



Regional District of Fraser Fort George Regional Agriculture Strategy 2022

Prepared for:
Regional District of Fraser Fort-George



Prepared by:
Urban Food Strategies
In association with Upland Agricultural Consulting

URBAN FOOD
STRATEGIES



upland agricultural consulting

Project Acknowledgements

The RDFFG respectfully acknowledges this project is taking place on the traditional territories of the Lheidli T'enneh, McLeod Lake Indian Band, and the Simpcw First Nation.

The Regional District extends from the Rocky Mountains in the East to beyond the Fraser River in the West, covering a land mass of over 50,500 km²... Approximately 100,000 residents call the region their home. It encompasses four municipalities – the City of Prince George (Prince George), the District of Mackenzie (Mackenzie), the Village of McBride (McBride), the Village of Valemount (Valemount) – and seven electoral areas – Electoral Areas A, C, D, E, F, G, and H.

Regional Agriculture Strategy Working Group Members

Agricultural Land Commission	Michael McBurnie
District 'C' Farmers' Institute	Michelle Miller
Eaglet Lake Farmers' Institute	Catherine Kendell
Everyone at the Table	Alex Rowan
McBride Farmers' Institute	Mark Roth
Ministry of Agriculture and Food	Karen Tabe
Punchaw Cattlemen's Association	Lynn Poole
Robson Valley Beekeepers Association	Lyn Smith
University of Northern BC	Serena Black
Downtown PG (Food Retail Association)	Warren Sunstrum
Local Food PG	Del Meyers
Community Futures Fraser Fort George	Shona Thorne

Project team

RDFFG Staff Team

Kenna Jonkman, General Manager of Development Services and Heather Meier, Planning Leader

Consulting Team

Urban Food Strategies: Janine de la Salle, Principal and Julie Bull, Planning Assistant in association with Upland Agricultural Consulting: Ione Smith, Principal, Kazlyn Bonnor, Agrologist, and Sydney Hnatiuk, Agroecologist And Debbie Evans, Agrologist

Funding Partners

The RDFFG Regional Agriculture Strategy was funded in part by Agriculture and Agri-Food Canada and the Government of British Columbia through programs delivered by the Investment Agriculture Foundation of BC.

DELIVERED BY:

FUNDING PROVIDED BY:



Acronyms

ACARN	BC Agricultural Climate Adaptation Research Network
ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
ASC	Agriculture Standing Committee
BCCA	BC Cattlemen's Association
BNFFG	Bulkley Nechako- Fraser-Fort George
CF FFG	Community Futures Fraser Fort George
CNC	College of New Caledonia
EAT	Everyone At the Table
IAF	Investment Agriculture Foundation
MAF	BC Ministry of Agriculture and Food
NDIT	Northern Development Initiatives Trust
OCP	Official Community Plan
RAS	Regional Agriculture Strategy
RASWG	Regional Agriculture Strategy Working Group
RDBN	Regional District of Bulkley Nechako
RDFFG	Regional District of Fraser Fort George
SSFPA	Small Scale Food Processors Association
SSMPA	Small Scale Meat Producers Association
UNBC	University of Northern British Columbia

Executive Summary

Overview

A Regional Agriculture Strategy (RAS) is a non-statutory plan that develops a shared vision, goals, and actions for supporting food and agriculture systems amongst producers, the public, local government, Indigenous governments and other key players within the Regional District. A Regional Agriculture Strategy focuses on a region's farm sector to discover practical solutions to challenges, identify opportunities to strengthen farming and ultimately contribute to agriculture and the community's long-term sustainability.

The RAS is the first-ever of its kind for the Regional District of Fraser Fort George (RDFFG). The purpose of the RAS is to guide and support agriculture and farming for all seven electoral areas within the region. The RAS provides a 20-year vision for agriculture with short, medium and long-term actions identified to strengthen and grow the food and agriculture sector.

RAS Objectives

The key objectives guiding the RAS development process are to:

- 1) Engage the agricultural community, external organizations, local governments and provincial agencies to in identifying a vision, goals, recommendations, and implementation actions that will strengthen and support the agriculture sector.
- 2) Connect with Indigenous governments to understand the regional Indigenous history surrounding agriculture, and to identify potential opportunities for strengthening relationships through meaningful partnerships.
- 3) Encourage collaboration between the Regional District and the agriculture community, industry associations, member municipalities, external organizations and provincial agencies to advance agriculture in the region.
- 4) Develop an implementation plan that contributes to the long-term environmental, social, and economic sustainability of agriculture within the region.

Why develop a RAS?

There are three main reasons for developing the RAS and establishing a regional role and approach to food and agriculture systems.

1. Help ensure that food and agriculture systems are strong for current and future generations.
2. Capture new and emerging market opportunities that the RD can work to support.
3. Provide additional linkages and ways to support the implementation of the BNFFG Climate Adaptation Strategy and other RDFFG initiatives.

How we got here

The development of the RAS occurred between April and December 2022. Within this timeline, research and engagement conducted by the project team led to the creation of the *Foundations Report*, which forms the technical basis for RAS recommendations. Key players were engaged, involved, and informed through multiple means including the RAS Working Group, one-on-one interviews, local government workshops, online input and conversations with Indigenous representatives. This input, in addition to the assessment of technical information, informs the RAS recommendations.

RAS Vision

Food and agriculture systems in the RDFFG are resilient, prosperous, and connected.

Key elements of this desired future state include:

- Ranchers, farmers, food producers, food harvesters, and food processors have successful businesses.
- Food system and agricultural knowledge is transferred to the next generation.
- Farming and ranching is diversified and operations are responsive to changing economic and climatic conditions.
- Regional collaborative networks create conditions in which agriculture can thrive.
- Understanding and sharing Indigenous history, traditional food systems, and relationship to land enables greater collaboration towards common goals.
- Farmers and ranchers are prepared for emergencies.
- Farming and ranching is regenerative: healthy soils, beneficial insects, and water conservation practices are common place and increase resiliency of producers.
- Regional food processing and distribution infrastructure adds value to raw goods.
- Regional foods are celebrated and marketed throughout the region and beyond.

RAS Goals



RAS Recommendations

Goal 1: Local government policies and plans support the food and agriculture sector

- 1.1 Maintain and enhance policies and bylaws to protect agricultural land in the RDFFG.
- 1.2 During plan and bylaw update processes, ensure that best practices for modernizing bylaws are considered and integrated, where appropriate.
- 1.3 During plan and bylaw update processes, ensure that food and agriculture are fully addressed.
- 1.4 Build understanding and acknowledgment of traditional and modern Indigenous food systems.
- 1.5 Work with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to support the identification and protection of agriculture lands within their traditional territories.
- 1.6 Keep the Regional Agriculture Strategy as well as related policies up-to date.

Goal 2: Stability and diversity characterize regional food and agriculture sectors

- 2.1 Continue to work with agriculture entities to improve meat slaughter and processing capacity in the RDFFG.
- 2.2 Support efforts to improve labour stability in the agriculture sector.

- 2.3 Support farm succession planning programs.
- 2.4 Support the diversification of agriculture in the RDFFG.
- 2.5 Continue to support and pilot agricultural plastic waste recycling.

Goal 3: Robust education and marketing programs enhance regional food and agriculture

- 3.1 Building on existing information, support the promotion of regional agriculture to regional buyers including both household and wholesale.
- 3.2 Building on existing efforts, develop and maintain a food and agriculture resource list for producers and processors.
- 3.3 Support the promotion of RDFFG agriculture to buyers and prospective farmers.
- 3.4 Support an inventory of available farmland and food processing facilities in the Regional District including member municipalities to help connect food and agriculture businesses to regional assets.
- 3.5 Support food and agriculture education for children, youth and adults in the region.
- 3.6 Support training and skill building programs for producers and processors.

Goal 4: Agriculture is regenerative and producers are prepared for emergencies

- 4.1 Support producers in being prepared for emergencies.
- 4.2 Support regenerative agriculture as a way to reduce dependency on farm inputs.
- 4.3 Promote water conservation practices and water licencing within the agricultural community.
- 4.4 Support the protection of ecological services on farmland.
- 4.5 Manage and eliminate invasive plant species.
- 4.6 Work to implement regional climate adaptation strategies.

Goal 5: Strong networks and capacity help to sustain the regional food and agriculture sector

- 5.1 Establish the delivery of the Regional Agriculture Strategy as a service within the governance structure of the RDFFG and identify staff and other resources needed for implementation.
- 5.2 Consider establishing a multi-regional fund to support extension services for producers and processors.
- 5.3 Facilitate knowledge sharing and regional collaboration through forming a Regional Food and Agriculture Roundtable.
- 5.4 Strengthen relationships with Indigenous governments to increase potential for meaningful partnerships.
- 5.5 Engage in and support food security initiatives in the region.
- 5.6 Advocate on behalf of producers and food and agriculture actors.
- 5.7 Continue to engage with the food and agriculture sector.

Table of Contents

1. Introduction.....	1
1.1 Why develop a RAS?	1
1.2 RAS Process Objectives.....	2
1.3 RAS Process Phases	2
1.4 How to use this document.....	3
2. Vision, Goals, and Actions.....	4
2.1 Vision for food and agriculture in RDFFG	4
2.2 Goals and actions for food and agriculture in RDFFG.....	5
3. RAS Implementation Plan.....	22
3.1 Implementation planning tool	22
3.2 RAS Implementation Plan	23
4. Core Concepts and Definitions	26

1. Introduction

A Regional Agriculture Strategy (RAS) is a non-statutory plan that develops a shared vision, goals, and actions for supporting food and agriculture systems amongst producers, the public, local government, and other key players within the Regional District. A Regional Agriculture Strategy focuses on a region's farm sector to discover practical solutions to challenges, identify opportunities to strengthen farming and ultimately contribute to agriculture and the community's long-term sustainability.

The RAS is the first-ever of its kind for the RDFFG. The purpose of the RAS is to guide and support agriculture and farming for all seven electoral areas within the region. The RAS provides a 20-year vision for agriculture with short, medium and long-term actions identified to strengthen and grow the food and agriculture sector.

1.1 Why develop a RAS?

The RAS is a tool to help ensure that food and agriculture systems are strong for current and future generations. With factors such as increased climate variability associated with global warming, global disruptions to value-chains, and the knowledge of experienced farmers not being passed-on, among other factors, there is more reason than ever to create a long-range plan for how to strengthen and create resiliency in the interest and investment in local food and agriculture products within BC. There are new and emerging market opportunities for farmers in the region and the RDFFG can become a significant partner in enabling their success. The RAS also provides a way to support the continued implementation of the Bulkley-Nechako- Fraser-Fort George (BNFFG) Climate Adaptation Strategy and other current RDFFG initiatives.

The RDFFG is situated on the traditional territories of:

Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation

Electoral Areas and Member Municipalities in the RDFFG:

Electoral Area A

Salmon River-Lakes

Electoral Area C

Chilako River-Nechako

Electoral Area D

Tabor Lake-Stone Creek

Electoral Area E

Woodpecker-Hixon

Electoral Area F

Willow River-Upper Fraser Valley

Electoral Area G

Crooked River-Parsnip

Electoral Area H

Robson Valley-Canoe

City of Prince George

District of Mackenzie

Village of McBride

Village of Valemount

1.2 RAS Process Objectives

The key objectives guiding the RAS development process are to:

- 1) Engage the agricultural community, external organizations, local governments and provincial agencies to in identifying a vision, goals, recommendations, and implementation actions that will strengthen and support the agriculture sector.
- 2) Connect with Indigenous governments to understand the regional Indigenous history surrounding agriculture, and to identify potential opportunities for strengthening relationships through meaningful partnerships.
- 3) Encourage collaboration between the Regional District and the agriculture community, industry associations, member municipalities, external organizations and provincial agencies to advance agriculture in the region.
- 4) Develop an implementation plan that contributes to the long-term environmental, social, and economic sustainability of agriculture within the region.

1.3 RAS Process Phases

The development of the RAS had three main phases. The process involved

- 1) Initiating the project by striking the RAS Working Group and identifying project timelines,
- 2) Conducting research, engaging key players in identifying issues and opportunities for agriculture in the region, and
- 3) Bringing research and engagement findings into preparing and finalizing the RAS.



The RAS involved the agricultural community, external organizations, member municipalities, provincial agencies and Indigenous governments in the following ways.

- **RAS Working Group:** The RASWG working group was formed at the outset of the project to guide the process and includes members from a wide-range of food and agriculture key players. The RASWG met a total of four times during the project. The

RASWG provided key input and advice on engagement as well as the development and review of the Foundations Report and the RAS.

- **Interviews:** The project team interviewed 17 people in the food and agriculture sector, with a focus on prioritizing regional producers and processors.
- **Member Municipality workshops:** The project team facilitated two workshops with representatives from member municipalities including City of Prince George, District of Mackenzie, Village of McBride, and Village of Valemount.
- **Online input:** A mini-survey was posted on the RDFFG website and received input from 24 respondents.
- **Conversations with Indigenous Representatives:** The Indigenous governments whose territory the RDFFG exists within were invited to contribute to the development of the RAS. The project team held a total of five meetings with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation. Through these initial conversations, learning has begun about the the regional Indigenous history surrounding agriculture and facilitated discussions regarding opportunities to strengthen relationships through meaningful partnerships.

1.4 How to use this document

The RAS includes four main sections:

- 1) Introduction
- 2) Vision, Goals, Recommendations and Actions
- 3) Implementation Plan and
- 4) Core concepts and definitions.

The *RAS Foundations Report* provides the technical background for the RAS and is a companion document to this Strategy. Please find the *Foundations Report* [here](#).



2. Vision, Goals, and Actions

The RAS contains five key elements:

- 1) A vision for food and agriculture 20 years from now;
- 2) Goals for food and agriculture systems in RDFFG;
- 3) Recommendations for how to achieve the goals;
- 4) Implementation actions for how to realize the recommendations, goals, and vision; and
- 5) Responsibilities in implementation to indicate lead and support roles for the RDFFG as well as identify potential collaborations and partnerships.

Together these elements provide a broad-to-specific strategy that will help to enable regional collaboration towards the RAS vision.

2.1 Vision for food and agriculture in RDFFG

The vision described below is based on the input and perspectives provided by the RAS Working Group, Indigenous representatives, as well as key players including producers, processors, industry associations, local governments, non-profits and industry associations.

RAS Vision

Food and agriculture systems in the RDFFG are resilient, prosperous, and connected.

Key elements of this desired future state include:

- Ranchers, farmers, food producers, food harvesters, and food processors have successful businesses.
- Food system and agricultural knowledge is transferred to the next generation.
- Farming and ranching is diversified and operations are responsive to changing economic and climatic conditions.
- Regional collaborative networks create conditions in which agriculture can thrive.
- Understanding and sharing Indigenous history, traditional food systems, and relationship to land enables greater collaboration towards common goals.
- Farmers and ranchers are prepared for emergencies.
- Farming and ranching is regenerative: healthy soils, beneficial insects, and water conservation practices are common place and increase resiliency of producers.
- Regional food processing and distribution infrastructure adds value to raw goods.
- Regional foods are celebrated and marketed throughout the region and beyond.

2.2 Goals and actions for food and agriculture in RDFFG

The RAS has five goal areas with multiple recommendations and implementation actions associated with each. These goals present what the recommendations and actions are striving to achieve.



Goal 1: Local government policies and plans support the food and agriculture sector

Local government plans and bylaws change over time in order to respond to shifts in the community, economy, and environment. Updating plans and bylaws represents an opportunity to integrate food and agriculture in a meaningful way. While there are already strong food and agriculture policies within the RDFFG, City of Prince George, District of Mackenzie, Village of Valemount and Village of McBride, changes in regulations, economy, and environment create a good reason for updating Official Community Plans (OCPs) and Zoning Bylaws (ZBLs), as well as other plans and strategies related to agriculture (e.g. climate action).

Goal 1: Local government policies and plans support the food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
1.1 Maintain and enhance policies and bylaws to protect agricultural land in the RDFFG.	<ul style="list-style-type: none"> • Limit subdivision within residential areas that are adjacent to lands within the ALR in order to support long-term farm viability of adjacent ALR lands. • Limit subdivision of lands outside the ALR that have agriculture viability. • Discourage subdivision and non-farm uses for lands within the ALR. • Consider ALR boundary realignments that make better use of farm land or resolve building encroachments. 	RDFFG and member municipalities to lead within their respective jurisdictions. RDFFG to support regional consistency.
1.2 During plan and bylaw update processes, ensure that best practices for modernizing bylaws are considered and integrated, where appropriate. <i>Please refer to RAS Foundations Report for full description of best practices</i>	When updating OCPs and ZBLs, consider: <ul style="list-style-type: none"> • Recognizing ALC jurisdiction up-front and using an agriculture land designation for lands within the ALR • Updating permitted residential uses, siting, and sizing on agricultural lands to be consistent with changes to the ALC Act and Regulations and MAF Guide for Bylaw Development • Connecting climate change, environment, and emergency planning policies directly to food and agriculture systems 	RDFFG and member municipalities to implement in their respective policies and bylaws.

Goal 1: Local government policies and plans support the food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
	<ul style="list-style-type: none"> • Raising the profile of compliance and enforcement on agricultural land • Addressing and differentiating urban and rural agriculture • Including provisions for temporary farm worker housing, where appropriate • Adopting a consistent size limit for structures associated with home-based business • Ensuring farmgate sales are permitted in the ALR • Ensuring tourism and agriculture activities are consistent with ALC regulations • Ensuring zoning is provided to allow for the establishment of abattoirs/slaughterhouses outside of the ALR • Restricting livestock buildings around watercourses, wetlands, lakes, and riparian areas • Encouraging larger-scale processing, storage, and distribution facilities on non-agricultural lands • Allowing limited agriculture (e.g. hens and bees, community gardens, rooftop gardens, urban greenhouses etc.) in all areas outside of the ALR. • Discouraging transportation infrastructure that may have an impact on farmland. 	
1.3 During plan and bylaw update processes, ensure that food and agriculture are fully addressed.	<ul style="list-style-type: none"> • Take a food systems approach that considers primary production/harvesting in addition to processing, storage, and distribution as well as food culture, economy, and environment 	RDFFG and member municipalities to lead within their respective jurisdictions. RDFFG to support regional consistency.

Goal 1: Local government policies and plans support the food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
	<ul style="list-style-type: none"> Engage representatives from across the food system including other levels of government, businesses and the private sector, industry associations, post-secondary institutions and non-profit organizations in food and agriculture planning and policy development. 	Other entities, such as regional Farmers Institutes, BCCA, UNBC, and EAT can support updates to policies and plans by sharing information and participating in the update process.
1.4 Build understanding and acknowledgment of traditional and modern Indigenous food systems.	<ul style="list-style-type: none"> Continue to engage with the Lheidli T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation to determine the best way to represent Indigenous values, history, and realities in food and agriculture systems in decision-making frameworks. Engage with the Lheidli T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation to explore education and awareness opportunities regarding d traditional food systems, cultural values and practices around food, impacts of colonization on food systems and people, among other topics. Support Indigenous- led food and agriculture initiatives. 	RDFFG to continue a conversation with the Lheidli T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation , to discuss possibilities and establish a process.
1.5 Work with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to support the identification and protection of agricultural lands within their traditional territories.	<ul style="list-style-type: none"> Engage with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to determine potential partnership in mapping areas and locations of lands within their traditional territories that are suitable for agriculture and have good agricultural capabilities (e.g. soil, water access, road access, compatible surrounding uses.) 	RDFFG to initiate conversations with Lheidli T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation to determine level of interest in partnership.

Goal 1: Local government policies and plans support the food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
1.6 Keep the Regional Agriculture Strategy as well as related policies up-to date.	<ul style="list-style-type: none"> Work with agriculture entities to keep RAS and policies up to date and inclusive of shifts in culture, environment, and economy. 	<p>RDFFG to lead the updating of RDFFG RAS and related policies and support the updating of other's plans and policies (e.g. member municipalities, Post-Secondary Institutions)</p> <p>Other agriculture entities, such as regional Farmers Institutes, BCCA, UNBC, MAF and EAT can support updates to strategy by sharing information and participating in the update process.</p>

Goal 2: Stability and diversity characterize regional food and agriculture sectors

Agriculture in all shapes and sizes is facing new and persistent challenges to long-term viability. One key issue for ranchers in the RDFFG, as well as other areas of BC, is the significant challenge of regulations that limit slaughtering and processing meat within the region, either for local purchasing or selling to buyers outside of the region. Although there have been changes to the regulations to try and ease this condition, there are still bottlenecks in the supply chain, such as labour shortages, that can become a hinderance to the long-term viability of ranchers. There are also emerging forms of agriculture such as produce, berries, and others that are relatively new to the region and may require new foundations to ensure long-term stability. While there have been many successful initiatives focused on expanding the market for regional producers, there is still a need to stay vigilant and continually improve and strengthen agriculture foundations for sector-wide stability and diversity.

Goal 2: Stability and diversity characterize regional food and agriculture sectors		
Recommendation	Implementation actions	Responsibilities
2.1 Continue to work with agriculture entities to improve meat slaughter and processing capacity in the RDFFG.	<ul style="list-style-type: none"> Support efforts to establish a regional abattoir to include beef as well as poultry/rabbit, sheep/goat processing. Support the establishment of a value chain for meat production (beef, bison, sheep, goat, poultry, and other specialties) and a marketing support role for the meat industry. Support the BCBeef initiative that sought to establish a beef processing plant in Prince George. Identify an entity to take a lead role in reusing past work to continue efforts to strengthen the foundations for the meat industry in RDFFG. Ensure zoning is provided to allow for the establishment of abattoirs/slaughterhouses outside of the ALR. Ensure zoning is provided to allow for the establishment of cold storage, dry storage, 	<p>RDFFG to support organization and agriculture entities undertaking this work, including; CF FFG, NDIT, MAF, as well as BCCA, SSMPA and SSFPA, among others.</p> <p>RDFFG and member municipalities to lead within their respective jurisdictions. RDFFG to support regional consistency.</p>

Goal 2: Stability and diversity characterize regional food and agriculture sectors		
Recommendation	Implementation actions	Responsibilities
	aggregation and distribution facilities outside of the ALR.	
2.2 Support efforts to improve labour stability in the agriculture sector.	<ul style="list-style-type: none"> Support northern meat facility worker training and retention programs. Help existing meat processors to reach needed capacity to provide services year-round. This could help the meat processing businesses to retain employees by providing year-round employment. Work with education institutions, agriculture entities and non-profit organizations to identify strategies for training and retaining labour in other agriculture sectors such as greenhouse, field crops, food processing and others. Engage with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to explore interest and support in food and agriculture job training and placement programs. 	RDFFG to support CNC and others active in delivering training programs as well as regional meat processors and produce growers to identify other strategies for improving labour stability. RDFFG could also support MAF on program development, promotion, and delivery.
2.3 Support farm succession planning programs.	<ul style="list-style-type: none"> Support initiatives and help to connect producers with resources for farm succession planning. 	RDFFG to support farm succession initiatives and programs led by Young Agrarians, CF FFG, MAF and others.
2.4 Support the diversification of agriculture in the RDFFG.	<ul style="list-style-type: none"> Explore growing the greenhouse industry in RDFFG as a way to extend the season and increase market potential for producers. 	RDFFG to support initiatives taken by CNC, UNBC, BC Forage Council, MAF, ACARN BC and other agriculture entities.

Goal 2: Stability and diversity characterize regional food and agriculture sectors		
Recommendation	Implementation actions	Responsibilities
	<ul style="list-style-type: none"> • Explore opportunities to use the CNC greenhouse for teaching, testing, and skill building. • Support for new crop trials as growing season is increasing with climate change and opportunities to add new varieties or new crops (e.g. Siberian and Aronia berries). • Advocate for hemp utilization study. • Engage with Lheidli T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation to explore how they may support agriculture diversification. 	
2.5 Continue to support and pilot agricultural plastic waste recycling.	<ul style="list-style-type: none"> • Continue to involve producers in the Agricultural Plastics Recycling Pilot Program with Cleanfarms BC to recycle plastics from the dairy and livestock industries. • Use the information collected during the pilot to advocate for the inclusion of agricultural plastics in the Provincial Extended Producer Recycling program across the province. 	RDFFG to support Cleanfarms.

Goal 3: Robust education and marketing programs enhance regional food and agriculture

Getting the word out on a wide-range of food and agriculture topics can help connect relevant information to producers and processors, help regional residents to find local products, and promote food and agriculture business in the region and beyond. Local governments, including the RDFFG can play a role in leading and supporting initiatives that promote regional food and agriculture. Apart from pure economic development, it is also an opportunity to build community understanding, knowledge, and capacity in food and agriculture. Programs that create learning environments that include culinary and gardening skills, learning about agriculture, and other topics, help to connect people to food, from an early age. This can help to improve health outcomes later in life by creating healthy relationships to food and food skills.

