 1/3 acre for \$200 currently growing medicinal herbs
- 4 acres for \$900 in vegetable production
- 5 acres for \$1,000 growing garlic seed
- 10 acres for \$1,500 for pasture land currently with chicken tractors
- 3.5 acres of community plots of 25 feet by 50 feet @ \$40/year

Transfer of Infrastructure Investments

A key component of land ownership that differs from leasing or licensing is that when the farmer leaves the land, their investment (equity) is compensated through the sale of the land. If properly crafted, long-term leases and/or licences can also facilitate the transfer of capital investments in fencing, drainage, and irrigation infrastructure, from one lessee to the next. Typically, the lessee is responsible for improvements, however, in some cases the foodlands access program manager will be responsible.

The lease rate can be adjusted to reflect the level of infrastructure investments that are available at the time that the agreement commences. If, over the course of the term of the lease, the farmer adds value to the operation, it is expected that the yield of crops, and therefore economic return, will also rise based on that investment.

Once the term of the lease expires there are several options:

- 1) The lessor (e.g., local government and/or NGO) can have the investments (and associated depreciations) assessed by a neutral third party and a lump-sum payment is made to the farmer to buy them out. This payment can later be recouped by the lessor by charging a higher lease rate to the next farmer, in acknowledgement of the increased value of the infrastructure available.
- 2) The outgoing farmer can sell the infrastructure directly to the incoming farmer.
- 3) The outgoing farmer can take the infrastructure with them to a new location.
- 4) A combination of the above can occur.

In order for this investment transfer process to be completed smoothly, it is best if the farmer keeps detailed records and receipts of all land improvement investments. These investment transfer options should be addressed directly within the lease agreement.

Grants

Grants may be available for initial program establishment and capital acquisitions (land, infrastructure and equipment), workshops, and education. However, it can be challenging to find grants that allow the funds to be used to cover staff time, operational costs, core administrative and other ongoing expenses.

The following amounts of grant funding are anticipated (see Table 8):

- If a local government is the lead organization with support from an NGO: \$50,000 to establish the program and \$10,000 annually thereafter.
- If an NGO is the lead organization with support from local government: \$100,000 to establish the program and \$50,000 annually thereafter.

Donations

Donations are most likely to be used for equipment or land. Any land donations would need to be accepted by a charitable organization, whereby the land trust approach is used. Attracting donations requires an ongoing marketing campaign and/or fundraising events and donations are not always a reliable source of funding to meet operating expenses, as they may fluctuate with changes in the economy and shifts in public priorities. Therefore, for the purposes of this report, donations are

considered a budgetary “bonus”, and no hard figures are presented in the expected revenues for donations.

Sponsorships

Corporate sponsorships either for the entire foodlands access program or for specific partnership programming may be a viable funding opportunity. This could be expressed through cash sponsorships or in-kind support (e.g., donation of a tractor or other equipment). It is not expected that sponsorships would fluctuate much whether the program is being led by local government or an NGO, although sponsorship levels may be higher at the outset of the program because corporations wish to be associated with an innovative program.

It is anticipated that a foodlands access program could garner \$50,000 at establishment and \$10,000 per year thereafter in sponsorships.

User Fees

Depending on the zoning of the land in question, a number of opportunities may present themselves for hosting events that could incur a user fee. These nominal fees would be charged for the use of the space and/or any equipment or infrastructure. Examples include workshops, gathering events, and outdoor classes.

It is anticipated that a foodlands access program could raise \$2,500 per year in user fees.

In-Kind Contributions

This type of support could be provided by hosting a website, providing advertising, supplying meeting-room space, and other overhead and administrative needs. This support could be provided by the local government and/or community partners.

It is anticipated that the program would be able to raise approximately \$25,000 per year through in-kind support from local governments as a host organization, or \$5,000 per year from an NGO as a host organization.

Loans

A referendum may be needed to borrow any required funds for program development and/or land acquisition. For the purposes of this report, it is estimated that, if the program is led by local government, \$150,000 could be borrowed during the first year to cover capital investments and that it would be paid off over time, resulting in approximately \$6,000 of interest per year, based on an interest rate of 4%. Major banks and credit unions such as BMO Financial, Vancity, CIBC, RBC, and TD have small-business start-up loans. It is important to note that NGOs would struggle to qualify for a loan of this nature.

The following loan amounts are anticipated:

- Local government as lead organization with support from NGO: \$150,000 to establish the program.
- NGO as lead organization with support from local government: \$10,000 to establish the program.

A8: Potential Funding Sources

Carthy Foundation

Enterprising Non-Profits

Epicure Foundation

Farm to School BC

Investment Agriculture Foundation

McConnell Foundation

McLean Foundation

Plan H

Real Estate Foundation

TD Canada Friends of the Environment Foundation

Victoria Foundation

Vancity Community Foundation

Webster Foundation

A9 Indicators for Success

There are several indicators for a foodlands access program that could be tracked to measure success. They are presented here in three phases: pre-program, establishment, and ongoing/annual indicators.

Pre-Program:

- Local government endorsing or accepting report recommendations.
- Local government deciding on an approach.
- Local government meeting with NGOs to discuss partnerships and/or alignments.

Establishment:

- Local government making a public commitment to leading or supporting the program.
- Inclusion of the foodlands access program within the local government budget.
- Local government securing or identifying land for the program in partnership with NGOs (this could be land that is already publicly owned).
- Establishing a program advisory committee.
- Promotion of the new program through marketing and communications.
- Releasing a call for farmer applications.
- Negotiation of lease agreements.

Ongoing/Annual:

- Amount of land brought into production.
- Number of new farmer entrants.
- Amount of food produced.
- Partnerships with community organizations to establish educational programs and events.
- Ability of new entrants to gain skills and graduate out of the program onto other larger plots.