Goal 3: Robust education and marketing programs enhance regional food and agriculture		
Recommendation	Implementation actions	Responsibilities
3.1 Building on existing information, support the promotion of regional agriculture to regional buyers including both household and wholesale.	<ul style="list-style-type: none"> Working from existing inventories of regional food system assets such as the one developed by EAT and CF FFG, develop, update, and disseminate a guide that helps to connect household and commercial food buyers with regional suppliers. Support promotional activities of agriculture entities, such as, Farmers Institutes, Farmers Markets, and others. Support events that bring together regional commercial buyers and producers. 	<p>RDFFG to lead and/or support the development of a guide with partners such as District C Farmers Institute, Farmers Markets and other industry associations.</p> <p>RDFFG to initiate conversations with EAT and CF FFG in order to leverage existing regional food system asset inventory and mapping information.</p> <p>RDFFG to support agriculture entities hosting events and outreach activities.</p>
3.2 Building on existing efforts, develop and maintain a food and agriculture resource list for producers and processors.	<ul style="list-style-type: none"> Using existing RDFFG communication systems such as the website, pull together resource links on a diverse range of topics of interest to producers and processors (e.g. rules and regulations on farmland, registering wells, how to apply for building permits on farmland to emergency 	RDFFG to work with ALC, MAF, CF FFG and other agriculture entities to develop and maintain a resource list for producers and processors.

Goal 3: Robust education and marketing programs enhance regional food and agriculture		
Recommendation	Implementation actions	Responsibilities
	preparedness and adapting to climate change).	
3.3 Support the promotion of RDFFG agriculture to buyers and prospective farmers.	<ul style="list-style-type: none"> Support economic development organizations and initiatives aimed at creating a brand and marketing position for products being produced and processed in the region. Develop an information package that could be used to attract farmers, food processors, and distributors to locate in the region. 	<p>RDFFG to support regional organizations like CF FFG, Chambers of Commerce, member municipalities and others to promote agriculture outside of the region.</p> <p>RDFFG to support organizations like Young Agrarians that deliver land matching programs.</p> <p>RDFFG to support the Robson Valley Region Program in partnership with the Village of McBride and Village of Valemount.</p>
3.4 Support an inventory of available farmland and food processing facilities in the Regional District including member municipalities to help connect food and agriculture businesses to regional assets.	<ul style="list-style-type: none"> Identify farmland that is available for lease or purchase within the region Identify commercial kitchens, food manufacturing facilities, and commercial processing facilities within the region. Keep the inventories up to date and shared with appropriate organizations. 	RDFFG to lead the development of an inventory, working with member municipalities, Young Agrarians, CF FFG, EAT, Northern Health, Chambers of Commerce and other agriculture entities.
3.5 Support food and agriculture education for children, youth and adults in the region.	<ul style="list-style-type: none"> Look for opportunities to provide food and agriculture education programs for children, youth and adults (e.g. Expand 4H, BC Agriculture in the Classroom, culinary skill, basic food skills, gardening skills) 	RDFFG to support organizations that are providing community-wide education such as 4H clubs, Farm2School, BC Agriculture in the Classroom, and Northern Health, UNBC and CNC .

Goal 3: Robust education and marketing programs enhance regional food and agriculture		
Recommendation	Implementation actions	Responsibilities
	<ul style="list-style-type: none"> Explore feasibility of reinvigorating an experimental farm model. 	
3.6 Support training and skill building programs for producers and processors.	<ul style="list-style-type: none"> Support training workshops for producers and processors on becoming wholesale-ready and positioned to supply independent and chain grocers. Support small scale growers by working with organizations such as The Good Food Box that specialize in localized product distribution models. Support training for how producers can extend their growing season to provide early or late season produce (See 2.4). Support events that bring experienced and new producers together to share knowledge and discuss farm succession strategies. 	<p>RDFFG to support education organizations like Young Agrarians, Northern Health, MAF, UNBC, and CNC.</p> <p>RDFFG to support business development organizations like CF FFG and NDIT.</p> <p>RDFFG to initiate discussion with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to explore Interest and opportunities for development of workshops for training in Indigenous agriculture practices.</p>

Goal 4: Agriculture is regenerative and producers are prepared for emergencies

With recent fires and floods in BC, the COVID pandemic, and vulnerability in global markets and supply chains, the desire to become more self-reliant as a region is strong in RDFFG. In addition, climate models indicate warmer, drier conditions will impact agriculture. Becoming less dependent on outside source for goods and services that can be provided within the region is one way to increase self-reliance. Preparing for emergencies, managing invasive plants and insects, increasing soil health, conserving water, enhancing ecological goods and services on farmland, and the controlled use of technology can all play a role in the region becoming more resilient in the face of change.

Goal 4: Agriculture is regenerative and producers are prepared for emergencies		
Recommendation	Implementation actions	Responsibilities
4.1 Support producers in being prepared for emergencies.	<ul style="list-style-type: none"> Support producers to become prepared for emergencies, including supporting the development of individual farm risk assessment plans, Environmental Farm Plans, emergency farm plans and becoming FireSmart and Bear Aware. 	RDFFG Emergency Management to facilitate outreach to producers and dissemination of relevant and consistent emergency preparedness, response, and recovery information based on the Regional District Board approved emergency management program and associated response plans. e.g. ACARN BC .
4.2 Support regenerative agriculture as a way to reduce dependency on farm inputs.	<ul style="list-style-type: none"> Support agriculture entities to create networking and skill building opportunities for how to reduce the need for fertilizer by using on-farm composting, growing your own feed, and preparing Environmental Farm Plans as well other strategies. <i>Consider the Kootenay and Boundary Farm Advisors program as a good model.</i> Identify ways to meet growing irrigation demands while also considering water conservation, on farm water storage, and other watershed management strategies 	RDFFG to support Farmers Institutes, BCCA and other agriculture entities that work directly with producers.

Goal 4: Agriculture is regenerative and producers are prepared for emergencies		
Recommendation	Implementation actions	Responsibilities
	<ul style="list-style-type: none"> Support programs for building soil health on-farms. 	
4.3 Promote water conservation practices and water licencing within the agricultural community.	<ul style="list-style-type: none"> Educate agricultural landowners on the water licence process through FrontCounterBC. Using existing RDFFG communication systems such as the website, educate agricultural landowners by pulling together resource links to water stewardship and conservation. Promote on-farm water collection and storage systems for farms. 	<p>RDFFG to support Farmers Institutes, BCCA and other agriculture entities that work directly with producers.</p> <p>RDFFG to work with MAF and other agriculture entities to develop and maintain water stewardship and conservation resources.</p>
4.4 Support the protection of ecological services on farmland.	<ul style="list-style-type: none"> Consider a regional approach to identifying ecosystem (e.g. water storage, beneficial insect habitat, grassland set asides) services that are stewarded on farmland in the RDFFG and explore opportunities to better protect these natural assets. Promote existing payment for ecosystem services initiatives such as Investment Agriculture Foundation's Farmland Advantage program. 	RDFFG to support programs delivered by IAF .
4.5 Manage and eliminate invasive plant species.	<ul style="list-style-type: none"> Support existing invasive plant species management programs and initiatives. 	RDFFG to support existing programs and initiatives delivered by MAF and Northwest Invasive Plant Council .

Goal 4: Agriculture is regenerative and producers are prepared for emergencies		
Recommendation	Implementation actions	Responsibilities
	<ul style="list-style-type: none"> • Ensure that invasive species management practices do not do more environmental damage than the invasive species. • Establish an invasive plant species management program to ensure RDFFG lands are free of invasive plants. 	RDFFG to work with Northwest Invasive Plant Council to develop a management program for RDFFG lands.
4.6 Work to implement regional climate adaptation strategies	<ul style="list-style-type: none"> • Support the implementation of the Bulkley-Nechako and Fraser-Fort George BC Agriculture & Climate Change Regional Adaptation Strategies. • 	RDFFG to work with the RDBN and MAF in implementing strategies and actions identified in the Regional Adaptation Strategies.

Goal 5: Strong networks and capacity help to sustain the regional food and agriculture sector

As the RAS is the first of its kind that the RDFFG has prepared, consideration of how it will fit into the governance and administration of services provided by the Regional District is critical for strategic implementation. Further, the RDFFG is one of many entities who can work to establish strong foundations for the long-term success of the food and agriculture sector and, as such, collaboration and partnership for effective implementation is also key for backing-up the sector. In particular, opportunities to develop and deepen relationships with Indigenous governments is a relatively unexplored area with great potential.

Goal 5: Strong networks and capacity help to sustain the regional food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
5.1 Establish the delivery of the Regional Agriculture Strategy as a service within the governance structure of the RDFFG and identify staff and other resources needed for implementation.	<ul style="list-style-type: none"> Regional District Board to support the delivery of the Regional Agriculture Strategy. Determine financial resources required for the delivery of the Regional Agriculture Strategy. Determine the benefits of increasing staff capacity vs. creating a granting program for organizations working in food and agriculture. Determine the benefits of piloting a full or part-time food and agriculture coordinator. 	RDFFG to lead with potential funding support from NDIT .
5.2 Consider establishing a multi-regional fund to support extension services for producers and processors.	<ul style="list-style-type: none"> Hold discussions with neighbouring Regional Districts to discuss the potential for an inter-regional agriculture extension service. Hold discussions with MAF and other agriculture entities to identify how to build-in offerings from the Province and others into the extension service. 	RDFFG to connect with MAF other Regional Districts such as RDBN and Cariboo Regional District to discuss the possibility of establishing a multi-regional fund to support an extension service for farmers.
5.3 Facilitate knowledge sharing and regional collaboration through forming a Regional Food and Agriculture Roundtable.	<ul style="list-style-type: none"> Support the development of a Regional Food and Agriculture Roundtable. The Roundtable would support the region by providing a forum for agriculture entities to meet and discuss 	RDFFG to lead with support from agriculture entities such as Farmers Institutes, BCCA, EAT and others.

Goal 5: Strong networks and capacity help to sustain the regional food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
	<p>knowledge sharing, event promotion and opportunities for regional collaboration.</p> <ul style="list-style-type: none"> Evaluate the role of the Agriculture Standing Committee (ASC) of the Regional District and update the Terms of Reference. Host a regular (annual or biennial) forum on food and agriculture in the region that is designed to enable the ASC and agriculture entities to share information, network, and report on the implementation progress of the RAS. 	<p>RDFFG to lead with support from the Regional Food and Agriculture Roundtable.</p>
<p>5.4 Strengthen relationships with Indigenous governments to increase potential for meaningful partnerships.</p>	<ul style="list-style-type: none"> Continue discussions with the Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to determine interest in education and awareness opportunities to better understand Indigenous history, including history of food systems and relationship to the land. Continue engaging with the Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to determine potential partnership on the development of visual and written narrative to describe Indigenous food system history including traditional practices as well as the realities of colonization. Be open to potential partnerships regarding food and agriculture initiatives with Lheidli 	<p>RDFFG to invite a discussion with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to establish a process for strengthening relationships and potential partnerships.</p>

Goal 5: Strong networks and capacity help to sustain the regional food and agriculture sector		
Recommendation	Implementation actions	Responsibilities
	T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation.	
5.5 Engage in and support agriculture and food security initiatives in the region.	<ul style="list-style-type: none"> Participate in regional food security dialogue and programs, where appropriate. 	RDFFG to support initiatives by Farmers Institutes, BCCA, EAT, UNBC, CFFFG and other agriculture entities.
5.6 Advocate on behalf of producers and food and agriculture actors.	<ul style="list-style-type: none"> In areas outside of the jurisdiction or capacities of the RDFFG, advocate on issues to senior levels of government and other entities. Where possible, join forces with other Regional Districts. 	RDFFG to support and lead advocacy efforts.
5.7 Continue to engage with the food and agriculture sector.	<ul style="list-style-type: none"> Continue to build trust and reach producers. Continue to engage agriculture entities. Strive to elevate food producer and processor voices. 	RDFFG to support and lead.

3. RAS Implementation Plan

3.1 Implementation planning tool

This implementation planning tool provides a method to prioritize goals, objectives and actions as developed as part of the RAS. This tool is applied to the goals and recommendations presented in the previous section in order to identify a phased implementation plan. This tool considers readiness, cost, priority, and phase for each of goals, and recommendations in the RAS. While the RAS presents a 20-year vision, action planning is limited to 10-years as actions beyond this timeline would be difficult to establish with any certainty as conditions can change dramatically in a 10-year timeline.

Readiness Estimate <i>The level that resources (\$ or other required assets) and partnerships needed for implementing actions are in-place or are reasonably obtainable.</i>	NR Not ready	GR Getting ready	R Almost ready/ Ready-to-go	
Resource Estimate <i>The high-level assessment of resources needed for implementing actions</i>	\$ Under \$10k/ Existing \$	\$ 11k-\$50k	\$ \$51k +	
Priority Level <i>On a scale of 1-3, the degree of priority based on consideration of impact, urgency, and measurability.</i> <ul style="list-style-type: none">Impact / benefit-The strategy/action has the greatest impact and/or benefitUrgency-The strategy/action is targeted at the areas of most needMeasurability- The strategy is specific, measurable, agreed upon, realistic and time-based	L Lower	M Medium	H High	
Phase Estimate <i>The estimated length of time needed to implementing actions</i>	O Ongoing	P1 Phase 1 1-2 years	P2 Phase 2 3-5 years	P3 Phase 3 5-10 years

3.2 RAS Implementation Plan

The table below presents a phased plan for implementing the RAS. Ongoing, and phase 1-3 activities are described for the next 10 years. High-level readiness, resource assessment and priority level assessments for each recommendation are provided. This RAS implementation plan is offered here as a way to help bridge planning and implementation. However, it is anticipated that priorities and phasing of activities will change over-time to adapt to available resources, progress made towards goals, and new actions and priorities that emerge.

Recommendations have been sorted by phase, priority level, and by recommendation identifying numbers.

RDFFG RAS Implementation Plan 2023-2033				
Recommendation		Readiness	Resource Assessment	Priority Level
		NR- Not ready GR- Getting ready R- Ready	\$ \$\$ \$\$\$	High Med Lower
ONGOING				
1.1	Maintain and enhance policies and bylaws to protect agricultural land in the RDFFG.	R	\$	H
1.2	During plan and bylaw update processes, ensure that best practices for modernizing bylaws are considered and integrated, where appropriate.	GR	\$\$	H
1.3	During plan and bylaw update processes, ensure that food and agriculture are fully addressed.	GR	\$\$	H
5.4	Strengthen relationships with Indigenous governments to increase potential for meaningful partnerships.	GR	\$\$	H
5.5	Engage in and support food security initiatives in the region.	R	\$\$	H
2.2	Support efforts to improve labour stability in the agriculture sector.	NR	\$\$	M
3.6.	Support training and skill building programs for producers and processors	R	\$	M

RDFFG RAS Implementation Plan 2023-2033				
Recommendation		Readiness	Resource Assessment	Priority Level
		NR- Not ready GR- Getting ready R- Ready	\$ \$\$ \$\$\$	High Med Lower
5.6	Advocate on behalf of producers and food and agriculture actors.	NR	\$	M
5.7	Continue to engage with the food and agriculture sector.	R	\$	M
1.6	Keep the Regional Agriculture Strategy as well as related policies up-to date.	R	\$	L
PHASE 1				
1.4	Build understanding and acknowledgment of traditional and modern Indigenous food systems.	GR	\$\$	H
2.1	Continue to work with agriculture entities to improve meat slaughter and processing capacity in the RDFFG.	GR	\$\$	H
4.1	Support producers in being prepared for emergencies.	GR	\$	H
5.1	Establish the delivery of the Regional Agriculture Strategy as a service within the governance structure of the RDFFG and identify staff and other resources needed for implementation.	GR	\$	H
5.3	Facilitate knowledge sharing and regional collaboration through forming a Regional Food and Agriculture Roundtable.	NR	\$	H
1.5	Work with Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation to support the identification and protection of agricultural lands within their traditional territories.	R	\$	M
2.5	Continue to support and pilot agricultural plastic waste recycling.	R	\$	L
3.2	Building on existing efforts, develop and maintain a food and agriculture resource list for producers and processors.	NR	\$\$	L
PHASE 2				

RDFFG RAS Implementation Plan 2023-2033				
Recommendation		Readiness	Resource Assessment	Priority Level
		NR- Not ready GR- Getting ready R- Ready	\$ \$\$ \$\$\$	High Med Lower
4.6	Work to implement regional climate adaptation strategies.	R	\$\$\$	H
2.4	Support the diversification of agriculture in the RDFFG.	NR	\$\$	M
3.4	Support an inventory of available farmland and food processing facilities in the Regional District.	NR	\$	M
4.3	Promote water conservation practices and water licencing within the agricultural community.	GR	\$	M
4.4	Support the protection of ecological services on farmland.	GR	\$	M
2.3	Support farm succession planning programs.	NR	\$\$	L
3.1	Building on existing information, support the promotion of regional agriculture to regional buyers including both household and wholesale.	GR	\$\$	L
4.5	Manage and eliminate invasive plant species.	NR	unknown	L
PHASE 3				
5.2	Consider establishing a multi-regional fund to support extensions services for producers and processors.	NR	\$\$\$	H
4.2	Support regenerative agriculture as a way to reduce dependency on farm inputs.	NR	\$	M
3.3	Support the promotion of RDFFG agriculture to buyers and prospective farmers.	NR	\$\$	L
3.5	Support food and agriculture education for children, youth and adults in the region.	GR	\$	L

4. Core Concepts and Definitions

Community Food Security¹ When everyone in a community has the ability to obtain a safe, culturally acceptable variety of foods to eat. Community food security comes from a sustainable food system that maximizes community self-reliance and social justice.

Household Food Insecurity² Household food insecurity is the inadequate or insecure access to food due to financial constraints.

Food System: A food system is all the steps of growing, harvesting, processing, packaging, transporting, distributing, preparing, marketing, and consuming food.

A food system consists of the inter-related stages that food goes through from the natural soil, water, and air resources that enable us to grow/raise/hunt/fish/forage food to the personal and commercial practices of harvesting, processing, storing, distributing, buying, selling, eating, celebrating, and recovering waste. These stages make up the basic elements of a food system. Education, governance and capacity building are key supports for the food system. Food systems exist at multiple scales including local, regional, provincial, national, and international.

Figure 1 depicts a simplified view of a food system. There are many food system diagrams and models that describe the elements somewhat differently, but the core ideas are largely consistent.



¹ Derived from: Hamm, M., & Bellows, A. (2003). Community Food Security and Nutrition Educators. Journal of Nutrition Education and Behavior, 35(1), 37–43.

² <https://proof.utoronto.ca/wp-content/uploads/2020/03/Household-Food-Insecurity-in-Canada-2017-2018-Full-Reportpdf.pdf>

A sustainable food system ³ furthers the ecological, social, and economic health of a community, region, province, country, and world and can be reproduced over multiple generations. Characteristics of a sustainable food system include, but are not limited to the list below. A sustainable food system:

- Is **secure**, and therefore reliable and resilient to change (including climate change, rising energy prices, etc.) and accessible to all members of society;
- Is energy efficient;
- Is an **economic generator** for farmers, whole communities, and regions;
- Is environmentally regenerative or benign;
- Uses creative **water reclamation and conservation** strategies for agricultural uses;
- **Balances** food imports with local capacity;
- Adopts **regionally-appropriate** agricultural practices and crop choices;
- Contributes to both community and ecological health;
- Builds soil quality and farmland through the **recycling of organic waste**;
- Supports multiple forms of **urban as well as rural food** production;
- Ensures that food **processing facilities** are available to farmers and processors of all scales;
- Is **celebrated** through community events, markets, restaurants etc;
- **Preserves biodiversity** in agro-ecosystems as well as in the crop selection;
- Has a strong **educational focus** to create awareness of food and agricultural issues; and
- Is **socially just** and **fairly traded** by providing a fair wage to producers and processors locally and abroad.

Figure 1: Food and Agriculture System.

Indigenous Food Systems⁴ The vast myriad of rivers, watersheds, landforms, vegetation and climatic zones have worked together for thousands of years to shape and form Indigenous land and food systems. Consisting of a multitude of natural communities, Indigenous food systems include all of the land, air, water, soil and culturally important plant, animal and fungi species that have sustained Indigenous peoples over thousands of years. All parts of Indigenous food systems are inseparable and ideally function in healthy interdependent relationships.

Resilient food system⁵: A food system that has capacity to absorb disturbances by a crisis including natural disasters or epidemic diseases and to recover food security in subsequent periods of stability.

Regional Agriculture Strategy A regional agriculture strategy is a non-statutory plan that develops a shared vision, goals, and actions for supporting food and agriculture systems

³ de la Salle, J (2008). City of Edmonton Policy Set. Some sustainable food system characteristics drawn from: Pothukuchi, K. and Kaufman, J.L. (1999) Placing the Food System on the Urban Agenda. The Role of Municipal Institutions in Food Systems Planning.

⁴ Indigenous Food System Network. <https://www.indigenousfoodsystems.org>

⁵ Pingali, P., Alinovi, L., and Sutton, J. (2005). Food security in complex emergencies: enhancing food system resilience. *Disasters*, 29, 5-24.

amongst producers, the public, local government, and other key players within the Regional District. A Regional Agriculture Strategy focuses on a region's farm sector to discover practical solutions to challenges, identify opportunities to strengthen farming and ultimately contribute to agriculture and the community's long-term sustainability.

Governance in food and agriculture systems. There are many distinct and overlapping roles in planning for food and agriculture systems. This complex web is somewhat simplified by focusing food and agriculture plans within appropriate levels of jurisdiction. This helps to ensure a through-line to effective implementation. Often times, food and agriculture plans are developed at the local government level, including regional and municipal governments. However, there are many other roles that can become an important part in plan creation and implementation. These roles are briefly described below.

Federal and Provincial Levels of Government. The federal government has jurisdiction over trade agreements, health inspection and food regulation, among other things. The activities of Agriculture and Agri-food Canada: *range from the farmer to the consumer, from the farm to global markets, through all phases of producing, processing and marketing of farm, food and bio-based products.*

The Provincial Government in BC also has jurisdiction on regulating farming and passes legislation that regulates land use in the Agricultural Land Reserve. The Province of BC is also involved with economic development initiatives.

Indigenous Government: Indigenous Governments and communities create rules and regulations for land use and community development, which can include food and agriculture. Community food security and food sovereignty plans can also contribute to governance in food and agriculture systems.

Health Authorities. There are six Health Authorities in BC. Increasingly, Medical Health Officers are engaging in community planning exercises like creating Official Community Plans, which can support food and agriculture system planning. Community nutritionists are also working with communities on increasing community food security through creating plans and supporting programs.

Community Sector, Schools, and Post-Secondary Institutions. Volunteers and staff in the community and non-profit sector are critical partners in developing and implementing food system plans. Schools and post-secondary institutions can also be part of providing food system education in the classroom and program development.

Industry Associations and Business Sector. There are many industry associations and business sector interest groups that are also a key part of creating and implementing food system plans. The BC Cattleman's Association, the Small-Scale Processors Association, Business Improvement Associations, Community Futures, Chamber of Commerce and Economic Development agencies are all examples of resources and stakeholders in food and agriculture system planning.

Local Government. Often local governments will be the primary facilitator for and lead on food and agriculture system planning processes. Legally, Agriculture Plans are non-statutory and considered at the same level as a Local Area Plan in the Local Government Act. Food and agriculture systems can also be addressed in statutory plans like Official Community Plans and Zoning Bylaws. While local governments have many ways to increase community food security and interact with many dimensions of the food system, they are limited in their ability to directly address some of the core drivers of household and community food insecurity such as poverty, climate change, macro-economics, and supply chain issues. In areas that are outside of the jurisdiction of local government, advocating on behalf of producers and others in the food and agriculture sectors is an important role for local government.



Regional District of Fraser Fort George Regional Agriculture Strategy Foundations Report | Summer 2022

Prepared for:
Regional District of Fraser Fort-George



Prepared by:
Urban Food Strategies
In association with Upland Agricultural Consulting



Project Acknowledgements

The RDFFG respectfully acknowledges this project is taking place on the traditional territories of the Lheidli T'enneh, McLeod Lake Indian Band, and the Simpcw First Nation.

The Regional District extends from the Rocky Mountains in the East to beyond the Fraser River in the West, covering a land mass of over 50,500 km². Approximately 100,000 residents call the region their home. It encompasses four municipalities – the City of Prince George (Prince George), the District of Mackenzie (Mackenzie), the Village of McBride (McBride), the Village of Valemount (Valemount) – and seven electoral areas – Electoral Areas A, C, D, E, F, G, and H.

Regional Agriculture Strategy Working Group Members

Agricultural Land Commission	Michael McBurnie
District 'C' Farmers' Institute	Michelle Miller
Eaglet Lake Farmers' Institute	Catherine Kendell
Everyone at the Table	Alex Rowan
McBride Farmers' Institute	Mark Roth
Ministry of Agriculture, Food, and Fisheries	Karen Tabe
Punchaw Cattlemen's Association	Lynn Poole
Robson Valley Beekeepers Association	Lyn Smith
University of Northern BC	Serena Black
Downtown PG (Food Retail Association)	Warren Sunstrum
Local Food PG	Del Meyers
Community Futures	Shona Thorne

Project team

RDFFG Staff Team

Kenna Jonkman, General Manager of Development Services and Heather Meier, Planning Leader

Consulting Team

Urban Food Strategies: Janine de la Salle, Principal and Julie Bull, Planning Assistant

In association with

Upland Agricultural Consulting: Ione Smith, Principal, Kazlyn Bonnor, Agrologist, and Sydney Hnatiuk, Agroecologist And Debbie Evans, Agrologist

Funding Partners

The RDFFG Regional Agriculture Strategy was funded in part by Agriculture and Agri-Food Canada and the Government of British Columbia through programs delivered by the Investment Agriculture Foundation of BC.

DELIVERED BY:

FUNDING PROVIDED BY:



Acronyms

ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
ALUI	Agricultural Land Use Inventory
BCA	BC Assessment
BCCA	BC Cattlemen’s Association
CFFFG	Community Futures Fraser Fort George
CSA	Community Supported Agriculture
EFP	Environmental Farm Plan
IAF	Investment Agriculture Foundation
MAF	BC Ministry of Agriculture and Food
NDIT	Northern Development Initiatives Trust
OCP	Official Community Plan
RAS	Regional Agriculture Strategy
RDFFG	Regional District of Fraser Fort George
UNBC	University of Northern British Columbia

Executive Summary

Background

Agriculture in the Regional District of Fraser Fort George (RDFFG) has played an important role throughout its history. What initially began as primarily hay farms today has expanded into a diverse range of food and agriculture activities ranging from ranching and horticulture to apiaries and well-established agricultural support networks. Although agriculture is a strong and active industry within the region, many challenges and opportunities exist across the food and agriculture sector. By creating a Regional Agriculture Strategy (RAS) that addresses agricultural challenges and opportunities within the jurisdiction of local government, the RDFFG is better positioned to be an agriculture sector partner and work collaboratively to support a resilient and diverse agriculture community and economy.

The results of this report will be used to develop the RDFFG's first-ever Regional Agriculture Strategy (RAS). The RAS will work to strengthen and grow the food and agriculture sector in all seven electoral areas within the RDFFG.

Objectives

The key objectives guiding the RAS development process are to:

- 1) Engage the agricultural community, external organizations, local governments and provincial agencies to in identifying a vision, goals, recommendations, and implementation actions that will strengthen and support the agriculture sector.
- 2) Connect with Indigenous governments to understand the regional Indigenous history surrounding agriculture, and to identify potential opportunities for strengthening relationships through meaningful partnerships.
- 3) Encourage collaboration between the Regional District and the agriculture community, industry associations, member municipalities external organizations and provincial agencies to advance agriculture in the region.
- 4) Develop an implementation plan that contributes to the long-term environmental, social, and economic sustainability of agriculture within the region.

Content of the Foundations Report

This Foundations Report provides key background and context for the development of strategies, actions and policy directions in the RAS. Information in this report includes six sections:

Section 1: Introduction provides key process information and rationale for developing the RAS.

Section 2: Agriculture in the RDFFG presents a profile of agriculture in the region and examines climate and biophysical conditions in the RDFFG for agriculture as well as key characteristics of the industry based on the 2021 Census of Agriculture.

Section 3: Agriculture Bylaw Review and Best Practices provides an assessment of the Official Community Plans (OCPs) in the Electoral areas and Member Municipalities in the RDFFG to determine areas that may need attention or updating. A set of best practices on modernizing how agriculture is represented in land use and other plans is also offered.

Section 4: Market Opportunities in the Region summarizes market research work conducted to date and highlights potential market development strategies.

Section 5: Engagement Findings summarizes results from input provided through one-on-one interviews, group workshops, on-line form feedback, and RAS Working Group input.

Section 6: Strengths, Opportunities, Aspirations, Results for the RAS, distills the information presented in previous sections to identify key directions for the Strategy.

Key findings based on research and engagement

A SOAR (Strengths, Opportunities Aspirations, and Results) assessment of themes from the agriculture profile, bylaw review, market research review, and engagement with key players outlines key information and perspective that will be used in the development of the RAS.

Strengths: What we are great at?

- Farming, ranching, and appreciating regional food
- Knowing our natural environment
- Working together

Opportunities: What are the possibilities?

- Policy and planning
- Expand agriculture supports
- Expand education and awareness around regional food
- Develop regional branding and marketing of regional agriculture goods and services
- Further explore potential market opportunities

Aspirations: What are our dreams and wishes?

- To grow the regional food and agriculture sector
- To make sure farms can prosper and be competitive on a level playing field
- To expand innovation, learning, and knowledge exchange/transfer
- To ensure policy and planning frameworks continue to support food and agriculture
- To become more self-reliant and resilient to environmental and market changes

Results: What are Meaningful Outcomes?

- The region is more food secure and self-sufficient

- Agriculture and food are well represented in local plans and bylaws
- The region is prepared for responding to emergencies
- There is growth and stability in the agriculture sector
- There is strong political support for agriculture industry
- There is biodiversity harmony between agriculture and the environment

Table of Contents

1. Introduction.....	1
Background	1
Why Create an RAS?	1
RAS Objectives.....	1
Project Timeline	2
How to use the Foundations Report.....	2
2. Agriculture in the RDFFG.....	3
Agricultural Profile Methodology	3
Indigenous History of Food and Farming in the Region	5
Settler History of Farming in the Region.....	5
Agricultural Land.....	7
Biophysical and Environmental Context.....	17
Agricultural Capability.....	18
Invasive Plants and Noxious Weeds.....	23
Climate Change and Related Impacts on Agriculture	24
Natural Hazards	28
Emergency Preparedness and Response	29
Agricultural Support Services	30
3. Agriculture Bylaw Review and Best Practices	42
Policy Assessment Tool.....	42
Summary of Official Community Plan Review	43
Best Practices for Modernizing Local Government Agriculture Bylaws.	44
4. Review of Market Research in the Region	51
Beyond the Market	51
The Rural Businesses Expanding Success (2017-2020)	53
Supporting Northern BC's agriculture producers and food/beverage processors (2018)	54
Robson Valley Agricultural Market Opportunities Analysis (2020-2021)	54
Robson Valley Agriculture Expansion (2020-2023).....	55
5. Engagement Findings.....	56
Producers and Non-Producers Participated	56
Implementation Partnerships with Indigenous Governments is an Area to Continue Exploring.....	57
People are Aware that the Environment and Climate are Changing	57
Labour Shortages Limit Opportunities for Regional Agriculture.....	58

More is Needed to Increase Capacity in Livestock & Poultry Processing.....	58
Input Costs are Rising	59
People Wish to Have More Regional Resiliency and Independence from Global Supply Chains.....	59
There is a Connection Between Reconciliation and Indigenous Food Systems	60
Innovation and Technology Could Provide New Opportunities in the Region, but should be Approached with Caution	60
There is a Need for Regional Value Added Processing Infrastructure	61
Building Knowledge and Community is Key to the Success of the Sector.....	62
Urban Agriculture Helps to Connect People to the Value of Farming	62
Other Perspectives & Ideas	62
6. Strengths, Opportunities, Aspirations, Results	64
Strengths: What we are Great at?	64
Opportunities: What are the Possibilities?.....	64
Aspirations: What are our Dreams and Wishes?	66
Results: What are Meaningful Outcomes?	67
Appendix 1: Agriculture projects led by Community Futures of Fraser Fort George	68
Appendix 2: Local Government Bylaw Review- Detailed Tables	71

Table of Figures

Figure 1: RAS Study Area.....	4
Figure 2: Agricultural Land Reserve (green) in the Regional District of Fraser-Fort George.....	7
Figure 3: Distribution of parcel sizes and parcel categories as quantified by the 2017 ALUI.....	8
Figure 4: Example of the Agricultural Capability map around Prince George. (Source: BC Soil Information Finder Tool).	20
Figure 5: Example of BC Agricultural Capability map along the Robson Valley. (Source: BC Soil Information Finder Tool).	20
Figure 6: Example of a soil map around Prince George. (Source: Canada Soil Survey).....	21
Figure 7: Major watersheds along the Fraser River. (Source: Fraser Basin Council)	22

Table of Tables

Table 1: Agricultural land use in RDFFG. (Source: Census of Agriculture).	8
Table 2: Farm size in RDFFG. (Source: Census of Agriculture).....	9
Table 3: Select types of farms in RDFFG. (Source: Census of Agriculture)	10
Table 4: Animal Trends in RDFFG (Source: Census of Agriculture)	10
Table 5: Most common crops in RDFFG. (Source: Census of Agriculture).....	11
Table 6: Details of specific crops and livestock grown on farms in each Electoral Area in the RDFFG that reported agricultural activities in the 2021 Census of Agriculture.	12
Table 7: Soil practices in RDFFG (Source: Census of Agriculture)	13
Table 8: Agricultural inputs in RDFFG (Source: Census of Agriculture)	13
Table 9: Labour types in RDFFG (Source: Census of Agriculture)	14
Table 10: Farm demographics in RDFFG (Source: Census of Agriculture).....	14
Table 11: Farm demographics in RDFFG (Source: Census of Agriculture).....	15
Table 12: Farms categorized by total capital in RDFFG (Source: Census of Agriculture).....	15
Table 13: Total farm revenues in RDFFG (Source: Census of Agriculture)	16
Table 14: Revenue per hectare of farmland in RDFFG (Source: Census of Agriculture).	16
Table 15: Gross Margin of Farm Operations in RDFFG (Source: Census of Agriculture)	17
Table 16: Weather averages between 1999-2019 for Communities in RDFFG (Source:Climate-data.org)	17
Table 17: Plant Hardiness Zones of RDFFG. (Source: Environment Canada)	18
Table 18: Climate Projections for the Fraser Fort George in the 2020s, 2050s, and 2080s (PCICS, 2014).....	25
Table 19: Potential agricultural impacts of climate change in RDFFG. (Source: Climate and Agriculture Initiative BC).	26
Table 20: Meat processing licenses in RDFFG. (Source. Abattoir Licenses Map in BC)	32
Table 21: Producers in the RDFFG selling direct to consumers. (Source: Census of Agriculture, 2021).....	33
Table 22: Summary of farmers market in and around Fraser Fort- George Region.	34

1. Introduction

Background

The Regional District of Fraser Fort George (RDFFG) is creating its first-ever Regional Agriculture Strategy (RAS). The RAS will guide and support agriculture and farming for all seven electoral areas within the RDFFG. The RAS will provide a 20-year plan with priorities identified for the first 5-10 years to strengthen and grow the food and agriculture sector in the region. Urban and Regional Food Strategies, in association with Upland Agricultural Consulting, have been contracted to support the RDFFG in developing the RAS. The RDFFG and project team worked closely with the RAS Working Group which comprises of agricultural industry associations, producers, and other entities that work with farmers and farming in the region.

Why Create an RAS?

With factors such as increased climate variability associated with global warming, global disruptions to value-chains, and the knowledge of experienced farmers not being passed-on, among other factors, there is more reason than ever to create a long- range plan for how to strengthen and create resiliency in the interest and investment in local food and agriculture products within BC. There are new and emerging market opportunities for farmers in the region that the RDFFG can become a sector partner in.

Agriculture strategies also help to identify tangible actions for local governments to take for supporting farmers and farming for generations to come.

RAS Objectives

There are four objectives for the Foundations Report:

- 1) Engage with the Regional Agriculture Working Group to identify a vision and actions to strengthen and support the agriculture sector.
- 2) Engage with Indigenous governments.
- 3) Engage the agricultural sector, external organizations and provincial agencies to determine opportunities to advance agriculture in the Region.
- 4) Develop recommendations that contribute to the long-term environmental, social, and economic sustainability of agriculture within the Region.

The RDFFG is situated on the traditional territories of:

Lheidli T'enneh First Nation, Simpcw First Nation, and McLeod Lake Indian Band

Electoral Areas and Member Municipalities in the RDFFG

Electoral Area A
Salmon River-Lakes

Electoral Area C
Chilako River-Nechako

Electoral Area D
Tabor Lake-Stone Creek

Electoral Area E
Woodpecker-Hixon

Electoral Area F
Willow River-Upper Fraser Valley

Electoral Area G
Crooked River-Parsnip

Electoral Area H
Robson Valley-Canoe

City of Prince George

District of Mackenzie

Village of McBride

Village of Valemount

Project Timeline

This project breaks-out into three main phases resulting in the preparation of the RDFFG RAS by the end of 2022. The process moves through conducting research, engaging key players in identifying issues and opportunities for agriculture in the region, and bringing research and engagement findings into preparing and finalizing the RAS.



How to use the Foundations Report

This report is intended to provide a robust factual basis for developing recommendations in the RAS as part of next steps. The information used for this report includes technical information from government sources, policies, plans and strategies prepared by economic development organizations, post-secondary institutions, and not for profits, as well as engagement outcomes from interviews and workshops conducted as part of the RAS.

Section 1: Introduction provides key process information and rationale for developing the RAS.

Section 2: Agriculture in the RDFFG presents a profile of agriculture in the region and examines climate and biophysical conditions in the RDFFG for agriculture as well as key characteristics of the industry based on the 2021 Census of Agriculture.

Section 3: Agriculture Bylaw Review and Best Practices provides an assessment of the Official Community Plans (OCPs) in the Electoral areas and Member Municipalities in the RDFFG to determine areas that may need attention or updating. A set of best practices on modernizing how agriculture is represented in land use and other plans is also offered.

Section 4: Market Opportunities in the Region summarizes market research work conducted to date and highlights potential market development strategies.

Section 5: Engagement Findings summarizes results from input provided through one-on-one interviews, group workshops, on-line form feedback, and RAS Working Group input.

Section 6: Strengths, Opportunities, Aspirations, Results for the RAS, distills the information presented in previous sections to identify key directions for the Strategy.

2. Agriculture in the RDFFG

This section provides an overview of the agriculture sector within the RDFFG. A variety of data sources were used to compile the information, and trends over time are described where possible.

Agricultural Profile Methodology

This agricultural profile was compiled using existing reports and data sets. The main sources of data regarding agricultural activities were the 2017 Agricultural Land Use Inventory (ALUI), the Census of Agriculture (2011, 2016, 2021), and 2021 BC Assessment Farm Tax classification data. There are some clear differences in the way that these data sets are compiled, which can lead to discrepancies when some indicators are compared. Whenever possible, these differences are explained. For example, if five acres of apple trees are noted on the parcel during the ALUI then this contributes to the acreage listed as apple orchard production, even if the apples may not be sold and/or otherwise be brought into the local food system. By contrast, the Census of Agriculture includes data on farms that are self-reported by individuals, specifically those from commercial operations. This is one example of how the data sets can lead to differences in results.

Agriculture Land Use Inventory (ALUI)

In 2006, BC Ministry of Agriculture and Food (MAF) completed an ALUI for Electoral Areas A, D, and F and in 2017 completed an ALUI for Electoral Area A. Each parcel was examined using MAF's standard AgFocus system for ALUI, which primarily involves a windshield survey coupled with publicly-available satellite data, such as Google Earth. The ALUI data is helpful in determining the type and scale of agricultural activities, and what proportion of the ALR is available for farming, however, it is representative of a snapshot in time only. Despite the intention of MAF to repeat ALUIs every five years it can be much longer than that before they are revisited; therefore it is difficult to explore trends with this dataset. One benefit of undertaking an ALUI is that the information can be entered into MAF's modelling for Agricultural Water Demand Model. This exercise assists in determining whether or not a future dry or wet weather year will significantly affect crop and livestock yields under different build-out scenarios.

Census of Agriculture

The Census of Agriculture collects information from self-reporting individuals every five years as part of the larger Statistics Canada census collection, and the completion is mandatory under the Federal *Statistics Act*. The Census of Agriculture is a federal data collection initiative, and as such, the geographic resolution is coarser than that of the ALUI. This is another reason for some discrepancies found in the datasets. The latest available Census of Agriculture uses 2021 data from Statistics Canada for Census Division (CD) 53 – Fraser-Fort George.¹ The

¹ Statistics Canada. 2016. Census of Agriculture

boundaries for Census Division 53 cover the entire Fraser-Fort George Regional District with several subdivisions for the Electoral Areas and Municipalities.

The Census of Agriculture defines the term “agricultural operator” as a person responsible for the management and/or financial decisions made in the production of agricultural commodities². In the 2011 and 2016 agricultural census³, an “agricultural operation” was defined as any farm that grows or produces agricultural products with the intent to sell these products. In the 2021 agriculture Census “agricultural operation” was replaced by “agricultural holding” and is now defined as “a unit that produces agricultural products and reports revenues or expenses for tax purposes to the Canada Revenue Agency” The new definition removes ambiguity in the definition of a farm, focusing on business oriented agricultural operations. This change affects the comparability of farm counts and related statistical data from previous census years³.

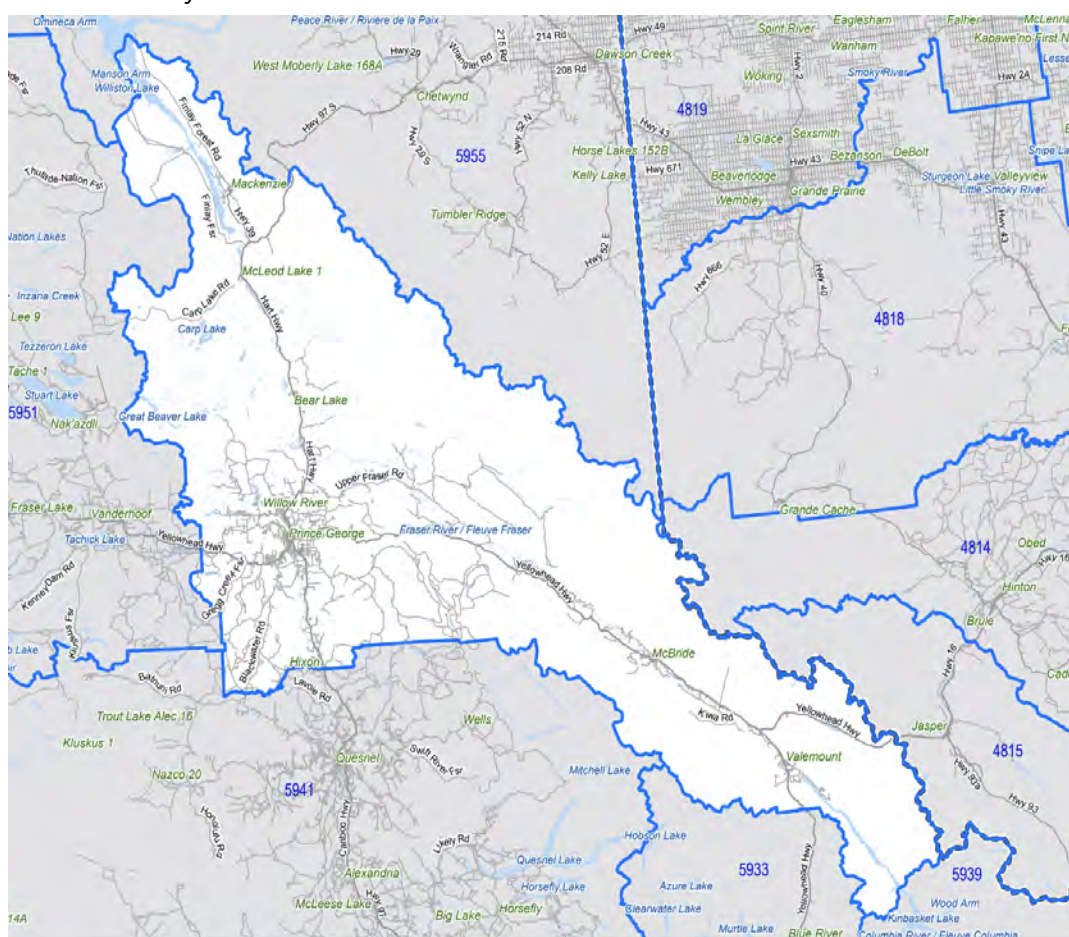


Figure 1: RAS Study Area

² Statistics Canada. 2020. Frequently Asked Questions.

³ The Western Producer. [Stats Can changes “Farm” definition](#). April 2022.

BC Assessment Farm Class Data

The *Assessment Act* is administered by BC Assessment (BCA), a provincial Crown Corporation responsible for the classification of properties for tax purposes. Farm classification for a portion of the property in farm use provides the benefit of a lowered tax rate for assessed properties.

Even though property may be zoned as agricultural land, or located in the ALR, farm classification will only be granted if the land (or at least a portion of it) is being actively used for agricultural production and it meets the other requirements of the *Assessment Act*. Only land can be classified as farmland - buildings (residences and outbuildings) are classified separately. Farm tax status properties may or may not be located within the ALR and are valuable for noting the distribution of farmed land in both the urban and rural areas. A certain minimum amount of gross income must be produced from primary agricultural production in order to qualify for farm tax status, and these requirements vary depending on the total land area. Minimum gross annual revenue requirements are calculated as follows:

- a) \$10,000 on land less than 0.8 ha;
- b) \$2,500 on land between 0.8 ha and 4 ha; and
- c) On land larger than 4 ha, you must earn \$2,500 plus 5% of the agricultural value of any farmland in excess of 4 ha. This agricultural value is determined by BCA and not through market real estate valuations.

Indigenous History of Food and Farming in the Region

At this time, there is no fulsome historical description of Indigenous food systems in the region that is ready to include in this report. This will require exploring education and awareness opportunities with the Lheidli T'enneh First Nation, McLeod Lake Indian Band and Simpcw First Nation. Through the process of compiling the Foundations Report and developing the Regional Agriculture Strategy, further discussions are needed to explore education and awareness opportunities, as well as, opportunities to strengthen relationships through meaningful partnerships have been made.

Settler History of Farming in the Region

In Fraser Fort-George, agriculture and forestry have a closely linked history. Agricultural production in the Fraser Fort-George area was stimulated during the early 1900s with the introduction of the Pacific Railway construction⁴. During this period, hay prices were inflated and many railroad laborers, such as tie makers and lumberers, left their positions to clear small acreage and produce hay⁵. These new landholders did not necessarily intend to become

⁴ The BC Department of Agriculture. [Soil Survey of the Prince George Area British Columbia](#). March 1946.

⁵ Ibid.

farmers, but rather, took advantage of the booming hay market. Landowners continued a mixed production of agriculture and lumber production on farm sites.⁶

With a lack of anticipated population development from the railroad construction in the McBride area, and thus a lack of market for crops, other farmers returned to the lumber industry⁷.

In 1920, for the remaining farmers, the government intervened and supported farmers institutions for dairy distribution to create an organized, and reliable delivery service to the region.⁸ Yet, a lack of sufficient markets and cash crop suitability remained an obstacle to agricultural expansion.⁹

During the Great Depression in the 1930s, landholders needed an influx of funding, so more land was cleared to provide more agricultural production.¹⁰ Agricultural land and tenancy were further supported by World War II as farmers were contracted to tie making which supplemented a weak agricultural market and allowed landowners to remain on their land.¹¹¹²

Later in the 1950s, the Robson Valley farmers provided most of the province with potatoes. The bunkers used to store them for shipping by rail are still visible today.

Statistics Canada, Census of Agriculture information indicates that through the mid-1980's into the early 2000's farming done in the RDFFG was predominately cattle with the other main commodities being field crops, small grains, pigs, poultry and dairy. Additional commodities that were reported over this time period include wheat, vegetables, fruit and miscellaneous specialties.

Farming trends from 2011 onward for the region are further detailed in this report.

Dairy Farming in the Robson Valley History

Throughout BC, in the early period of the development of the BC dairy industry, transportation of milk over great distances was difficult. In populated areas, creameries were established to process milk from local farms. In later years, creameries disappeared to be replaced by milk processing plants located in more populated southern regions of the province. The McBride area had dairy farms until just over 30 years ago, when transportation costs were not shared provincially. The remote producers bore the brunt of unrealistic milk transportation costs that resulted in dairy farming in the Robson Valley being unprofitable.

⁶ Ibid.

⁷ Canada Department of Agriculture. [Soils of the Upper Part of the Fraser Valley](#). 1970.

⁸ The BC Department of Agriculture. [Soil Survey of the Prince George Area British Columbia](#). March 1946.

⁹ Canada Department of Agriculture. [Soils of the Upper Part of the Fraser Valley](#). 1970.

¹⁰ The BC Department of Agriculture. [Soil Survey of the Prince George Area British Columbia](#). March 1946.

¹¹ Ibid.

¹² Canada Department of Agriculture. [Soils of the Upper Part of the Fraser Valley](#). 1970.

Agricultural Land

There are about 390,000 hectares of ALR in the RDFFG.¹³ The majority of agricultural land is located around Prince George and east along Highway 16 into the Robson Valley (Figure 2).

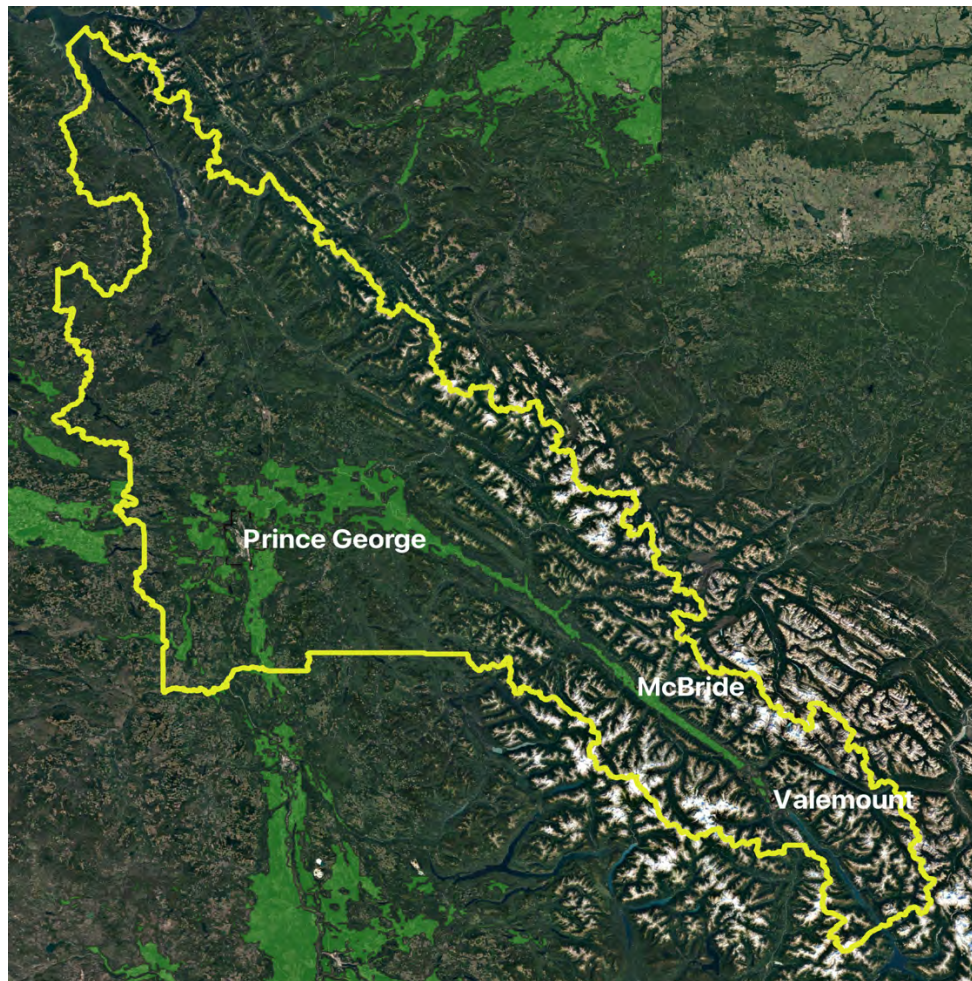


Figure 2: Agricultural Land Reserve (green) in the Regional District of Fraser-Fort George

The 2017 ALUI surveyed 55,700 hectares of agricultural land in Electoral Area A and found that around 9,000 Ha are actively farmed.¹⁴ According to the Census of Agriculture, the regional total area of active farmland in 2021 was approximately 51,900 hectares, with natural pasture being the most common land use accounting for 40% of actively farmed land (Table 1). Cropland represents 27% of agricultural land in use, while woodlands and wetlands account for an additional 18% of farmland use. One farm can report multiple land uses.

¹³ BC Ministry of Agriculture and Food. [Agriculture in Brief, Regional District of Fraser-Fort George](#). 2016.

¹⁴ BC Ministry of Agriculture and Food. Regional District of Fraser-Fort George ALUI. 2017.

Table 1: Agricultural land use in RDFFG. (Source: Census of Agriculture).

	2011		2016		2021	
Land Use	# of farms	Ha (%)	# of farms	Ha (%)	# of farms	Ha (%)
Natural pasture	336	35,599 40%	310	39,229 45%	248	25,731 41%
Cropland	442	24,960 28%	382	21,933 25%	337	17,104 27%
Woodlands and wetlands	305	15,888 18%	276	14,594 17%	223	11,456 18%
Tame or seeded pasture	255	13,185 15%	200	11,030 13%	175	9,005 14%
Total	558	89,756	492	86,847	456	63,355

The 2021 BCA data indicates that there is approximately 40,000 ha of land with active Farm Class status in the RDFFG, with 3,800 ha located outside of the ALR. The discrepancies in the hectares of land considered to be agriculturally active between the three data sources, point to the different methods used by each entity when quantifying active agricultural lands.

The results from the 2017 ALUI found a high number of parcels with large areas of land available for farming (Figure 3). These ‘available for farming’ parcels provide an initial selection of parcels that may be available for agricultural expansion. However, it is important to consider that these lands may include forests, wetlands or other natural features, and that land prices and ecological goods and services are not considered when assessing parcel availability.¹⁵

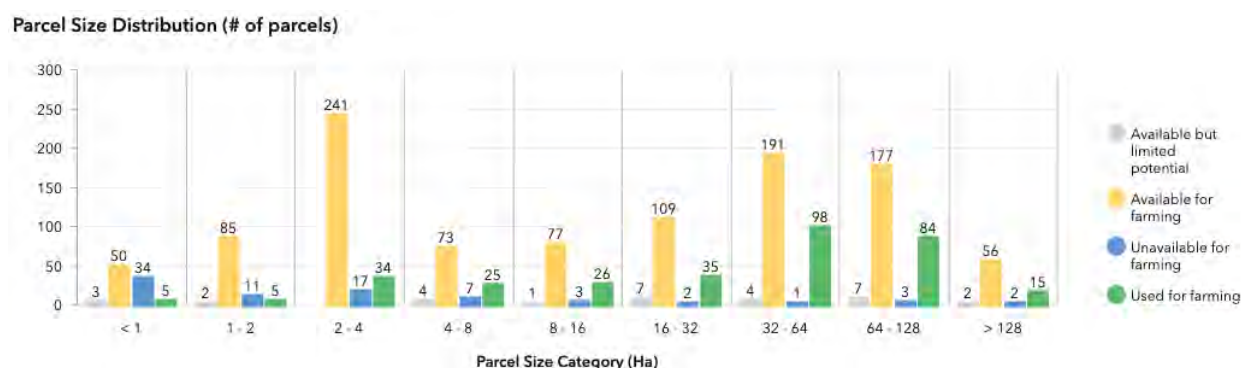


Figure 3: Distribution of parcel sizes and parcel categories as quantified by the 2017 ALUI.

¹⁵ BC Ministry of Agriculture and Food. Regional District of Fraser-Fort George ALUI. 2017.

Farm Characteristics

Number of Farms and Farmed Parcels

According to the Census of Agriculture, the number of commercial farm operations decreased from 492 in 2016 to 456 in 2021. This difference may be partly accounted for by the change in quantifying 'farms' for the 2021 Census, which only includes farms that will be reporting revenues and expenses to the Canada Revenue Agency (CRA). In 2016, a farm was considered any operation that intended to sell an agricultural product, but not necessarily report revenues and expenses to the CRA. The 2021 BCA roll data, which includes self-reported commercial farms inside and outside the ALR, lists 875 parcels as having Farm Class tax status. Many of these farms include multiple parcels with Farm Class tax status.

Size and Types of Farms

The land in the region supports a wide diversity of farms and ranches ranging from under 4 hectares to over 450 hectares (Table 2). Though most farms in RDFFG remain on the small side, with about 45% of farms being under 53 hectares, and only 24.5% of farms are over 160 hectares.

Table 2: Farm size in RDFFG. (Source: Census of Agriculture)

	2011	% of Farms	2016	% of Farms	2021	% of Farms
Total Number of Farms	558	100%	492	100%	456	100%
Under 4 ha	32	5.5%	48	10%	71	15.5%
4 - 27 ha	107	19%	86	17.5%	88	19.5%
28 - 52 ha	64	11.5%	51	10.5%	45	10%
53 - 72 ha	99	18%	78	16%	74	16%
73 - 96 ha	27	5%	31	6%	20	4.5%
97 - 161 ha	81	14.5%	61	12.5%	45	10%
162 - 226 ha	40	7%	37	7.5%	30	6.5%
227 - 307 ha	24	4.5%	24	5%	20	4.5%
308 - 452 ha	36	6%	31	6%	24	5%
453 ha and over	48	9%	45	9%	39	8.5%

Census data indicates that the most common types of farm operations in the region are beef cattle and hay operations, although horse and equine operations are also quite common (Table 3). The results from the 2017 ALUI indicate that horse farms and cattle farms are the top livestock in Electoral Area A.¹⁶ Sheep, goats and chicken egg production are notable, as well as a small number of vegetable and fruit producers. Between 2011 and 2021, the number of farms

¹⁶ BC Ministry of Agriculture and Food. Regional District of Fraser-Fort George ALUI. 2017.

with horses and the number of dairy operations decreased while the number of egg production, hog, sheep and goat, and fruit and tree nut operations all increased.

Table 3: Select types of farms in RDFFG. (Source: Census of Agriculture)

	2011	2016	2021	Change 2011- 2021
Total Farms	558	492	456	-102
Beef cattle ranching	98	112	100	+2
Dairy cattle	4	7	6	+2
Hog and pig farming	1	5	9	+8
Horse and equine	84	62	45	-39
Sheep and goat	14	8	20	+6
Chicken egg production	5	9	18	+13
Nursery tree	14	8	9	-5
Floriculture	4	4	0	-4
Vegetable and melon	13	22	16	+3
Dairy cattle	7	2	6	-1
Apiary (honey bees)	4	10	6	+2
Fruit and tree nut	3	3	10	+7
Hay	223	155	151	-72

A closer look at livestock trends in RDFFG between 2011 and 2021 shows almost all farms with animals, including the number of animals increased in 2016, and then decreased by 2021 (Table 4). The greatest decrease is horse farms and hay farms (Table 3) – likely due to the change in the definition of farms as these two farm types often utilize under the table financial systems, cash only, bartering and trading – particularly the smaller farms.

This could be due to the change in the 2021 Census definition of a ‘farm’. The average poultry flock size in 2016 was under 100, indicating that the egg-laying operations are small-scale and are not requiring quotas.

Table 4: Animal Trends in RDFFG (Source: Census of Agriculture)

	2011			2016			2021		
Total Animals	# of Farms	# of Animals	Average per farm	# of farms	# of animals	Average per farm	# of Farms	# of Animals	Average per farm
Horses & Ponies	241	1,784	7.4	193	1,344	7	89	649	7.3
Cattle & calves	245	20,654	84.3	231	22,980	99.5	224	18,926	84.5

Bison	6	384	64	5	206	41	2	x	x
Hens & Chickens	105	6,328	60.2	143	6,867	48	133	x	x
Sheep & lambs	55	2,868	52	40	1,851	46	42	1,761	42
Pigs	23	113	5	47	335	7	32	384	12
Llamas & Alpacas	34	135	4	20	92	4.6	9	127	14
Goats	35	415	11.8	43	492	11.5	28	349	12.5

Of the crops produced in the region, tame hay and fodder and alfalfa mixtures for livestock feed are the most common, which aligns with cattle populations in the region, including beef and dairy operations. There has been an increase in the number of farms producing vegetables and fruits, berries and nuts but a decrease in total hectares, indicating a larger number of small farms growing in smaller areas (Table 5).

Table 5: Most common crops in RDFFG. (Source: Census of Agriculture)

Crops produced	2011		2016		2021		% Change 2011-2021
	# of farms	ha	# of farms	ha	# of farms	ha	% ha
Tame hay & fodder	338	17,195	264	14,323	244	12,788	-25%
Alfalfa & Alfalfa mixes	103	4,801	107	5,263	70	2,878	-40%
Oats	63	625	54	732	20	243	-61%
Field vegetables	23	22	39	28	35	21	-4%
Potatoes	17	15	22	17	15	18	+20%
Barley	38	789	27	785	19	483	-39%
Fruits, berries & nuts	16	19	19	13	35	x	x
Mixed grains	15	434	10	215	8	114	-73%
Wheat	9	277	6	23	4	x	x
Rye	6	226	10	174	1	x	x
X = no records or data							

In the RDFFG there are six electoral areas with farms reporting to the Census of Agriculture. There are no farms reporting from Electoral Area G. In all electoral areas, beef cattle ranching and hay farming are the most common agricultural activity (Table 6). Electoral Area C has by far the most farms in the region.

Table 6: Details of specific crops and livestock grown on farms in each Electoral Area in the RDFFG that reported agricultural activities in the 2021 Census of Agriculture.

	Electoral Areas					
	A	C	D	E	F	H
Total number of farms	78	15 7	78	17	3 5	91
CROPS						
Hay farming	31	52	27	6	7	28
Other vegetable (except potato) and melon farming	2	4	1	0	2	5
Fruit and tree nut farming	3	4	1	1	1	0
Nursery and tree production	1	4	2	0	0	2
Food crops grown under cover	2	3	2	0	1	1
All other miscellaneous crop farming	3	4	2	0	4	1
LIVESTOCK						
Beef cattle ranching and farming, including feedlots	11	40	14	6	7	22
Horse and other equine production	9	8	11	2	2	13
Dairy cattle and milk production	0	1	0	0	1	4
Hog and pig farming	1	4	3	0	1	0
Chicken egg production	0	6	5	1	4	2
Sheep & Goat farming	6	10	1	0	1	2
Apiculture	2	2	1	0	1	0
Animal combination farming	4	9	3	1	2	8

Farm and Water Practices

From 2011 to 2021, there was a decrease in soil management practices such as rotational grazing and plowing down green crops and an increase in windbreaks/shelterbelts (Table 7). This could be due to the change in the 2021 Census definition of a 'farm'. Agricultural inputs stayed relatively stable save for a significant increase in surface application of manures and compost (Table 8).

Table 7: Soil practices in RDFFG (Source: Census of Agriculture)

Soil Practice	Number of farms		
	2011	2016	2021
Rotational grazing	225	192	160
In-field winter grazing	130	141	135
Windbreaks or shelterbelts	186	219	258
Plowing down green crops	68	45	34
Winter cover crops	19	29	18

Table 8: Agricultural inputs in RDFFG (Source: Census of Agriculture)

Inputs	2011		2016		2021	
	# of Farms	ha	# of farms	ha	# of farms	ha
Commercial fertilizer	209	14,374	171	11,423	158	10,138
Manure or compost incorporated in soil	104	1,064	75	841	47	504
Manure or compost not incorporated in soil	52	631	65	1,074	46	1,938
Herbicides	58	951	39	1,165	47	981
Insecticides	10	26	4	6	3	x
X = no records or data						

Agricultural land in the region is irrigated by an abundant supply of water from rivers and streams as well as melting snowpack from the mountains. Irrigation is an uncommon practice in the region; in 2021, the Census reported that 931 ha of land were irrigated, up slightly from 849 hectares in 2016. The need for irrigation is only expected to increase with the impacts of climate change, including hotter, drier summers. The BC government provides an online database of groundwater and surface water licenses. For the Upper Fraser, McBride precincts, there are approximately 78 active surface water licences; 63 of them are for “Livestock and Animal: Stock watering”, and 15 are for “Irrigation.”¹⁷ There are approximately 34 active groundwater licences; 2 for “Irrigation”, 2 for “Greenhouse & Nursery”, and 30 “Livestock and Animal”.

Farm Labour and Succession

In terms of labour, in 2021, only 16 farms in RDFFG reported providing full-time work on a year-round basis, 12 reported year-round part-time work, and a total of 12 farms reported

¹⁷ BC Government. [Water Rights Databases](#). Accessed March 2022.

hiring part-time seasonal/temporary basis. The total number of farming jobs provided between all three levels of employment was 138, down significantly from 2016's total of 270 (Table 9). Again, this may be due to changes to the 'farm' definition in the 2021 Census.

Table 9: Labour types in RDFFG (Source: Census of Agriculture)

Labour Types	2016		2021	
	Farms reporting	Total employees	Farms reporting	Total employees
Year-round full time	21	79	16	30
Year-round part time	24	54	12	30
Seasonal/ Temporary	47	137	12	78
Family members	42	76	19	34

Despite the average age of RDFFG farmers being close to 60 (Table 10), only 29 of 456 farms (6%) reported having a written succession plan in place for their farm, according to the 2021 Census of Agriculture. Seventy-two farms have a verbal succession plan only.

Table 10: Farm demographics in RDFFG (Source: Census of Agriculture)

	2011	2016	2021	Change 2011-2021
Total number of operators	830	760	675	-155
Farms with one operator	295	230	245	-50
Operators on Farms with two or more operators	540	530	430	-110
Male operators	520	470	410	-110
Female operators	310	295	270	-40
Average age	56.5	56.7	58	+1.5
Farms with succession plans	x	21	29	+38%
X = no records or data				

Farmland Tenure

In 2021, more than 2/3 of agricultural land was owned, while almost all of the remaining land (28%) was being leased from government and private owners.¹⁸ The data for land leased from governments is not available from the 2021 Census. In 2016, land leased from governments was 25%, most likely for rangeland tenure on Crown land.

¹⁸ Approximation is due to incomplete data provided on the Agriculture Census.

Farm Profitability

Producers in the region must balance their income with costs for land, labour, chemical and fertilizer inputs and fuel. Farmers in most of BC have difficulty producing sufficient revenues to balance the costs of equipment, and other farm inputs (seeds, feed, soil amendments, etc.). Most farmers need to bolster farm revenues by having at least one family member work off the farm. Farm profitability is difficult to measure or estimate. The following proxies can be used:

- Farm capital and assets
- Average farm revenue per farm and per hectare
- Gross margin of farm operations

Farm Capital and Assets

Total farm capital in RDFFG has risen from \$443.4 million in 2011 to \$666.1 million in 2021 on fewer farms (Table 11). The trend in the past decade is seen in Table 12, where there is a decrease in farms with total capital below \$1,000,000 and an increase in farms with capital above that. This suggests that farms are gradually making investments in long-term assets such as infrastructure and equipment. The increase in farms with total capital over \$1,000,000 may be attributed to the rise in real estate value rather than investments in farm assets. Total farm capital includes land and buildings, livestock and poultry, farm machinery, and farm equipment.

Table 11: Farm demographics in RDFFG (Source: Census of Agriculture)

	2011 (million \$)	2016 (million \$)	2021 (million \$)
Total farm capital	443.4 (558 farms)	500.9 (492 farms)	666.1 (456 farms)
Land & buildings (owned)	299.7 (548 farms)	321.3 (479 farms)	404.9 (439 farms)
Machinery & equipment	55.8 (558 farms)	46.1 (492 farms)	56.8 (422 farms)
Livestock & poultry	17.3 (421 farms)	44.1 (338 farms)	30.9 (332 farms)

Table 12: Farms categorized by total capital in RDFFG (Source: Census of Agriculture)

Total Farm Capital (\$)	2011 # farms	2016 # farms	2021 # farms	% Change 2011- 2021
Under 100,000	6	10	7	+17%
100,000 - 199,999	42	26	11	-73%
200,000 - 349,999	114	83	38	-66%
350,000 - 499,999	123	89	48	-60%

Total Farm Capital (\$)	2011 # farms	2016 # farms	2021 # farms	% Change 2011- 2021
500,000 - 999,999	170	149	156	-8%
1,000,000 - 1,499,999	52	48	78	+50%
1,500,000 - 1,999,999	14	30	26	+85%
2,000,000 - 3,499,999	25	36	51	+104%
3,500,000 and up	12	21	41	+242%

Farm Revenues

Seventeen percent of farms in RDFFG are generating above \$50,000/year in revenues, while 73% of farms generate under \$50,000/year and 8% of RDFFG farms don't generate any farm revenue at all (Table 13). However, a higher proportion is bringing in higher levels of revenues compared to 10 years ago.

Table 13: Total farm revenues in RDFFG (Source: Census of Agriculture)

Total farm revenues distribution	2011 (558 farms)	2016 (492 farms)	2021 (456 farms)
\$0	x	x	36
Under \$10,000	272	233	184
\$10,000 - \$24,999	130	93	93
\$25,000 - \$49,999	75	58	54
\$50,000 - \$99,000	48	52	37
\$100,000 - \$249,999	20	35	35
\$250,000 - \$499,999	6	11	11
\$500,000 and above	7	10	6
X = no records or data			

The average farm revenue has been steadily dropping for the past decade (Table 14). There has been a slight increase in average revenue per hectare from 2016 to 2021.

Table 14: Revenue per hectare of farmland in RDFFG (Source: Census of Agriculture).

Year	# of Farms	Farm Revenues (\$)	Average Revenue per Farm (\$)	Total Land in Crops* (ha)	Average revenue per ha of Land in Crops (\$)
2011	558	39,014,029	69,917	73,868	528
2016	492	28,319,045	57,559	72,253	392
2021	456	21,460,565	47,062	51,899	413

*Total land in crops include: cropland, summer fallow, tame or seeded pasture, and natural pasture.

Gross Margin of Farm Operations

From 2016 to 2021, gross margin of farm operations dropped from 12% to -5% (Table 15). This means that in 2016 the average farmer in RDFFG was making \$0.13 in profit for every \$1 of sales on their operation, while today, farmers are losing an average of \$0.05 for every \$1 of sales.

Table 15: Gross Margin of Farm Operations in RDFFG (Source: Census of Agriculture)

Year	Gross farm receipts (\$)	Total operating expenses (\$)	Gross margin
2011	39,014,029	38,605,275	1.04%
2016	28,319,045	24,749,310	12.6%
2021	21,460,565	22,572,264	-5.18%

Biophysical and Environmental Context

Weather and Growing Conditions

The RDFFG is made up of extremely varied terrain from some of Canada's highest mountains in the east along the Alberta border, to the fertile landscape of the Robson Valley, which follows the Fraser River to the west. Due to this diverse topography, the climate in Fraser-Fort George varies significantly. Much of the region is characterized by the sub-boreal spruce biogeoclimatic zone, with hot summers and cold winters. While summers are short in such a northern region, they are warm and moist in RDFFG. The primary growing season is only a few months long¹⁹. The Robson Valley is characterized by the interior Cedar-Hemlock zone, largely irrigated by melting snowpack from the west, feeding a fertile landscape for agricultural production. Cold night temperatures and short seasons are the most significant agricultural limitations in the region. Most agricultural production happens in the Robson Valley, along the banks of the Fraser River and around Prince George, where land is relatively flat. A brief overview of weather norms is highlighted in Table 16.

Table 16: Weather averages between 1999-2019 for Communities in RDFFG (Source:Climate-data.org)

	Prince George		Valemount		McBride		Mackenzie	
Weather Indicator	Jan	July	Jan	July	Jan	July	Jan	July
Avg. Temp (°C)	-7.2	16.5	-10.2	13.8	-10.1	13.6	10.7	14.9
Precipitation/ Rainfall	58	55	102	128	108	132	79	78

¹⁹ Climate and Agriculture Initiative BC. [Regional Adaptation Strategies: Bulkley-Nechako & Fraser-Fort George](#). 2019.

Plant hardiness zones are identified by considering multiple climate factors which influence the ability of plants to grow within a region. While hardiness zones fail to capture micro-climates and the possibilities afforded by season extension infrastructure such as row covers and high tunnels, they do provide insight into the general productivity of a landscape. The hardiness zones of RDFFG range from 1b in the mountains to 5a²⁰ along the Fraser River, with the Robson Valley representing 4a-5a, offering opportunity for a wide diversity of plant production. As a product of climate change, plant hardiness zones have been shifting in recent decades, allowing for improved production capacities, in some cases. Anecdotally, hardiness zones have changed in the RDFFG, although hardiness zone data has not yet been updated to reflect climate change. A brief overview of horticultural zones is available in Table 17.

Table 17: Plant Hardiness Zones of RDFFG. (Source: Environment Canada)

Municipality	1961-1990	1981-2010
Prince George	4a	5a
McBride	4a	4b
Valemount	4b	5a
McLeod Lake	3b	4a

Agricultural Capability

Not all agricultural lands are created equal, and not all agricultural land is capable of, or suitable for, producing all agricultural products. For example, some agricultural land is more suitable for certain crops than others, and some land is best suited to pasture or grazing lands for livestock. BC's diverse agriculture industry needs all classes of land to thrive.

There are three main factors limiting agricultural capability in BC:²¹

1. Climate - the heat energy and moisture inputs available for agricultural production.
2. Soil variability - properties and characteristics affect the land's ability to sustain agricultural products.
3. Topography - can limit access and the ability to use cultivation equipment.

The decision to put a particular parcel into a particular form of agricultural production is not a sole reflection of its agricultural capability or suitability. Investments in inputs such as soil amendments, irrigation, drainage, and season extension infrastructure, can contribute to improving agricultural capability classifications. Agricultural business costs, physical accessibility and market changes may result in a certain parcel of land being used or left fallow and this may vary over time.

²⁰ Plant maps. [British Columbia Plant Hardiness Zone Map](#). Accessed February 2022.

²¹ Agricultural Land Commission. [Agricultural capability and the ALR](#). 2021.

The Canada Land Inventory (CLI), developed in the 1980s, uses agricultural capability rating, or classes, for soils in the ALR. There are seven classes²²:

- Class 1 land is capable of producing the very widest range of crops. Soil and climate conditions are optimum, resulting in easy management.
- Class 2 land is capable of producing a wide range of crops. Minor restrictions of soil or climate may reduce capability but pose no major difficulties in management.
- Class 3 land is capable of producing a fairly wide range of crops under good management practices. Soil and/or climate limitations are somewhat restrictive.
- Class 4 land is capable of a restricted range of crops. Soil and climate conditions require special management considerations.
- Class 5 land is capable of production of cultivated perennial forage crops and specially adapted crops. Soil and/or climate conditions severely limit capability.
- Class 6 land is important in its natural state as grazing land. These lands cannot be cultivated due to soil and/or climate limitations.
- Class 7 land has no capability for soil bound agriculture (e.g. bedrock, wetland).

Although Class 6 and 7 lands have limited capability for soil bound agriculture, they may be agriculturally productive where topography and climate allow, or they may comprise a small area of a larger parcel with better classification ratings. The following are not considered in the classification: distance to market, distribution, location, farm size, type of ownership, cultural patterns, skill or resources of individual operators, and hazard of crop damage by storms.

The diverse landscape of RDFFG may be challenging for some types of soil-based agriculture, with the highest agricultural capabilities limited to the Robson Valley and river valleys, particularly along the Fraser River, Nechacko River, Chilako River, and Big Lake area. Figures 4 and 5 provide a snapshot of the agricultural capability classes that have been mapped around Prince George and along the Robson Valley. There is a very small amount of Class 2 and 3 land (red areas), with most of the remaining agricultural land being classified as more “marginal” Class 4 and 5 lands.

²² Ministry of Agriculture and Food, Ministry of Environment. [Land Capability Classification for Agriculture in British Columbia](#). 1983.



Figure 4: Example of the Agricultural Capability map around Prince George. (Source: BC Soil Information Finder Tool).

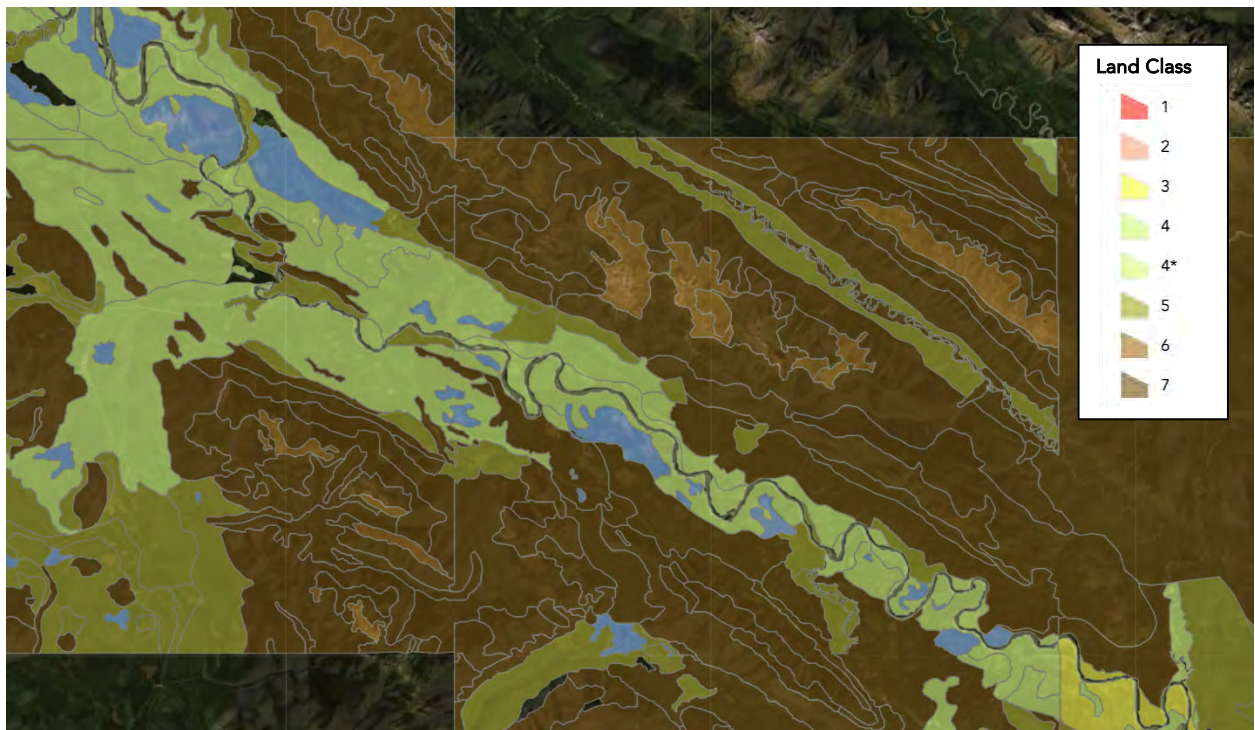


Figure 5: Example of BC Agricultural Capability map along the Robson Valley. (Source: BC Soil Information Finder Tool).

Soil

There are dozens of soil types within the RDEFG. In the 1980s, the Federal government conducted soil surveys across Omineca-Skeena, including Fraser-Fort George. These soil surveys provide detailed descriptions of soils and can be accessed through the [BC Soil Information Finder Tool](#), and the original reports are available [online](#). Broadly speaking, the soils most important for agricultural uses are found along the Robson Valley on the banks of the Fraser River, and around Prince George. Soils in the vicinity of Prince George include the Fraser Soil Complex, Giscome Gravelly Sandy Loam, Eena Loamy Sand, Eena Sandy Loam and Chilako Stony Soil Complex (Figure 6). The river bench soils along the Fraser River are sandy or silty loams.

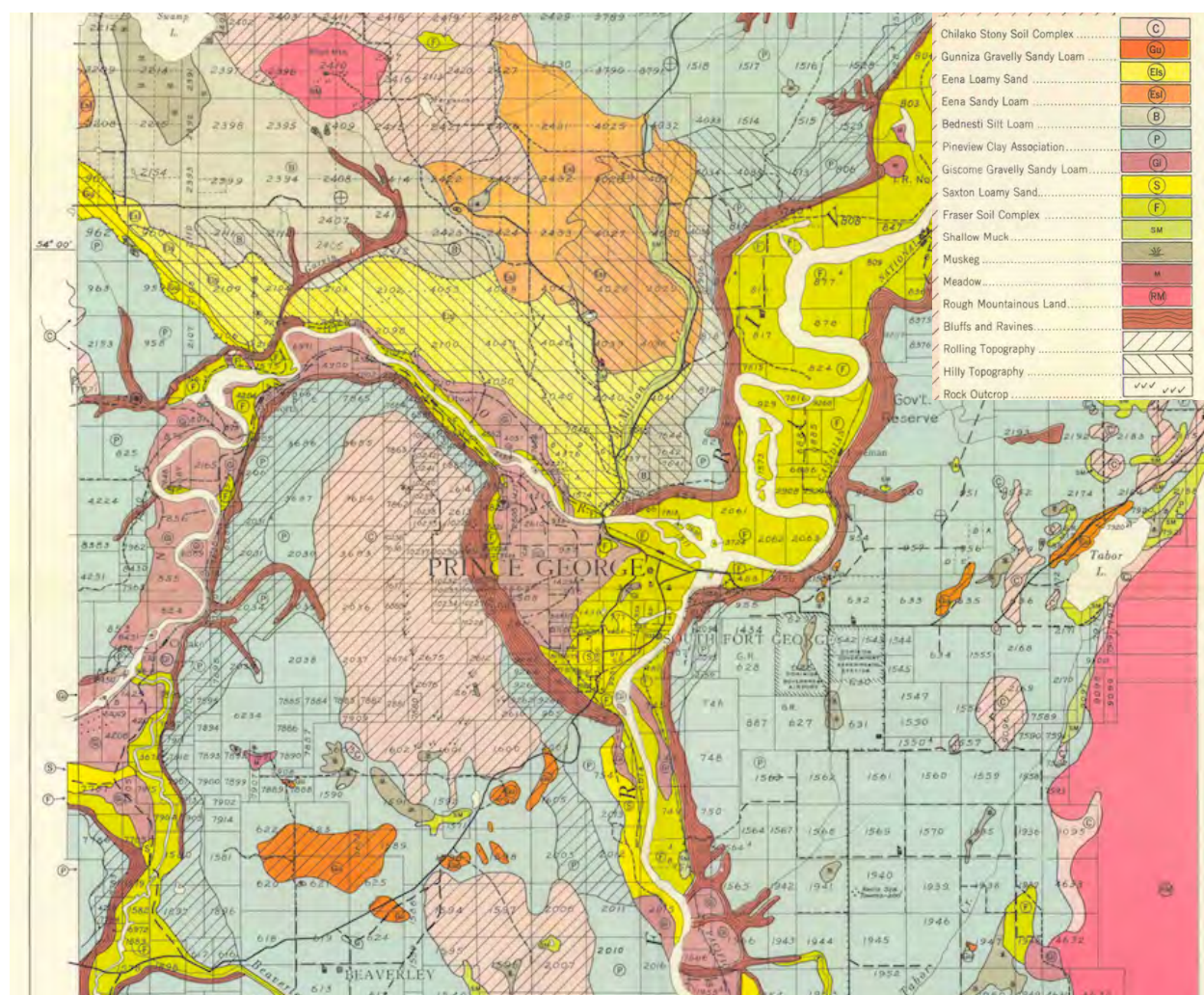


Figure 6: Example of a soil map around Prince George. (Source: Canada Soil Survey)

Water Resources

Most of the RDFFG is within the Upper Fraser Watershed (Figure 7), which includes the headwaters at the base of Mount Robson on the eastern border of the RDFFG. A large geographic area of Electoral Area G is north of the continental divide near Summit Lake and all of the rivers in that area flow north into the Arctic Ocean. The Fraser River passes through McBride as it heads northeast up the Robson Valley, turning south at Prince George. Major tributaries in this watershed include McGregor River, Salmon River, Nechako River and Bowron River.



Figure 7: Major watersheds along the Fraser River. (Source: Fraser Basin Council)

Invasive Plants and Noxious Weeds

Invasive species, primarily plants, have known impacts on the agriculture and livestock industry. Loss of native grasslands to the spread of invasive plants has led to the loss of forage for both livestock and wildlife. Many invasive species also pose health threats to livestock and wildlife due to toxins or burrs causing physical injury. The City of Prince George and the Northwest Invasive Plant Council²³ have both created an online resource outlining key invasive weeds in the area, including:

City of Prince George

- Blueweed
- Burdock
- Common tansy
- Chicory
- Himalayan balsam
- Hoary alyssum
- Scentless chamomile
- St. John's wort
- Sedum Acre
- Knapweed spp
- Knotweed spp
- Leafy spurge

Northwest Invasive Plant Council

- Scotch thistle
- Yellow floating heart
- Russian knapweed
- Yellow loosestrife
- Meadow Knapweed
- Baby's-breath
- Bishop's goutweed
- Black knapweed
- Bladder campion
- Blueweed
- Common Burdock
- Brown Knapweed
- Giant hogweed
- Goat's-beard
- Gorse
- Great knapweed
- Knotweeds
- Leafy spurge
- Marsh stone crop
- Mountain bluet
- Russian thistle
- Scentless chamomile
- Scotch broom
- Tansy ragwort
- Wild carrot
- Wormwood
- Bull thistle
- Canada thistle
- Chicory
- Common comfrey
- Common bugloss
- Common tansy
- Cypress spurge
- Dalmatian toadflax
- Diffuse knapweed
- English holly
- English ivy
- Field scabious
- Hawkweed
- Himalayan balsam
- Himalayan blackberry
- Hoary Alyssum
- Nodding thistle
- Oxeye daisy
- Plumeless Thistle
- Purple loosestrife
- Spotted knapweed
- St. John's- wort
- Sulphur cinquefoil
- Yellow archangel
- Yellow flag iris
- Yellow Toadflax

The RDEFG previously provided weed services, but the program is no longer operational.

²³ Northwest Invasive Plant Council. [Invasive, Alien plants to watch out for](#). Accessed May 2022.

Climate Change and Related Impacts on Agriculture

Farmers are accustomed to the weather influencing their activities, and weather-dependent decisions are a part of farming life. Adapting to climate change, however, involves a more systematic assessment and response. Agriculture is highly vulnerable to changes in climatic conditions, and even small shifts could have significant consequences for farm viability and food production. Various climate change modelling scenarios developed by UBC, and the Pacific Agri-Food Research Centre in Summerland all predict that winter snow-packs will decrease as the climate warms and the snow level moves higher up the mountains. Further, agricultural water demands are expected to increase as climate change creates hotter summers and longer growing seasons.

Climate change, population growth, and expansion of the agricultural land base are expected to result in significantly increased water withdrawals from surface and groundwater sources, especially during summer months.²⁴ As a result, stream flows from late fall to early spring are expected to be slightly greater, while flows in late spring, summer and early fall are expected to be smaller, thus adding to the current constraints on fish and water users in late summer. Spring runoff will likely occur sooner on average, and annual total water yield will likely increase.

There are also possible positive impacts of climate change on agriculture in central and northern regions of BC. In particular, the increase of Growing Degree Days and Frost-Free Days will help to broaden the variety of crops that can be grown and the potential yields. This will impact the overall economic viability of smaller scale farms and will require research into new crop varieties and potentially re-thinking current land use designations. For example, land that is best suited currently to forestry activities may become better suited to food production over time.

Despite the challenges of applying broad climate models, some general projections are anticipated in BC between now and 2050. For RDFFG, climate projections from the Pacific Climate Impact Consortium suggest significant increases in temperature as early as the 2050's, overall reduced snowfall in winters with increased precipitation as rain, and an extension of the productive season through increased growing degree days and frost-free days. Table 18 offers a more in-depth look at the current projections.

²⁴ Climate and Agriculture Initiative BC. [Regional forecasting. Accessed February 2022.](#)

Table 18: Climate Projections for the Fraser Fort George in the 2020s, 2050s, and 2080s (PCICS, 2014)²⁵.

		2020 change from 1961-1990 baseline		2050 change from 1961-1990 baseline		2080 change from 1961-1990 baseline	
Indicator	Season	Range	Median	Range	Median	Range	Median
Median Temperature	Annual	+1.3°C to +1.9°C	+1.7°C	+2.4°C to +4.2°C	+3.2°C	+4.2°C to +6.8°C	+5.2°C
Precipitation	Annual	-3.6% to +2.5%	-1.1%	-1.1% to +8.1%	+4.3%	+1.9% to +20%	+6.4%
	Summer	-2.9% to +6.1%	+3.3%	-13% to +14%	+4.5%	-25% to +14%	-1.3%
	Winter	-13% to +0.65%	-6.3%	-8.7% to +4.2%	-1.9%	-7.1% to +11%	+2.4%
Snowfall	Winter	-27% to -12%	-19%	-27% to -17%	-24%	-40% to -24%	-31%
	Spring	-41% to -26%	-30%	-57% to -58%	-43%	-71% to -49%	-62%
Growing Degree Days	Annual	+143 to +314	+273	+305 to +751	+537	+558 to +1350	+903
Frost-free days	Annual	+13 to +27	+22	+32 to +58	+39	+60 to +94	+68

With rising temperatures and changes in precipitation patterns, RDFFG can expect hydrological effects which will impact agriculture production. Reduced snowpack in the winters and only marginal increases in rainfall in the summers, may lead to pressure on fresh water sources, creating strain on crop and livestock water needs. These changing hydrological systems, along with higher summer temperatures, will only serve to increase the risk of wildfires and extreme weather events such as storms and prolonged droughts.²⁶ Warmer winters may be favourable to new pests and diseases, which will be able to over-winter and expand their territory into the RDFFG region, impacting both agricultural production and the forestry industry.

In 2019, the RDFFG partnered with the Regional District of Bulkley-Nechako for the Bulkley-Nechako & Fraser Fort George Regional Adaptation Strategies with the BC Agriculture Climate Change.²⁷ Projections provided by the Pacific Climate Impacts Consortium²⁸ were shared

²⁵ Pacific Climate Impacts Consortium. [Plan2Adapt tool](#). Accessed May 2022.

²⁶ Climate and Agriculture Initiative BC. [Bulkley-Nechako & Fraser-Fort George](#). Accessed May 2022.

²⁷ Climate and Agriculture Initiative BC. [Bulkley-Nechako & Fraser-Fort George](#). Accessed May 2022.

²⁸ <https://services.pacificclimate.org/plan2adapt/app/>

during the regional planning process, where producers discussed how the anticipated changes would likely affect their operations. Four climate issues were identified as their top concerns. Many subsequent projects were a direct response to the adaptation strategies and top issues outlined in the Bulkley-Nechako & Fraser-Fort George Adaptation Strategies plan. These 2-4 year projects fall under the Farm Adaptation Innovator Program.²⁹

Projected Climate Impacts in the RDFFG

The four climate issues that were identified through the Regional Adaptation plan are summarized below.

Warmer & Drier Conditions

Only an estimated 1.4% of this region's agricultural land was under irrigation in 2016. But a growing number of producers are considering irrigation due to periods of drier conditions during the production season. In 2018, the Northwest, Upper Fraser West, Upper Fraser East and Nechako regions reached Level 2 to Level 3 drought ratings, meaning these areas were very dry.

Increasing Wildfire Risk

Mountain pine beetle die-off and human management of wildfires have led to a build-up of fuels in forests in this region. These forest conditions, combined with climate change, are increasing wildfire risk.

Increasing Variability & Changing Crop Suitability

As mentioned, Growing Degree Days are projected to increase faster in Bulkley-Nechako & RDFFG than in other parts of the province. Combined with a longer growing season, this is likely to result in shifting crop suitability in some areas.

This may result in new production opportunities, provided that producers can manage well through seasonal variability. Increasingly unpredictable shifts in temperature and precipitation create challenges with timing for key farming activities.

Changing Pest & Beneficial Insect Populations

Mountain pine beetle outbreaks that have affected Bulkley-Nechako & RDFFG are partly due to increased winter survival rates. Forestry modelling studies have identified the likelihood of significant shifts in this region's biogeoclimatic zones. This is likely to result in shifts in the agricultural pests associated with the zones. Additional effects may include a range of conditions described in Table 19.³⁰

Table 19: Potential agricultural impacts of climate change in RDFFG. (Source: Climate and Agriculture Initiative BC).

²⁹ <https://bccclimatechangeadaptation.ca/wp-content/uploads/2022/Resources/RegionalStrategies-BNFFG.pdf>

³⁰ Climate and Agriculture Initiative BC. Regional forecasting.

Climate Change Condition	Potential Agricultural Impacts
Increasing temperatures across all seasons	Increased pressures from pests and diseases, increased potential for drought and extreme heat and resulting damage to crops.
Changes to pests, diseases and invasive species	Increased winter survival rates, more frequent and increased damage to crops, reduction in forage and pasture quality, compromises to animal health, increase in costs of pest and disease management.
Increased occurrence of extreme precipitation events	Increased potential for floods and run off, wet soils hindering access to land and productivity of land, potential for animal health risks, increased risk of erosion in fields and riparian areas, potential flooding and resulting infrastructure damage.
Increased risk of wildfires	Stunting impacts of smoke and ash on crop production, impacts to livestock and human health, increased severity and frequency of damage to agriculture infrastructure, long term impacts on soil and hydrological systems after severe burns, competing water needs between firefighting and agriculture use.
Increased seasonal variability	Reduced predictability of weather patterns, changes to production scheduling and an increased need for adaptability, unpredictable frost days, unpredictable timing of bloom and pollination.
Increased growing degree days and frost-free days	Potential for additional cuts of hay, opportunities for new varieties of crops, inconsistent yield and quality from previous crops.

Climate Adaptation Projects in RDFFG

From the Regional Adaptation Strategies, the RDFFG shared funding to initiate three projects:

- 1. Transferring Knowledge About Water Management:** This project was undertaken to provide knowledge about water management in two of the regions. A project report for Knowledge Transfer for Adoption of Water Management Best Practices is available for more detail.³¹

³¹ <https://bcclimatechangeadaptation.ca/wp-content/uploads/2022/Resources/BF01-Project-Report-Knowledge-Transfer-Adoption-Water-Management-Best-Practices-2021.pdf>

2. **Collaborative fuel management:**³² The second project was in two parts looking at collaborative fuel management in the agricultural-wildland interface, which will help reduce wildfire threat for operations in these areas, particularly for those bordering Crown Land. The project report for Fuel Management Pilot Business Case for High-Risk Agriculture Interface Area – 2020 documents the extent of high wildfire threat/agriculture interface with processed pilot areas identified; one being located in the RDFFG.
3. **Pollinators:** The RDFFG also funded a Pollinator project that looks at a variety of pollinators. At the time of this writing, a final report has not yet been completed.

Natural Hazards

The region faces a number of natural hazards which are only expected to increase in frequency and severity with a changing climate. These hazards include wildfires, flooding and landslides. Though wildfires have always been a reality in the RDFFG, added pressures from warming temperatures and changing precipitation patterns are expected to increase the impact of wildfires, especially for isolated ranches without access to emergency services or warning systems and road connectivity.

Floods and Landslides

Floods are part of the natural environment which can be beneficial to agriculture by enriching floodplain soils and providing soil moisture; however, they can also cause detrimental impacts to agricultural land and farms and disrupt supply chains. The north central area of the province has been increasingly experiencing damaging floods at the 1 in 50-year levels and 1 in 100-year levels. Along with floods, parts of the RDFFG are prone to landslides due to shifts in spring freshet and existing unstable terrain. Landslides may also be a result of wildfires destabilizing slopes. Landslides and road washouts not only pose safety risks to residents in the immediate area, but also cause disruptions in supply chain, impact the viability of productive land, and can further complicate evacuation and emergency response procedures. Flood Maps are available by region.³³

Wildfires

Warmer, drier summers are increasing the risk of wildfires due to droughts, bark beetles and increasing the volume of forest fuels that are accumulating on a seasonal basis. The proximity of agricultural operations to forests places farming and ranching operations within the RDFFG under increasing pressure from wildfire. In collaboration with the BC Climate and Agriculture Initiative, RDFFG developed a strategy for Fuel Management in the Agriculture-Wildland

³² <https://bcclimatechangeadaptation.ca/wp-content/uploads/2022/Resources/CBBF01-fuel-manage-interface-areas-2020-summary.pdf>

³³ <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams/integrated-flood-hazard-management/flood-hazard-land-use-management/floodplain-mapping/floodplain-maps-by-region>

Interface. This was a 2-part project looking at how collaborative fuel management in the agriculture-wildland interface will help reduce wildfire threat for operations in these areas, particularly for those bordering Crown land. The 2020 report documents the extent of high wildfire threat/agriculture interface in three regions: RDFFG, Regional District of Bulkley Nechako and the Cariboo Regional District. It also includes feasibility criteria and approaches for economic fuel management in three proposed pilot areas.

Emergency Preparedness and Response

The RDFFG has an Emergency Management Program , which aims to inform and prepare residents for emergency situations through a notification system and building resilience across the region³⁴. The region also has emergency response plans for flooding and fire which pertains to residents and residential properties within the urban/wildland interface. The threat of hazards and emergencies to the agriculture sector in the north central area of the province has inspired the creation of many farm preparedness tools including workbooks and seminars.

Emergency Planning Resources for Producers

The following is a list of emergency preparedness and response resources available to producers in RDFFG:

- BC Ministry of Agriculture and Food (MAF) provides emergency preparedness factsheets, tips, and industry-specific guidelines.³⁵
- BC Climate and Agriculture Initiative has developed a province-wide farm and ranch [wildfire plan toolkit](#), as well as a [flood readiness toolkit](#).
- Industry-specific guides and templates provide educational materials on various natural and human-caused threats to farms. The guides are an opportunity for producers to be prepared, to mitigate impacts and to tailor responses that a farm would follow in the event of any such emergency. Guides for a variety of livestock commodities as well as small-mixed farms and also for small lot pork producers to help hobby farmers plan.
- Agricultural producer associations can also be an important resource for emergency management for their members. Support that associations provide may include:
 - Distributing emergency related information during an incident
 - Representing their sector in an Emergency Operations Centre as subject matter experts
 - Developing prevention, mitigation, preparedness, response and recovery tools for their members
- Guides and handbooks intended to help producers prepare their operations for an emergency and plans for industry associations.³⁶ These include:

³⁴ Regional District of Fraser-Fort George. [Emergency Management](#). Accessed May 2022.

³⁵ BC Ministry of Agriculture and Food and. [Emergency Response Planning](#). Accessed May 2022.

³⁶ [Ibid.](#)

- Guide to Completing a Farm/Ranch Wildfire Plan and Workbook³⁷
- Farm/Ranch Wildfire Plan Workbook³⁸
- Guide to assist producers to prepare for freshet and flood³⁹

Agricultural Support Services

Agricultural support services, such as extension officers, farm equipment dealers, irrigation and drainage specialists, local processing, and value-added infrastructure can all assist in maximizing the ability for individual farming operations to succeed. The local food system is connected through storage, distribution, and retail channels as well. These are summarized within the RDFFG context below.

Meat Processing

Regional abattoirs allow farmers and ranchers to get their animals processed in a timely manner and cut and wrap shops (butchers) allow farmers to sell their products in cuts that are tailored to the appropriate market. Successful local abattoirs have developed business cases that include total cost accounting; are able to match maneuverability vs. workflow limitations; and have invested in producer-processor relationships to build trust through education and celebrate successes. While there may never be one simple solution for something as complex as the meat sector, some relatively small investments in local infrastructure can provide enhanced income streams for area farmers and employment opportunities for area residents.

In 2007, the province amended meat processing regulations such that licensing and certification was more stringent and involved additional administrative oversight. These changes, along with other challenges in the industry, such as the Bovine Spongiform Encephalopathy crisis, resulted in more than 300 abattoirs closing throughout BC over the last 15 years.

Beef production is the primary agricultural activity in the region; however, most of the cattle produced in the region go to supply the Alberta feedlot industry.⁴⁰ This flow of resources is influenced by many factors including, demand and existing supply chain dynamics. While over a quarter of farmers in the region use direct marketing for distribution, the high cost of transportation limits long range distribution to the south of the province, despite the region's connectivity to Highway 16.⁴¹ Despite the large amount of meat processing facilities in the area, the region struggles to meet the labour needs of the processing demand. This decline is partially due to the industry aging out, with a lack of young people interested in taking over

³⁷ [BC Climate Change Adaptation Program. Accessed May 2022.](#)

³⁸ [BC Climate Change Adaptation Program. Accessed May 2022.](#)

³⁹ Ibid.

⁴⁰ BC Agriculture & Food Climate Action Initiative. Regional Adaptation Strategies: Bulkley-Nechako & [Fraser-Fort George](#). 2019.

⁴¹ Ibid.

these trades, as well as expense and red tape associated with acquiring a full abattoir as well as cut and wrap status.⁴²

Recent changes to meat processing licensing

Abattoir licenses are issued under the *Meat Inspection Regulation* of the *BC Food Safety Act*. On October 1, 2021, important changes to meat inspection and licensing in BC came into effect which created new license categories. The new meat licensing system is intended to support farm businesses in rural parts of the province and make it easier to sell locally raised meat in BC.⁴³

The new system replaces the Class A, B, D, and E system with “Abattoir”, “Farmgate Plus” and “Farmgate” licenses. These changes could support producers throughout the RDFFG as the region increases food production, supports local food security, prioritizes food safety and stimulates local economies.

Three license categories were announced with licenses valid for 5 years from October 1, 2021. The categories are:

- 1) Class A & B licenses were replaced with the new abattoir license and these facilities still have fully inspected meat processing with no restrictions on volume or sales within BC.
- 2) Farmgate license was created to help new and small-scale producers sell their products locally and fill the demand for local meat products in rural communities. With this license, producers can sell from their farmgate or at farmers’ markets within their regional district, RDFFG, and at farmers’ markets within a 50 km radius of their farms if they border a different regional district.
- 3) Farmgate Plus category replaced Class D & E licenses. It is available province-wide and will help alleviate ranchers’ and producers’ concerns about accessing processing services, as well as provide new sales opportunities at farmers’ markets, retail sales and restaurants.

Details on the meat production modernization are available on the BCMAF Meat Inspections and Licensing website.⁴⁴

Meat slaughter and processing capacity in the RDFFG

There is one abattoir license within the Fraser- Fort George area: Kawano Farms in Prince George, which processes bison, cattle, goats, hogs, water buffalo, and sheep. Kawano services the entire red meat industry, including beef and bison as well as ostrich, emu, llama and other specialty meats. Kawano primarily provides processing and custom cut wrap services for a large wholesale and retail customer base. They are dedicated to making business as local as possible

⁴² Samantha Charlton, Charlton Consulting. [Robson Valley Agricultural Market Analysis](#), Gaps and Opportunities Assessment and Implementation Plan. September 2021.

⁴³ <https://news.gov.bc.ca/releases/2021AFF0046-001398>

⁴⁴ <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/food-safety/meat-inspection-licensing>

to support the meat industry and local economies. The other licensed facilities are focused on services that allow for more regional and local sales.

In total, there are fourteen facilities with abattoir, Farmgate or Farmgate Plus licences in the area, the majority of these are located along Highway 16. The following is a complete list of licensed facilities in RDFFG:

Table 20: Meat processing licenses in RDFFG. (Source. [Abattoir Licenses Map in BC](#))

Name	License	Location	Animals
Balsame Ranch	Farmgate Plus	Dunster	Cattle
Butterkup Farms	Farmgate Plus	Dunster	Cattle, sheep/ lamb, hog goat, chicken, turkey
Chillo Creek Ranch	Farmgate Plus	Prince George	Cattle, hog, chicken, turkey, duck, goose
Feathers Aviary DBA	Farmgate Plus	Prince George	Chicken, turkey
Garrendenny Farms	Farmgate Plus	Prince George	Chicken, turkey
Kawano Farms	Abattoir	Prince George	Bison, cattle, goats, hogs, water buffalo, sheep
Legrand Farms	Farmgate Plus	McBride	Cattle, sheep/ lamb, chicken
Lesle Saverella	Farmgate	McBride	Cattle, chicken, turkey, duck goose
Mark T Froese	Farmgate Plus	McBride	Bison
Michelle Read	Farmgate Plus	McBride	Cattle, hog
Robson Valley Fresh Farm	Farmgate Plus	McBride	Cattle, chicken, turkey, duck, goose
Robson Valley Sheep Company	Farmgate Plus	McBride	Cattle, sheep/ lamb
Roth Farms	Farmgate Plus	McBride	Cattle, sheep/ lamb, hog, goat, chicken, turkey goose, rabbit
Steve Peleton	Farmgate Plus	Loos	Cattle Sheep/Lamb, hog, chicken, turkey

The RDFFG also has other meat butcher shops:

- Chilako Meats Hwy 16 W of Prince George which is cutting and custom processing
- Hunniford Meats, Ness Lake, north Prince George, which is cutting and custom processing

Many producers in the Robson Valley also send their meat to Rainer Custom Cutting in Barriere.

Distribution and Sales

The agri-food sector in the RDFFG area relies on highways and secondary roads for connectivity to local, regional, and provincial sales markets. Highway 97 is the main transportation artery running through the RDFFG area which connects to markets in Mackenzie/McLeod Lake and into the north and Kamloops and the Lower Mainland in the south. Highway 16, a part of the Trans-Canada highway, links Prince George and the areas along the Fraser River to Alberta to the east and reaches Prince Rupert to the west. Prince George is well-suited as an agricultural distribution hub as it is located at the intersection of Highway 97 and Highway 16.

Support systems and infrastructure for distributing food to major retail markets have long been established and operate efficiently at the provincial and national levels (Sysco, Gordon Food Services, and Overwaitea are examples). However, many mixed farming producers in the RDFFG may have difficulty accessing this distribution system because they are too small to meet production requirements of larger scale retail outlets, or there may be information gaps around labelling, quality control, traceability, and food safety. Existing grocery stores in the incorporated municipalities include Save-on-Foods, Co-Op Grocery store, The Independent Grocers Alliance (IGA), Loblaws, and Walmart, which may not always support local producers.

Food from the RDFFG is also sold outside of the region. For example, a large part of produce grown in the Robson Valley is sold and distributed to the Jasper Farmers Market and Jasper hotels.

Locals who are passionate about food security and distribution have mobilized through online social platforms like Facebook to purchase, share, exchange and sell local food. Facebook groups provide a hyper local distribution source which facilitates ease of communication and distribution in rural settings. Relevant Facebook groups include "[Prince George Fruit Exchange](#)"; "[Prince George Online Farmers Market](#)"; "[Prince George Farm Gate Sales](#)" and "[Prince George Food Hub](#)". Additionally, producers are selling directly to consumers through a variety of channels. These include unprocessed and value-added products, being sold via farm gate stands, farmers markets and Community Supported Agriculture (CSA). Table 21 summarizes the channels by which farmers are selling directly to customers.

Table 21: Producers in the RDFFG selling direct to consumers. (Source: Census of Agriculture, 2021).

Farms Selling Direct to Consumers	Number of Farms
Sales of Unprocessed Agricultural Products	132
Using Farm Gate, Stands, Kiosks, U-pick	56
Using Farmers' Markets	24
Sales of Value-added Products	24

There are five farmers markets operating in the region, with others in the Cariboo region which may be accessible to RDFFG producers. Table 22 summarizes the farmers markets that operate in the RDFFG and surrounding area.

Table 22: Summary of farmers market in and around Fraser Fort- George Region.

Market	Location	Season	Days
Eagles Farmers Market	Prince George	May - October	Sundays TBD
Prince George Farmers Market	Prince George	Year round	Saturdays 8:30 - 14:00
Valemount Farmers Market	Valemount	June - September	Thursdays 4:00-19:00
McBride Farmers Market	McBride	July- September	Fridays 11:00 - 14:00
Dunster Farmers Market	Dunster	July- September	Saturdays 11:00-13:00
Eastline Market	Willow River	June- Sept	Sundays 10am-3pm

Farmers markets

The majority of Farmers' Markets in the RDFFG are in rural areas and may be the only point of access for farm products for the consumer. There are multiple Farmers' Markets in Prince George; the Prince George Farmers' Market is a year-round market, and there is a summer Wilson Square: Prince George's Community Farmers' Market. The rural communities have Farmers' Markets in Valemount, McBride, Dunster, and Mackenzie has a Community Market. In addition, local events throughout the region provide selling opportunities for producers outside of the main farmers markets.

Community-Based Agricultural Programs and Organizations

Some agriculture producers throughout the RDFFG are offering sales through a Community Supported Agriculture (CSA) program. CSA is an arrangement where a local farmer commits to providing an invested member with weekly food boxes at a nearby pickup location or from the farm. This commitment between the farmer and community members allows the farmer to receive funds early in the season which provides security for longer term planning of the farm.

Prince George has a Good Food Box Program⁴⁵ made up of a collaborative local Food Box & online store supplying fresh local and provincial produce to the Prince George community. There are also three box programs operating in the Robson Valley.

The Good Food Box offers a variety of subscriptions and has vegetables, fruit, mushrooms and some extras. Some of the extras are:

⁴⁵ <https://www.thegoodfoodboxpg.ca/>

- Chocolate Oat Bars from Lobby Coffee⁴⁶, a small coffee shop located in the lobby of the Victoria Medical Building in downtown Prince George.
- A variety of dried fruit and fun healthy snacks from Soul Fruiting Good⁴⁷ from Prince George.
- Local eggs and honey

Robson Valley and Regional food asset map

The Robson Valley and Regional Food Asset map contains information on regional food retail, food distributors, food processing and distribution, regional food services, lower, regional agricultural suppliers, cold storage and transportation, and Robson Valley farmers and producers.⁴⁸

Agritourism

The RDFFG area is known for its wild backcountry landscape, with high mountain ranges, the mighty Nechako and Fraser rivers and vast sprawling forests, which make it a popular destination for recreational tourism. Highway 16 through Prince George is the main route to Highway 37 which leads to Alaska, bringing many visitors from the US, Alberta, and other parts of British Columbia.⁴⁹ The most common activities include hiking, fishing, mountain biking, wildlife viewing, and visiting museums and historic sites. A quick Airbnb search of the RDFFG area turned up 677 guest accommodations, suggesting there is high demand for accommodation in the area.

Additionally, the long stewardship history of the Lheidli T'enneh communities is captured in their traditional territory in the ancient forest of Chun T'oh Whudujut Ancient Forest. This Provincial Park and Protected Area is 120km east of Prince George. The park protects a portion of the only inland temperate rainforest in the world and offers boardwalks for all abilities to experience the grandeur of ancient cedars and waterfalls.

RDFFG producers are familiar with the opportunities that come with tourism. There are a number of guest ranches offering Bed and Breakfast services, nature walks, wagon and sleigh rides, and pioneering skills workshops. The equine sector in the region is also well represented with a number of farms offering horse riding classes, riding arenas and horse boarding..

Efforts to improve recycling options for agriculture plastic waste

Agriculture plastic waste is an issue throughout the region. Transfers stations are not large enough to take all the material. Construction companies will not accept agricultural plastic industrial waste. Many producers resort to burning or burying agricultural plastic waste on-site.

⁴⁶ <http://www.lobbycoffeepg.com>

⁴⁷ <https://soulfruitingood.com/>

⁴⁸ Regional food asset map: <https://www.google.com/maps/d/u/0/viewer?ll=52.124709317305886%2C-119.97447604999999&z=6&mid=1fNBKB1oLIBPNVhaTd2m-2XxfmBRxletT>

⁴⁹ Destination BC. [Northern BC Regional Tourism Profile](#). May 2017.

In 2020 the RDFFG took part in a study aimed at getting a handle on plastic waste produced by farms in the region. Agricultural plastic waste – including bale wrap, silage film and twine is classed as industrial waste. The Regional District Board of Directors voted to partner with Cleanfarms to conduct a study on the amount of plastic farm waste being produced in the region and had a potential to develop a three-year recycling pilot project. The study results could also be used to help advocate for an extended agricultural plastic manufacturer's responsibility to assist in the cost of recycling the materials.

Following this study, the RDFFG is participating in the Cleanfarms initiative that is collecting agricultural plastics in the Robson Valley. In 2021 the BC Ministry of Environment and Climate Change published a new plan to upgrade the province's recycling program. The Extended Producer Responsibility Five-Year Action Plan indicates the government's plan to identify a policy approach to manage Industrial, Commercial and Institutional materials. Within the Industrial waste, it includes most agricultural plastics with 2025 targeted as the goal year.

Extension and Support Organizations

The following are examples of organizations providing extension and support services to RDFFG producers. This is not an exhaustive list of organizations supporting the agricultural sector as many may not have an online presence and new organizations may frequently pop up. The RDFFG is well-served by a wide range of industry organizations.

BC Cattlemen's Association (BCCA)

BCCA has been the official voice of cattle ranchers across BC for more than 80 years. The BCCA works with provincial and federal governments to promote, encourage, and protect the cattle industry in BC. There are no BCCA local offices within the Robson Valley, though there are four in neighbouring Nechako, 11 in Cariboo and one in Bulkley Valley. Learn more:

<https://www.cattlemen.bc.ca/regloc.htm>

BC Livestock Producers Co-op

BC Livestock Producers Co-operative Association is a rancher-owned and rancher-operated livestock co-operative that was incorporated in 1943. The Co-op offers market analysis through newsletters as well as cattle financing options. The Vanderhoof stockyard holds livestock auctions weekly. Learn more: <https://www.bclivestock.bc.ca/about-us>

BC Forage Council

The BC Forage Council's purpose is to promote growth and development of a viable forage industry for domestic and export markets and was established to provide a unified voice for forage crop producers, representing all sectors of the industry. Learn more:

<https://bcforagecouncil.ca/>

Central Interior Region 4-H Clubs

4-H BC builds awareness of agriculture, inspiring, educating and supporting youth by empowering them with skills and knowledge necessary to excel in the agriculture industry and

make positive change in the communities. There are 4 different 4-H clubs in the region centered around Prince George. Learn more: <https://www.4hbc.ca/clubs/central-interior>

Clean Farms

Cleanfarms is a not-for-profit environmental stewardship organization and works collaboratively with its members, partner agencies and the government to ensure that Canadian farmers can actively contribute to a healthy environment and a sustainable future. By partnering with Cleanfarms, this program can create meaningful change and offer a tangible way to address agricultural waste management and resources in agriculture communities.

District C Farmers' Institute

The Central Interior Farmers' Institute District C coordinates the activities of Farmers' Institutes in northwestern B.C. and holds conventions to ensure member's best interests. Farmers' Institutes coming under District C included those for Eaglet Lake, McBride, Prince George, Reid Lake, Salmon River, Mud River and Beaverly. Learn more:

<https://www.facebook.com/districtC.FI/> or website: <https://districtcfarmers.wordpress.com/>

Farm to School BC

Farm to School BC is a program to bring healthy, local and sustainable food into schools across British Columbia and provide students with hands-on learning opportunities that develop food literacy, all while strengthening the local food system and enhancing school and community connectedness. There is a Northern Hub for Farm to School with a local representative to help more schools participate. Learn more: <https://farmtoschoolbc.ca/>

Ministry of Agriculture and Food Regional Agrologist

MAF provides extension support services through a Regional Agrologist in the Prince George area.

Prince George and McBride Beekeepers' Associations

Prince George and McBride both have Beekeepers' Association that are a branch of BC Honey Producers' Association (BCHPA) dedicated to sharing knowledge and skills around successful small-scale beekeeping. The Prince George branch focuses on public education and gardening to sustain pollinators. The Prince George Beekeepers Association holds monthly meetings on Zoom and has demonstrations in the summer. Learn more:

<https://www.pgbeekeepers.ca/home>

University of Northern British Columbia (UNBC)

As the largest university on Northern BC, University of Northern BC takes pride in being Canada's Green University. In partnership with the Prince George Public Interest Research Group (PGPIRG), the university runs '[Farm for Thought](#)' which sells its produce to the school's dining services and directly to students. Further, the university offers a Bachelor of Arts in Nature Based Tourism Management which could be an opportunity for producers to connect with faculty and agri-tourism. Partnerships with UNBC can offer a cross pollination of ideas, resources, and research. Learn more: <https://www2.unbc.ca/green/news/future-food-unbc>

Young Agrarians (YA)

Young Agrarians is a farmer-to-farmer education and resource network aimed at supporting new and aspiring young farmers in building their business, production knowledge and skills and community. YA operates their land matching program as well as some farmer mixers and education activities in the RDFFG region. Learn more: [Young Agrarians Central & Northern B.C.](#)

Small Scale Meat Producers Association

A non-profit society made up of farmers and producers interested in raising animals outside of industrial production. Learn more: <https://smallscalemeat.ca/about-us/>

Agriculture Resource Suppliers

In addition to extension supports and educational resources, the agriculture industry requires services and supplies which allow farmers to operate their businesses, the following list includes a non-exhaustive list of agricultural suppliers near to or within the RDFFG:

- Nechako Valley Feeds (Vanderhoof)
- Horseshoe Lake Ventures (McBride)
- Spruce Capital Feeds (PG)
- Prairiecoast Equipment (PG)
- Northern Acreage Supply (PG)
- Huber equipment (PG)
- Zenmar Feeds (PG)

Community Futures- Fraser Fort George

Community Futures has been helping to grow the regional food economy through many initiatives in the region. Section 4 below provides more detail on these initiatives. An inventory of these initiatives is provided in Appendix 1.

Urban Agriculture and Local Food Security

Urban Agriculture Policies

Urban agriculture initiatives within town centres not only offer opportunities for community members to be active, but also contribute to cultivating local food security. The municipal center of Prince George has taken some policy actions towards improving local and household food security. The Prince George Official Community Plan (OCP)⁵⁰ states intention to support local food security through encouraging local markets, events which celebrate local production, buy-local and community gardens, and opportunities for developments to provide community kitchen amenities.⁵¹ The City also encourages agri-tourism opportunities and community greenhouses in residential areas.

⁵⁰ City of Prince George. Official Community Plan. Bylaw 8383. Policy Area 7 & 8. May 2022

⁵¹

Community Gardens

Urban agricultural education is supported through school and community gardens in a diverse range of locations including, schools, youth centers, churches, and street corners. The following organizations and projects manage community gardens:

- Valemount Community Garden, Valemount
- Open Gate Garden, McBride
- **Community Gardens in Prince George**
 - AimHi Community Gardens- Kerry Street
 - Growing Community Gardens (Christian Reform Church of PG)- 20th & Willow
 - Our Saviours lutheran church's eco community collective- 3590 Dufferin Ave.
 - Fort George Baptist Church- 1600 Johnson St,
 - PG PIRG- UNBC
 - Queensway Community Gardens- 2121 Queensway
 - First Baptist Church- 483 Gillett St
 - Mennonite Central Committee- McIntyre community
 - Three Sisters Lane Garden- 835 3rd Ave.
 - Connaught Youth Centre- 1491 17th Ave
 - Guru Nanak's Free Langar- 2225 Victoria St
 - Connecting Communities- 2121 Queensway
 - George Street Community Garden
 - Le Cercle des Canadiens Français- 1752, Fir St
- **School gardens in Prince George**
 - Edgewood Elementary
 - Sacred Heart
 - Westwood Elementary
 - Quinson Elementary
 - Exploration Place
 - (daycare kids)
 - Vanway Elementary
 - Immaculate Conception
 - Van Bien Elementary

Food Hubs

Prince George has established or is in the process of developing virtual food hubs, to help in creating better access to local food and opportunities for value-added processing of locally produced goods. The following is a list of organizations and projects working towards improved food security in RDFFG:

- Prince George Food Hub Facebook Group. Learn more: <https://www.facebook.com/groups/553826928865003/>
- Local Food PG Society Facebook Group. Learn more: <https://www.facebook.com/LocalFoodPG/>
- Everyone at the Table. Learn more: <https://www.letseatlocalpg.com/>

Food Banks

In addition to policy, Prince George, Valemount and McBride all have food banks which serve the public with emergency food needs and ongoing food security. The region has several food banks responding to emergency food needs, the following is a complete list:

- Salvation Army Food Bank, Prince George
- Friendship Centre Food Bank, Prince George
- Saint Vincent De Paul Meals, Hampers & Food Bus, Prince George
- McBride Seventh Day Adventist Food Bank, McBride
- Valemount Food Bank Society, Valemount

Food Organizations and Programs

Additional food security organizations and programs in the area include food societies, meal delivery programs, community supported agriculture and Indigenous kitchen program training. The following is a list of food organizations and programs in the region:

Everyone at the Table (EAT) ⁵²

An independent collective of individuals passionate about collaborating, sharing, supporting, and networking with the food system activities in North Central BC. Their website provides access to The Good Food Box. The Good Food Box offers local products to consumers through a subscription service. They also offer a list of Prince George's Food Scape including farmer resources, food programs and a library of best practices on sustainable food systems research and policy.

Smoke House Kitchen Program

A four-month training program offered through the Prince George Native Friendship Center that teaches youth kitchen skills which ladder into an entry level position in the hospitality industry. Learn more: http://www.pgnfc.com/programs_services.html

Prince George Council of Seniors (PGCOS) Meals on Wheels

Offers daily, affordable food delivery to older adults who are disabled, homebound or post-operative. Learn more: https://www.pgcoss.ca/?page_id=1679

Prince George Public Interest Research Group

The Prince George Public Interest Research Group⁵³ is a non-profit student society based at the Prince George campus of the University of Northern British Columbia.

Master Gardeners

The MGABC is an affiliation of local chapters of master gardeners working together to support the delivery of quality education to their members and environmentally responsible gardening advice to the public. Learn more: <https://www.mgabc.org/content/about-us>

⁵² <https://www.letseatlocalpg.com/>

⁵³ <https://www.pgpirg.org/>

Prince George Public Library

The Seed Library is a free program committed to increasing our ability to feed ourselves wholesome food by offering seeds and education. Through the time-honoured tradition of seed saving we celebrate biodiversity, nurture locally adapted plant varieties, and foster community resilience, self-reliance and a culture of sharing. The seed library operates on the honor system to maintain a collection of pure, healthy, viable seeds for the community to use. When you fill out a borrowing record and check out seeds, you automatically become a member of the Seed Library. Learn more: <https://www.ddbotgarden.bc.ca/seed-library>

3. Agriculture Bylaw Review and Best Practices




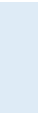
This analysis is aimed at identifying any gaps or problem areas within Official Community Plans (OCPs) within the RDFFG with regard to agriculture bylaws and local government policy. We have developed an evaluation tool to enable a consistent analysis of all of the Official Community Plans within the region. Appendix 2 contains the detailed review tables, examining a set of criteria for each Official Community Plan. This section provides a description of the policy analysis tool used, a summary of findings from the analysis, as well as a best practices for modernizing local government bylaws.

Policy Assessment Tool

The policy assessment tool is aimed at measuring the strength of agriculture policy in a range of OCP policy categories. Each policy category consists of sub categories that are evaluated for how strong they are. Policy categories include:

- Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming
- Preventing conflict between agricultural and developed areas
- Agriculture Economy, regional processing, storage, distribution
- Education in agriculture
- Environmental Protection and Climate Adaptation
- Urban Agriculture
- First Nation Relationships

The rating scheme below provides a tool for evaluating how strong OCPs within the region are regarding agriculture policies and supportive bylaws.

Strong		The policy is comprehensive and integrated, addressing multiple dimensions of food and agriculture
Medium		The policy has multiple links to food and agriculture but may be missing some key dimensions.
Light		The policy has few to no strategies that link directly to food and agriculture and is missing many key dimensions of food and agriculture
Not present		The policy has no mention or link to food or agriculture

This assessment tool (i.e. the policy categories and rating scheme) is applied to 12 different local government plans. The analysis tables may be found in Appendix 2.

Summary of Official Community Plan Review

The project team reviewed the Official Community Plans for each of the Electoral Areas and Member Municipalities within the RDFFG. These include:

Electoral area OCPs reviewed

- Electoral Area A - Salmon River-Lakes Official Community Plan Bylaw No 1587, 1996
- Electoral Area C - Chilako River Nechako Official Community Plan Bylaw No 2593, 2010
- Electoral Area D - Tabor Lake-Stone Creek Official Community Plan Bylaw No 2157, 2004
- Electoral Area D - Pineview Official Community Plan Bylaw No 2302, 2006
- Electoral Area F - Willow River-Upper Fraser Valley Official Community Plan Bylaw No 1589, 1996
- Electoral Area G - Crooked River-Parsnip Official Community Plan Bylaw No 2425, 2007
- Electoral Area H - Robson Valley-Canoe Downstream Official Community Plan Bylaw No 1948, 2001
- Electoral Area H - Robson Valley Canoe Upstream Official Community Plan Bylaw No 2290, 2006

Member Municipality OCPs reviewed

- City of Prince George Bylaw No. 8383, 2011
- District of Mackenzie Bylaw No.1304, 2014
- Village of Valemount Bylaw No. 843, 2021
- Village of McBride Bylaw No. 682, 2008

For the Electoral Areas, the strongest OCP element is general protection of agriculture, limiting subdivision, and establishing minimum lot sizes in the ALR. While this is a foundational element of any OCP, many of these plans are older than five years and would benefit with an update to modernize local government bylaws for agriculture as well as addressing multiple dimensions of the food and agriculture sector.

For Member Municipalities, OCPs are more complex and include more urban-relevant policies. Where relevant, municipal OCPs have strong agriculture land protection, limiting non-farm use, minimum parcel size in the ALR, and discouragement of subdivision policies. In addition, municipal OCPs contain broader food system policies that can be regionally relevant. For example, the Prince George OCP includes recommendations for the development of a farm and farmer resource centre and supporting local markets. Another example is the District of Mackenzie OCP, which has a strong urban agriculture element that supports food production in public and private spaces. The Village of Valemount has a strong OCP policy to support local markets. While there are other areas where municipal OCPs address food and agriculture, there are many areas where food and agriculture could be included to 1) Modernize statutory plans and 2) Include innovative ideas 3) Build relationships with Indigenous communities, among others.

Best Practices for Modernizing Local Government Agriculture Bylaws.

In modernizing local government agricultural by-laws, there are many elements to consider. The OCP and ZBL section below outlines best practices to support future policy review/development. Some of these elements the RDFFG is already addressing with others being options for future community/ electoral area bylaw updates.

Official Community Plans (OCP)

The below agricultural bylaw best practices for OCPs include recent changes to provincial legislation as well as other considerations.

Recognize ALC jurisdiction up-front and Use the Agriculture Land Designation throughout the ALR

Best practices suggest that language recognizing agricultural policy and regulation to the ALC and ALC-related Acts and Regulations should be stated early on within the OCP, and repeated throughout Zoning Bylaws. Although senior level government policy set the framework for local government policies in the ALR, they can also work best together. In short, local governments can regulate but not prohibit. This is intended to allow for local governments to address local concerns and context. For example, the RDFFG could:

- Create farm home plates, which are not in the ALR regulations, but are a valuable tool for preserving agricultural land;
- Require farm status for additional residences on farmland; and
- Limit or regulate agri-tourism, non-soil bound cannabis, vertical farming, and home occupations.

Land use designations should include all ALR lands in a single land use designation, such as A1. For instance, the following paragraph could be inserted into OCPs under Context as well as within the Agricultural Policies section:

Notwithstanding any other provisions of this bylaw, all lands within the Agricultural Land Reserve (ALR) are subject to the Agricultural Land Commission Act (ALCA), the Agricultural Land Reserve General Regulation and ALR Use Regulation (the Regulations), and any Orders of the Agricultural Land Commission (ALC). The ALCA and Regulations generally prohibit or restrict non-farm use and subdivision of ALR lands, unless otherwise permitted or exempted.

Nest agriculture in statutory and non-statutory plans

The most successful agricultural policies are those that are securely nested within a variety of land use planning tools. These include OCPs, Zoning Bylaws, Local Area Plans, Development Permit Area Guidelines, and Agricultural Plans. The modernization of many of these tools will help to secure this nested approach.

Update Permitted Residential Uses, Siting, and Sizing on Agricultural Lands

The ALC Act and Regulations have been updated in recent years to include a maximum house floor area for a principal dwelling and to allow small secondary dwellings in the ALR under

certain conditions. There are also robust guidelines set forth by the Ministry of Agriculture and Food regarding the size of the overall footprint of all residential uses, and maximum lot line setbacks for residential uses in the ALR (Guide for Bylaw Development). These guidelines should be reflected in OCPs, Rural Bylaws, and Zoning Bylaws to help guide decision-making regarding the use of the ALR for residential purposes. At a municipal or regional level, it is also recommended that the sizing and siting guidelines be adopted for all land designated as Agriculture outside of the ALR in order to ensure consistency across the agricultural landscape.

Connect Climate Change, Environment, and Emergency Planning Policies Directly to Agriculture

There is an opportunity within OCPs to directly connect policies related to climate change, water conservation, environmental protection, and emergency planning to agricultural policies. While these topics are often presented as separate chapters within an OCP, cross-referencing these themes can help underscore the fact that these issues are related and interconnected. Issues such as watercourse protection, aquifer vulnerability, watering restrictions, flooding, and wildfire risk mitigation all hold significant potential to disrupt agricultural activities on farmland. Updating permitted uses in the zoning bylaw to reflect how these priorities may shift land uses should reflect OCPs and rural land use plans.

Be Consistent with the Use of the Term "Agriculture"

The terms "food" and "agriculture" are often used interchangeably in local government plans and bylaws. However, the activities associated with agriculture and those permitted or regulated in the ALR encompass more than only food production. Policies should exist for these permitted uses as well. For example, the cultivation of nursery and tree crops, or the raising of livestock and small animals for fibre and fur. The term "food" can refer to activities that are not permitted or are limited in the ALR, such as food processing and manufacturing.

It is also worthwhile to include policies and permitted uses regarding secondary or accessory agricultural activities and services in the ALR (such as agricultural product processing, farm equipment sales or maintenance, production of soil amendments, vertical farming, indoor cannabis production, slaughterhouses and/or abattoirs, composting and agricultural waste management) as well as encourage these uses outside of ALR and into industrial and/or commercial areas.

Reinforce minimum parcel size adjacent to ALR

An agricultural land base is only as healthy as a community's ability to also control where, what type of, and how much urban development occurs. The ability for agricultural activities to flourish depends on suppressed land values associated with long-term restrictions on permitted uses of the land. Reducing land speculation on farmland requires predictability and consistency created by local government plans and bylaws. The most effective way to ensure that agricultural land is valued for agricultural activities is to ensure that non-farming development such as residential, commercial, industrial, institutional, and recreational uses are firmly directed away from farmland. Secondly, planning to create good edges between land

uses is a key strategy.⁵⁴ Policies that explicitly state that the expansion of utilities (e.g. sewer, water, power, roads) should not be allowed into the ALR should be included in local government plans and bylaws, where appropriate.

Raise the Profile of Compliance and Enforcement on Agricultural Land

Compliance and enforcement regarding agricultural land should occur at both a local government and provincial government (ALC) level. Opportunities exist for local bylaw enforcement to support the ALC's Compliance & Enforcement division, and vice versa. Pilot projects between the ALC's C&E division and local government bylaw enforcement in the Central Okanagan are one example of successful partnership outcomes which focus on bringing property use into compliance. Policies in the OCP should clearly state that enforcement of regulations within the ALR is a key pillar of a sustainable agricultural community and provides clarity for investors for economic development purposes.

Differentiate Between Urban and Rural Agriculture

Rural agriculture is typically characterized by commercial operations and hobby farms. It is largely governed by senior levels of government. Urban agriculture is significantly smaller in scale, sometimes more intensive, integrated into a more densified urban landscape, and largely governed by local levels of government. These two types of agriculture should receive unique and specific attention in plans and bylaws.

Consider Temporary Farm Worker Housing

At present, there are no policies specific to the needs of the agricultural sector when it comes to Temporary Farm Worker Housing (TFWH). It is recommended that policies be developed to be included in local government plans and bylaws so that the issue can be approached proactively rather than reactively, should an application for this type of housing arise. There are many best practices developed by the ALC and Ministry of Agriculture and Food related to this topic that can be reviewed and integrated into statutory plans and bylaws.

Best practices in Agriculture-informed OCPs

The plans listed below demonstrate OCPs with strong agricultural policies.

- North Saanich (currently under review)
- Squamish Lillooet Regional District Electoral Area C
- City of Kelowna
- Regional District of Nanaimo Electoral Area A (Cedar)

⁵⁴ Ministry of Agriculture Food and Fisheries Guide to Edge Planning:
https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/planning-for-agriculture/823100-3_edge_guide_2015.pdf

Modernizing Zoning Bylaws

Modernizing ZBLs contains many elements. Some of these elements include updating ZBLs to reflect OCP directions as well as respond to any land use policy changes at the Provincial and Federal levels. Other elements presented below are suggested best practices to use when undertaking plan updates or developing new bylaws. The RDFFG is already addressing some of these elements, whereas others could be considered in future planning exercises.

Parcels and Zones

- Minimize the number of agricultural zones
- Keep parcels as large as possible, e.g. maintain minimum lot sizes in and out of the ALR

Definitions and Jurisdiction

- Ensure that the jurisdiction of the ALC is stated upfront and highlighted throughout.
- Provide consistent definitions for agricultural-related terms as well as environmental terms that impact agriculture, such as “watercourses”.
- Include new definitions, such as controlled environment structures (vertical farming), and alcohol production facilities.

Residential Uses

- Permitted uses in the ALR must align with new ALC rules and regulations, particularly around residential uses in the ALR: e.g. occupying an existing dwelling while constructing a new house; number of dwellings on a parcel; size of secondary dwellings. Deference should be given to the ALC when making any decisions about residential use outside of what is explicitly permitted.
- Include parameters around Farm Worker Housing to provide clarity around what is and what is not permitted.

Home Occupation and Home-Based Businesses

- Include a strict and consistent size limit for structures associated with home occupation (home based businesses).
- Consider requiring farm tax status for properties using ALR land for home occupation accessory buildings, so that it is not the primary use of farmland.
- Add a statement that home-based businesses in the ALR must comply with ALC rules and regulations. Add specific restrictions around truck parking and vehicle repairs in the ALR.

Agricultural Buildings and Structures

- Relax fencing height maximums on ALR lands in order to keep wildlife out of farms. According to Ministry of Agriculture and Food bylaw standards, crop protection and support structures such as deer fencing, netting supports, and trellises should be excluded from height requirements.

- Ensure farm gate sales are permitted across the ALR and consider creating consistency between non-ALR agriculture areas and the ALR with regard to the footprint permitted for farm gate sales.

Tourism and Agriculture

- Ensure B&B regulations are consistent with ALC regulations and are consistent across Electoral Areas.
- Create clarity around permitted Agri-Tourism uses and criteria, as per the ALC Act and Regulations and ensure that it is clear that farm tax status is required.
- Determine how many (if any) Agri-Tourism Accommodations (e.g. camp sites, RVs, cabins) should be allowed on a parcel with farm tax status in the ALR. Consider creating consistency with parcels outside of the ALR with farm tax status.

Environmental Setbacks

- Restrict livestock buildings outside of a 30 m setback from watercourses, lakes
- Requiring setbacks of cannabis production from parks, schools, daycares, etc. is excessively limiting.

Accessory Agricultural Uses Outside Farmland

- In order to direct farm product processing, commercial composting, and abattoirs outside of productive farmland, these must be included as permitted uses elsewhere, such as in commercial and/or industrial zones. Currently most of these uses are not mentioned within permitted commercial or industrial zoning uses.
- Consider allowing food trucks or mobile food vending outside of the ALR and in commercial areas in order to promote local food businesses.
- Ensure that parcel sizes in industrial zones remain as large as possible to accommodate agri-industrial uses, which often require at least 2 ha.
- Allow some limited agriculture, or horticulture, or urban agriculture (definition to be determined) in all zones outside of Agriculture zones.

Using DPAs for Agriculture

Development Permit areas can be a helpful land use planning tool to have more control over development near to agricultural and/or natural areas.

Section 488(1) of the Local Government Act provides local governments with the authority to designate a Development Permit Area (DPA) for the "protection of farming". The ALC encourages local governments to designate DPAs in areas where farm and non-farm conflicts are occurring or are likely to occur with development. DPAs must be designated by an OCP, and the OCP must specify the conditions or objectives that justify the designation in addition to the requirements for development.

It is recommended that definitions within DPAs align with Zoning Bylaw definitions and provincial directives such as the Code of Practice for Agricultural Environmental Management.

In the RDFFG DPAs could be used for riparian area protection on farmlands and farmland protection.

Examples of best practices for DPAs

- Central Okanagan Regional District Aquatic Resource DPA
- City of Kelowna Natural Environment DPA
- City of Kelowna Farm Protection DPA

Be Ready for Cannabis and Vertical Farming

The RDFFG may see an increase in Cannabis and potentially vertical farming related land uses in the ALR. These are similar uses as they both use enclosed growing systems, often in buildings and not connected to the soil on-site. The definition of “controlled environmental structures” was recently added to the ALR use regulation,⁵⁵ which is considered a farm use that may be prohibited by a local government.

The list below suggests some ways that the Region and member municipalities can become prepared for enclosed growing systems (Cannabis, vertical farming) operations locating in the region.

- Where possible, direct appropriate forms of enclosed growing systems and processing into industrial zones. Ensure that industrial zone lot sizes remain as large as possible.
- Consider splitting the definitions of cannabis into “micro” and “standard” – there is precedence for this in other BC local government bylaws.
- Maximize the square footage of indoor non-soil-based enclosed system cultivation buildings and processing buildings. This can be done on a “footprint” approach or a “gross floor area” approach and could be scaled based scale and form of production and/or parcel sizes.
- Consider adding parcel-based minimum and maximum setbacks for enclosed-growing system-related buildings as another form of buffering.
- If water conservation is a concern, facilities could be required to apply for a Water License or method for tracking water use.
- Continue to follow the issue of cannabis and vertical farming farm gate sales, for which the provincial government is in the process of determining guidelines and regulations for, and adjust the RDFFG policies as necessary once those guidelines and regulations are published.

Examples practices for Cannabis Bylaws

- BC Minister of Agriculture’s Bylaw Standard on Medical Marihuana (2015)
- District of Sechelt Cannabis Bylaw (2019)
- Regional District of North Okanagan Zoning Bylaw No. 1888, 2003 (updated to 2019).

⁵⁵ OIC 83/2022:

https://www.bclaws.gov.bc.ca/civix/document/id/oic/oic_cur/0083_2022

- Regional District of Central Kootenays Electoral Area B – Rural Creston, Land Use Bylaw No. 2316, 2013 (updated to 2022).
- Commercial Cannabis Production in BC – Best Available Control Technologies

4. Review of Market Research in the Region

Some market research for agriculture has been completed to identify specific market opportunities and other supports that would enable producers to better market their products in the RDFFG and beyond. This section summarizes findings to date around market opportunities in the RDFFG and sets-out potential areas for the Regional Agriculture Strategy to address.

Two key documents provide an understanding of market opportunities in the region 1) Beyond the Market and 2) Robson Valley Agricultural Market Analysis, Gaps and Opportunities Assessment and Implementation Plan (2021). Although both of these studies were tailored to specific areas, namely Terrace to Valemount, and the Robson Valley, there is likely regional relevance to the findings in both reports. Further research and engagement work as part of the development of the RAS will seek to validate this information and identify any additional information on market opportunities.

Beyond the Market

Beyond the Market: Growing the North (2010-2012)

In 2010, Community Futures Fraser Fort George launched Beyond the Market: Growing the North Project as a cross regional agricultural initiative on Highway 16, Terrace to Valemount.⁵⁶ The Growing the North project aimed to build, strengthen, and diversify the agriculture and food service industries from Valemount to Terrace, BC. Growing the North aimed to link farmers, ranchers, purchasers and consumers in the region in an effort to identify the barriers to the local food industry and encourage collaboration and entrepreneurial development to overcome them. The project was developed out of the Omineca Beetle Action Coalition (OBAC), an agriculture sub working group was established to address a number of priorities the OBAC identified in their Agriculture Strategy for the region.

Growing from a discussion about the challenges farmers face trying to sell local food to local institutions, the project's goal was to work with project partners and communities to build, strengthen, and diversify the produce industry in communities along the Hwy 16 corridor by:

- 1) Increasing access to information about regional markets and value chain opportunities
- 2) Building and enhancing networks
- 3) Encouraging commercial consumers to purchase local foods
- 4) Encouraging value-added opportunities

The project focused on community engagement and outreach to producers, both through face to face meetings and through the creation and distribution of a producer survey. In its day-to-day activities, the Beyond the Market project worked with individuals to provide key guidance on farm business development and local food procurement. Project activities also included working with Northern Health on a pilot project to introduce local food products to their menus

⁵⁶ Note: unless references as RDFFG, the area in report is Terrace to Valemount

for hospitals and other Northern Health administered facilities, participation in a UNBC food systems course, and the creation of a number of promotional pieces about how to purchase local food. Outcomes that included a website, no longer active, an opportunity analysis, engagement with UNBC on a cold-storage project, and most importantly, engagement with a large number of farmers and producers across this region.

The Regional Food System Assessment and Opportunity Analysis Report, which outlined the state of the food sector in the Highway 16 region, provided key insight into the challenges and opportunities for local food production, distribution and consumption. The report highlighted several key economic opportunities including the development of a supplier network to bring local beef into the kitchens of large operators, the optimization of meat processing and finishing capacity in the region, the communication of weekly produce fresh sheets from suppliers during the peak growing seasons, and many others. Beyond the Market also partnered with UNBC's Northern Agriculture Research Initiatives, led by Dr. David Connell to explore some of the further research needed to pursue the opportunities identified in the report.

The project has hosted workshops in Prince George and the Robson Valley, which gathered farmers, ranchers, chefs, caterers and food service managers to learn and discuss the opportunities for the growing agri-food industry in the north with experts from around the province. The workshops were designed with business training and networking in mind and featured Farm-to-Chef Networking events that paired local farm operators one-on-one with restaurant and purchasing representatives in a speed networking format.

Beyond the Market: New Farm Development Initiative (2012-2014)

After a successful end to Beyond the Market's pilot project and strong community demand for continued programming, phase two of the Beyond the Market launched in fall 2012. The second phase consisted of two separate initiatives aimed at addressing critical gaps in the region's agriculture sector: the New Farm Development Initiative and the Regional Beef Value Chain. The project sought to connect with new and potential farmers to provide support for business planning development, technical training and mentoring through a cluster development approach in the BC Highway 16 region. The BCMAF identified the project as a potential model for its new entrant support across the province.

The New Farm Development Initiative was a community-based remedy to the lack of training and extension services available to new entrants in the regional agriculture sector. Its three main goals focus on:

- Training and networking opportunities for new entrants,
- Exploration and documentation of regionally appropriate educational content, and
- Development of new land access opportunities for farmers.

In addition to courses and coaching, the New Farm Development initiative produced the "A-Z Guide for New Northern Farmers." This unique guide was developed out of a series of outreach events in six different communities along the BC Highway 16 corridor. It compiles answers to dozens of farm-related questions from past, present and future farmers in the area.

The guide was funded in partnership with Investment Agriculture Foundation. The New Farm Development Initiative ended on 2014.

Beyond the market: Regional Beef Value Chain Initiative (2012-2014)

The Regional Beef Value Chain Initiative was designed to work with the ranching sector, which, of the regional agriculture sector as a whole, demonstrated the most opportunity for market diversification and expansion. The focus of this initiative was two-fold:

- Provide producers with learning and networking opportunities, and
- Provide resources to increase their access to direct-sale markets (markets in which producers maintain some ownership of their product until it reaches the consumer) while also working with potential buyers to ready them for alternative means of sourcing their products.

The initiative sought to strengthen and diversify the market opportunities for value-added beef through direct sales within the BC Highway 16 region. The initiative was originally developed with a focus on grass-fed beef, but expanded to encompass all types of finished beef due to the limited volume of participants in the grass-fed sector.

Through a partnership with UNBC and OBAC, the initiative published a comprehensive report on cattle operations in the BC Highway 16 region, titled Beef in Northern BC. It included both a market demand analysis and a financial assessment of various cattle enterprises. The report also includes a beginner's guide to cattle operations, especially cow calf operations. The intention of the portion of the report was to provide prospective cattle operators with the resources they need to develop their business, production and marketing plans. The report found that there is ample capacity of the local cattle industry to supply the beef consumption demand of the local population and that, on a per animal basis, the gross margin achieved through marketing of finished beef was significantly higher than those achieved through traditional cow/calf marketing. The Regional Beef Value Chain Initiative ended on March 31, 2014.

Beyond the Market: Farm Knowledge Network (2014-2016)

This element of Beyond the Market consisted of a community based extension service strategy for the regional agriculture sector involving farm operator training and professional development, centralizing information networks and develop a self-sufficiency model to support the community-run extension services network.

The Rural Businesses Expanding Success (2017-2020)

This initiative focused on agriculture expansion work in the Robson Valley. Activities included: specific workshops with one-one-one support from the facilitators for up to 8 weeks following the workshops and an online webinar series as well as work done towards a collaborating co-operative.

Supporting Northern BC's agriculture producers and food/beverage processors (2018)

In 2018, the University of Northern British Columbia Community Development Institute and BC Ministry of Agriculture and Food completed a Northern BC needs assessment study of the Agrifood industry. The project met with producers, distributors and chefs in many areas of Northern BC. In the RDFFG, the needs assessment looked at Robson Valley, Valemount, and McBride. The project considered seasonality, human resources/ financial, production capacity, food safety and quality assurance, bargaining power of buyers including distribution incentives/rebates, pricing and packaging, marketing/branding, distribution logistics, utilization of co-operatives and co-packing agreements and others.⁵⁷

From the assessment, an action plan for delivery of program and assistance was published and promotes a community economic development approach to the development of the northern BC agrifoods sector.⁵⁸ The main focus for the action plan were in the meat industry as well as regional and provincial branding.

Robson Valley Agricultural Market Opportunities Analysis (2020-2021)

In 2020, Community Futures Fraser Fort George (CFFFG) shifted the focus of Beyond the Market to the Robson Valley. The Robson Valley Market Opportunities Analysis had the core objectives of improving our understanding of which markets need to be considered by the Robson Valley agriculture sector, identifying challenges and gaps, and providing recommendations for overcoming these challenges/gaps.

The initiative held workshops on the sustainability of farming, food sustainability and the environment to work together to provide agriculture products to a growing number of people. There was a workshop on expanding agriculture businesses including online marketing and e-commerce options. These workshops partnered with the Robson Valley Growers Group and other individuals. The goal of this study is to help producers expand their current operations by accessing new regional markets within the province. Desired outcomes from this research and engagement include:

- Increase sales through existing direct local channels
- Increase regional/ extra-regional meat sales and build a red meat value chain
- Capture increased market share of adjacent markets and wholesale channels
- Establish a broadened Robson Valley cooperative (co-op) or collective

⁵⁷ Supporting northern BC's agriculture producers and food/beverage processors industry consultation and findings report https://www2.unbc.ca/sites/default/files/news/53972/northern-bc-agrifood-industry-needs-assessment-and-supports/ministry_of_agriculture_-_consultation_and_findings_report.pdf

⁵⁸ Supporting Northern BC' agriculture producers and food/beverage processors action Plan for the Delivery of Programs and Assistance https://www2.unbc.ca/sites/default/files/news/53972/northern-bc-agrifood-industry-needs-assessment-and-supports/ministry_of_agriculture_-_agriculture_action_plan.pdf

- Conduct Robson Valley specific production trials/ product research

The study also found that retailers were interested in carrying local produce if they did not already have a local source of a specific vegetable. Interest was also expressed in carrying local grain, more “shelf stable” vegetables (like broccoli or root vegetables as opposed to leafy greens) and a consistent source of local honey. Some local retailers were interested in carrying local meat but indicated they would have to change their insurance coverage to do so.⁵⁹

Based on targeted interviews completed, grocery chains are looking for items they don’t currently offer that are local, local products that are available earlier or later than their current suppliers, or superior items (e.g. better flavour) to replace an item that is currently carried. Late season, high-quality, and/or frozen fruits/berries; and storage crops outside of the typical season were emphasized as potential produce opportunities. Unique/novel items would only be an opportunity if associated with a well-resourced marketing campaign. Early season greens and local asparagus were also mentioned. Season extension infrastructure and emerging varieties for early or late production would be needed for the Robson Valley to compete in this arena at an extra-regional/provincial and/or wholesale level.

Robson Valley Agriculture Expansion (2020-2023)

The Agricultural Expansion in the Robson Valley initiative^{60, 61, 62} is based on agri-business. The initiative was funded by the RDFFG and the BC Rural Dividend Fund. This program is aimed at supporting Robson Valley producers in expanding their current operations by accessing new markets, linking to renewed discussions regarding food security within the province, as well as build a more resilient and diversified economy within the Robson Valley.

⁵⁹ Robson Valley Agricultural Market Opportunity Analysis

⁶⁰ <https://cfdc.bc.ca/wp-content/uploads/2021/10/RVMOA-Summary.pdf>

⁶¹ https://cfdc.bc.ca/wp-content/uploads/2021/10/RVMOA_Market-Analysis-and-Opportunities-Report-and-Implementation-Plan_JN15.pdf

⁶² <https://www.google.com/maps/d/viewer?ll=52.124709317305914%2C-119.97447604999999&z=6&mid=1fNBKB1oLIBPNVhaTd2m-2XxfmBRxletT>

5. Engagement Findings

The project team used several forms of engagement to involve as many producers and consumers as possible. Key engagement points and methods include:

1. Fifteen key player interviews with producers and agricultural knowledge holders. Interviews produced many of the key insights in the engagement summary
2. Four workshops with staff, local governments, and the RAS working group. Workshops provided direction and important feedback on the agriculture strategy.
3. Two meetings with Indigenous governments
4. In addition, an online form was posted on the RDFFG website to ensure those who didn't have time to complete an interview or participate in a workshop were able to provide feedback. A total of 25 responses were collected.

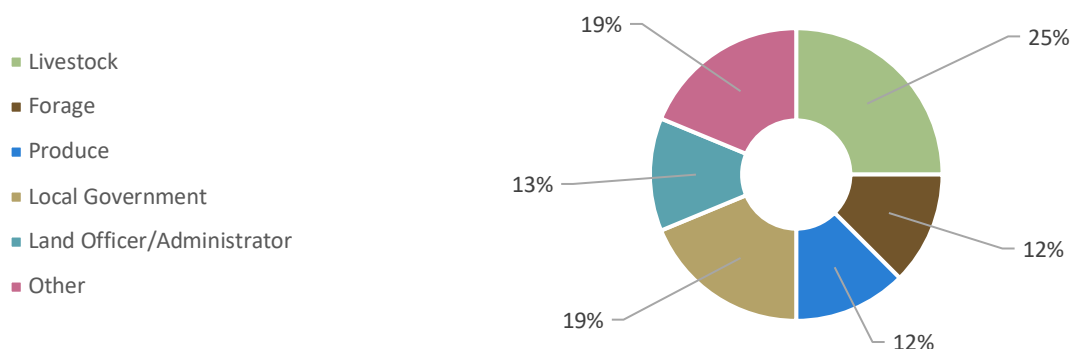
This section summarizes the findings from these three engagement points and presents themes within the input received so far.



Producers and Non-Producers Participated

About half of people participating in the project so far have been producers and half have been from related sectors.

Summary of Interviews - Interviewee Background



Implementation Partnerships with Indigenous Governments is an Area to Continue Exploring

An important part of the engagement process included reaching out to Indigenous Governments in the region including the Lheidli T'enneh and Simpcw First Nation.

The purpose of this engagement was to a) inform Indigenous Governments that the RDFFG was conducting a process to develop a Regional Agriculture Plan and b) better understand current activities and areas of potential alignment connected to the regional food and agriculture sector. Although these conversations were informal and preliminary in nature, there is positive indications that mutually supportive activities are desirable and possible. Preliminary areas for further exploration include but are not limited to:

- Increasing opportunities for people to enter into food and farming jobs and careers
- Activating underused farmland
- Connecting youth to farming
- Expanding beyond agriculture to include lands and waters that are central to traditional foods
- Passing on knowledge on food and farming
- Extending the growing season
- Expanding local marketing of regional products

People are Aware that the Environment and Climate are Changing

"The effects of climate change on agriculture must be dealt with at a regional level."

Producers rely on stable and predictable weather conditions for growing within the RDFFG. In recent years, many producers have experienced challenges related to weather and climate directly affecting their operations. Colder than normal winters have been hard on livestock, and wet growing conditions have made it challenging or impossible for crops to be planted on time. Extreme heat in the summer months has resulted in crops not growing, and wildfires have posed additional risks and challenges. Producers, as a result, have experienced crop failures or been forced to sell off livestock. Unfortunately, respondents feel there is little help for those who experience crop damage or failure.

In response, producers and survey respondents expressed interest in developing predicted climate models and re-evaluating agricultural capabilities in the region to better prepare the region and producers for the effects of a changing climate. Specifically, some felt that land currently rated as "marginal" may be considered of high capability in the near future, and that

85%

of farmers thought climate change and extreme weather was a challenge to agriculture in the region.

this should be taken into consideration when making long term land use planning decisions. In addition, exploring new techniques, diversifying crops, and developing Environmental Farm Plans (EFPs) could offer potential solutions. Many also expressed a desire to see agriculture to become more sustainable and contribute to the health of local ecosystems by acknowledging the role that farmers play in stewarding natural assets and ecosystem services.

Labour Shortages Limit Opportunities for Regional Agriculture

Producers are experiencing challenges finding labour. Finding skilled and unskilled, local labour that is willing to work seasonal and sometimes long hours is becoming more and more difficult. The costs associated with hiring labour are also rising and cutting significantly into producers' slim profit margins so much so that many can't afford to hire. Many believe a lack of education in farming and agriculture contributes to the problem. Those who are interested in getting into agriculture often have little experience or education, and producers find that it's often a steep learning curve for those entering the industry.

Foreign workers in the agricultural industry were mentioned a few times during interviews, but producers preferred to hire locals or found the resources required for housing foreign workers to be a barrier.

The amount of agriculture knowledge and the many knowledge-holders in the region were repeatedly mentioned. However, succession planning remains an area of concern in the RDFFG and many producers do not have succession plans. Many producers are reaching an age of retirement and are planning to slow down over the next few years. Some plan on selling their land and many expressed a desire to see more young people enter the industry.

More is Needed to Increase Capacity in Livestock & Poultry Processing

100%

of livestock producers felt that access to slaughter and processing facilities was a challenge in the region.

Many of the producers interviewed were involved in livestock and poultry production. Generally, producers were satisfied with the changes in regulations allowing limited on-farm slaughtering and farm gate sales, but most agreed additional work was needed to create a more resilient sector. The costs and insurance for setting up a Farm Gate Plus licenses is prohibitive for many farmers. At the same time, transportation costs to ship animals to an abattoir are also not sustainable. Many expressed frustrations with the long wait times and limited availability of abattoirs and butchers within the region. Slaughter and processing times must be booked up to a year in advance, and by fall, there's limited availability due to

hunting season. Producers felt that there was room for expansion of livestock production in the region, but that lack of slaughter and processing facilities was a "pinch point."

Producers felt that the Regional District could support meat production in the region by:

- Ensuring zoning/land use bylaws allow for slaughterhouses and abattoirs (this could be in industrial areas rather than in the ALR).
- Continuing to support producers in getting Farm Gate Plus licenses.
- Advocating for higher numbers of animals allowed for on-farm slaughter.
- Advocate for additional facilities within the region and promote a diverse range of these facilities.

In addition, livestock producers also found that the lack of knowledgeable vets for large animals in the region, strict regulations around selling to grocery stores, and challenges with market prices were also putting negative pressure on the industry.

Input Costs are Rising

Producers are struggling with rising costs. Many found that the costs of necessary inputs for their operations have risen astronomically. Common inputs include:

- Fuel (diesel and gas) to run equipment
- Fertilizer
- Animal feed
- Transportation costs
- Packaging and labelling

Many producers also felt that farmers and producers are in direct competition over land with developers, speculators, and those looking to escape city living for agricultural land in the area. One interviewee noted that there was little land for sale in the province and that the limited land that is available and within a reasonable price range is often raw and requires significant investment to make it operable. All in all, many felt that agricultural land was becoming unaffordable for those looking to enter the industry or expand their operations.

People Wish to Have More Regional Resiliency and Independence from Global Supply Chains

Many producers and interviewees expressed a desire to move away from global supply chains and focus on building a resilient local food system that better meets the community's needs. Many emphasized that a lot of great agriculture happens in the region but then gets shipped elsewhere for processing or globally for consumption. Reliance on global supply chains and major processing facilities located in major metropolitan areas of the province creates vulnerability in the region.

There was excitement amongst interviewees for creating a regional brand and marketing strategy to help promote local agriculture. Ideas ranged from developing a list of farmers and producers hosted on the Regional District website to developing additional farmers' markets or programs to identify local products in stores easily. In addition, interviewees felt that by developing a stronger brand more investors would be attracted to the area and the industry. Overall, interviewees felt there are many opportunities to grow and expand the region's agricultural sector.

There is a Connection Between Reconciliation and Indigenous Food Systems

There are opportunities for improving and developing Indigenous food systems and promoting Indigenous food sovereignty within the region. Some of the ways identified include:

- Farming farmland close to reserves to provide employment and economic development opportunities to Indigenous people.
- Providing community garden spaces to help facilitate Indigenous food system knowledge between generations.
- The creation of a shared vision and collaborative strategy, memorandums of understanding, between regional governments and First Nations governments.
- Assisting Indigenous governments to identify food lands by providing mapping resources.

Innovation and Technology Could Provide New Opportunities in the Region, but should be Approached with Caution

Innovation in agriculture is already occurring in the region. Throughout the interviews, producers and local government representatives described how unique partnerships are creating mutually beneficial solutions and innovative practices in the region. Some of which include:

“We need a different way of doing things - a paradigm shift.”

Using energy alternatives to heat greenhouses: The Omineca Growers Society and the District of Mackenzie are seeing the first-ever alternative energy greenhouse being established to grow fresh produce for the community. The OGS is planning and fundraising to build three large conventional hoop-style greenhouses that are heated using alternative energy sources. Participants also suggested that generally, greenhouses may help producers protect crops against extreme weather events.

Utilizing Clear Cuts as Grazing Lands: One producer spoke about his unique partnership with the Community Forest Association, where he grazes his livestock on clear-cut lands. This partnership expands the producer's grazing pastures while managing underbrush and fertilizing land for the Forest Association.

Indigenous Food Sovereignty in Action: Tea Creek in Kitwanga was brought up by a few interviewees as an innovative practice happening in the Regional District of Kitimate-Sikine. Tea Creek is an Indigenous-led, culturally safe, land-based Indigenous food sovereignty and trades training initiative that provides holistic hands-on, on-farm learning and employment opportunities for Indigenous people.

A Local First Approach: One producer spoke about developing partnerships with businesses operating near to the RDFFG. Centerra Gold's Mount Milligan Mine operation will buy potatoes and other local produce to feed workers at resource camps.

In addition, there was excitement amongst interviewees to expand the agricultural offerings in the RDFFG. Many identified different opportunities, sectors, or areas of expansion that could happen in the region. These include:

- Apiaries
- Niche berry production (haskap, saskatoons, wild blueberries, black huckleberries)
- Land-based aquaculture
- Hops & barley for locally made beer
- Hemp & Cannabis
- Meat for export

There was also excitement for new and innovative practices to help farmers. Some of which include:

- Zero-till
- Vertical farming
- Biomass heating for green houses
- Community Supported Agriculture (CSA) boxes
- Ag-Tech, including year-round greenhouse
- Self-driving machinery
- Organic, pesticide free, and natural products.
- Utilizing agriculture for therapy and rehabilitation programs.

However, many interviewees identified that it would take significant investment and resources to bring these ideas to life and to continue to support agriculture in the region.

“It’s hard to pursue innovation without resources and capital.”

Many also urged caution that agri-technology is not a panacea for many of the challenges being experienced by the farming community. For example, indoor-growing (vertical farming) could be a solution if the scope and scale is well-suited to the community, but should not be seen as a method for dramatically increasing food security as only a limited number of crops can be grown using that system. In addition, many of the ‘high-tech’ fixes require specialized engineering skills for repairs and maintenance and costly replacement parts.

There is a Need for Regional Value Added Processing Infrastructure

The engagement results indicate an expressed desire to see more processing facilities as well as better utilization of existing infrastructure. A variety of facilities currently exist throughout the region, but long distances in the region create challenges for many producers in accessing these facilities. Developing food hubs/shared processing facilities, distribution centres, and cold storage/community root cellars is something many would like to see. Support from the RDFFG could be offered by helping apply for grants, organize permits, licensing and insurance for facilities.

Building Knowledge and Community is Key to the Success of the Sector

Producers felt that there was incredible potential to build knowledge and community in the agriculture sector. Many noted that there was a need for a revitalized association or institute to act as a centralized knowledge source and community for producers. A resource to provide producers with guidance on rules and regulations, potential leads on labour, and new and innovative practices would be beneficial. There was also talk of developing a regional co-op to help producers access wholesale pricing for inputs and access larger markets for their products. In addition, producers felt that by developing more of a community around agriculture, more people would be interested in farming and enter the industry.

It was noted that involving younger generations in agriculture could be beneficial in preserving the wealth of knowledge in the region. Ideas ranged from:

- Involving children in agriculture through school programs
- Community gardens and children's gardens
- Farm mentorship programs
- Incubator lending programs
- Connect with local colleges/universities on education opportunities and applied research
- Experimental farms

Urban Agriculture Helps to Connect People to the Value of Farming

There was general support amongst participants for urban agriculture. Many expressed support for community gardens, creating landscapes that support pollinators and wildlife, providing incentives, and improving the regulatory environment for people wanting to grow food in urban areas.

Other Perspectives & Ideas

The thoughts and ideas below are additional ideas that don't fit neatly into the main themes from the engagement. These thoughts are still important to consider in addition to the main themes presented above.

- Work to remove barriers to agriculture through zoning.
- Work with Ministry of Transportation to fence roadways to ensure livestock safety.
- Protect large farm parcel size from subdivision.
- Access to land for emerging farm ventures.
- Increased flexibility for non-farm uses on ALR land (through zoning and the ALC).
- Update zoning and official plans to encourage innovation and emerging agri-business.
- Lower taxes for working farms.
- Support indoor/winter farmer's markets.
- Curbside compost pick up to be used for agricultural purposes.
- Allowing backyard chickens in urban areas.
- Protecting clean water sources.

- Advocate to Province for allowing farmers access to/purchases of Crown land.
- Assist with Road Bans and getting exemptions for agricultural businesses.
- Maintain the ALR and work to stop industrial development on agricultural land.
- Explore Lease to own opportunities to support non-family farm transitions.
- Not a lot of land for sale in the province.
- Foreign ownership of farmland in Robson Valley area, and Vanderhoof area, becoming an increasing discussion point.
- Shift in mindset needed for all year-round meat slaughter- deeply entrenched.

6. Strengths, Opportunities, Aspirations, Results

This section will synthesize research and engagement findings to date to identify key strengths, limitations, opportunities, and aspirations for agriculture in the region. This assessment begins to set-out key directions for the Regional Agriculture Strategy (RAS) that will be further developed with the RASWG, RDFFG staff and elected officials, as well as other key players and partners.

This analysis will use a Strengths, Opportunities, Aspirations and Results (SOAR) approach to distill-out preliminary findings.

STRENGTHS: What are we great at?

OPPORTUNITIES: What are the possibilities?

ASPIRATIONS: What are our dreams or wishes?

RESULTS: What are meaningful outcomes?

Strengths: What we are Great at?

- **Farming, ranching, and appreciating regional food**
 - We take pride in what we do
 - There are many active producers farming and ranching in the region
 - We have a strong history of agriculture
 - We raise top quality beef
 - We buy local food where we can
 - We growing market gardens and crops
 - We have a history of being self-sufficient
 - We have a diversity of growing regions – provides opportunities for a variety of products that can be grown in the region
 - We can produce high quality in particular crops
 - We have access to transportation corridors – highway, rail, and airport
 - Our agricultural land is accessible compared to other regions provincially
- **Knowing our natural environment**
 - We understand where the best soils are
 - We have high rainfall
- **Working together**
 - We work together across sectors, departments, and disciplines
 - We represent agriculture in our statutory plans
 - We have farming knowledge but are at risk of losing it over time with the older generations retiring
 - We have several farmers' institutes and networks as well as other organizations like Community Futures and Young Agrarian's Program/ Young farmers' renewal of smaller farms

Opportunities: What are the Possibilities?

- **Policy and planning**
 - Strengthen and modernize Local Government Bylaws in the RDFFG

- RDFFG supports the implementation of RAS recommendations under an established service areas of the RDFFG (e.g. Planning or Economic Development)
 - Work to help producers to become prepared for emergencies
- **Expand agriculture supports**
 - Find ways to support/stimulate the establishment and growth of existing regional protein and produce processing facilities and distribution facilities
 - Help producers to prepare for emergencies
 - Expand greenhouse, technology to extend the season, buffer against extreme weather events
 - Support young / small farm development in the region
 - Expand beef and other protein processing infrastructure and address labour shortages throughout the supply chain
 - Explore agritech where appropriate
- **Expand education and awareness around regional food**
 - Expand 4-H clubs
 - Education to public around what is available locally/ what can be grown locally
 - School programs to introduce farming to children / summer programs
 - Develop a mentorship program
 - Promote farmers institutes/ local organizations
 - Better understand where smaller farms are/ available farms for purchase/ land transfer/ etc.
 - Encourage/ Expand university and college applied research programs
 - Provide producer and processor training and networking events
- **Develop regional branding and marketing of regional agriculture goods and services**
 - Develop regional branding
 - Expand access to local products outside of the demographics that attend Farmers' Markets
 - Expand online opportunities – food boxes/ local purchasing – make it as easy to shop local as it is to shop “Amazon”
 - Develop a regional food guide (print and on-line) similar to the Connecting Consumers and Producers Guide, updated and distributed by the Regional District of Bulkley Nechako
 - Increase the number of farmers markets in the region (e.g. McBride, Mackenzie)
 - Increase existing CSA and Food Box Programs, including on-line ordering platforms
 - Host Farm-to-Table events, based on past events held by Farm Folk/City Folk.
 - Market to regional food retailers and grocery chains, especially in product areas that the store does not already provide (e.g. a consistent source of local honey, early or late season crops).
- **Further explore potential market opportunities**
 - Tap into growing demand for regionally produced food
 - Expand and promote agritourism

- Expand potential areas of high demand and low supply
 - Forage, hay, shavings
 - Eggs
 - Meat
 - Late season and high-quality, and/or frozen fruits/berries, and storage crops outside of the typical season
 - Year-round honey supply

Aspirations: What are our Dreams and Wishes?

- **To grow the regional food and agriculture sector**
 - To grow regional food and agriculture opportunities for both producers and consumers
 - To grow the regional food and agriculture economy
 - To continue to diversify scale of farming operations in the region – support both local and provincial/ national market needs
 - For regional producers to be wholesale-ready and supply independent and chain buyers while receiving a fair price for their goods
 - For producers to use season extension technologies to provide early or late season produce
 - To attract new producers to the region
 - To export value added products as opposed to raw goods
- **To make sure farms can prosper and be competitive on a level playing field**
 - To support year- round operations of existing meat slaughter and butcher facilities (e.g. Shifting when slaughter services are needed- year- round calving)
 - To coordinate the regional food system
 - To make a livable family income from farming without second/ supplementary income
- **To expand innovation, learning, and knowledge exchange/transfer**
 - To bring in farm school programs – learn about what can be grown in the region
 - To get an experimental farm back up and running
 - To provide regional coordination of information/ farming e.g. a “one stop shop” for producers and consumers
- **To ensure policy and planning frameworks continue to support food and agriculture**
 - To update urban food bylaws to allow small livestock and permit urban agriculture – chickens and rabbits within member municipalities
 - To advocate for agriculture issues as a unified voice
 - To continue to explore agriculture plastics recycling
- **To become more self-reliant and resilient to environmental and market changes**
 - To be prepared for emergencies at a producer level
 - To be self-reliant as a region
 - To be adaptive to climate change challenges

- To have stronger clarity and consistency in programs, communications etc. around emergency preparedness

Results: What are Meaningful Outcomes?

- The region is more food secure and self-sufficient
- Agriculture and food are well represented in local plans and bylaws
- The region is prepared for responding to emergencies
- More meat that is raised in the region is processed in the region
- More producers farm in the RDFFG
- Number of farms have increased
- Average age of farmers is lower (i.e. under 55)
- Different types of farms have increased
- Farm assets have increased, signifying investment
- Retiring farmers have succession plans
- Regional food processing and distribution are established to meet demands that are not currently being met
- Less food is imported to the region, especially in areas where that product is produced regionally
- See an upward trend analysis when comparing the 2021 and 2025 census of agriculture.
- More people understand agriculture and are aware of where to buy it
- There is strong political support for agriculture industry
- There is biodiversity harmony between agriculture and the environment (e.g. more farms have environmental farm plans)

Appendix 1: Agriculture projects led by Community Futures of Fraser Fort George

Beyond the Market: Growing the North

The Beyond the Market: Growing the North project aimed to build, strengthen, and diversify the agriculture and food service industries from Valemount to Terrace, BC, linking farmers, ranchers, purchasers and consumers in the region in an effort to identify the barriers to the local food industry and encourage collaboration and entrepreneurial development to overcome them.

Term: October 15, 2010 to June 30, 2012

Co-Funders:

Rural Economic Diversification Initiative – BC (REDI BC)

Community Futures Nadina

Community Futures 16-37

Omineca Beetle Action Coalition

Regional District of Fraser-Fort George

Ministry of Agriculture and Lands

Beyond the Market: New Farm Development Initiative (Agreement# A0711)

The project sought to connect with new and potential farmers to provide support for business planning, technical training and mentoring through a cluster development approach in the BC Highway 16 region.

Term: September 11, 2012 to February 28, 2014

Contract Date: October 12, 2012

Co-Funders:

British Columbia Investment Agriculture Foundation

Regional District Fraser-Fort George

Regional District Kitimat-Stikine

BC Real Estate Foundation

Regional District Bulkley-Nechako

Beyond the Market: Regional Beef Value Chain Initiative (Agreement# RTF019)

A cluster development approach to work with partners and communities to build, strengthen and diversify market opportunities for direct sales of beef in BC Highway 16 region from Valemount to Terrace.

Term: August 10, 2012 to February 28, 2014

Contract Date: October 17, 2012

Co-Funders:

Ranching Task Force Funding Initiative (British Columbia Investment Agriculture Foundation)

Regional District of Fraser-Fort George

Regional District Kitimat-Stikine

Regional District Bulkley-Nechako

Omineca Beetle Action Coalition

Beyond the Market: Farm Knowledge Network

Term: April 2014 – April 2016

A community based extension service strategy for the regional agriculture sector involving farm operator training and professional development, centralizing information networks and develop a self-sufficiency model to support the community-run extension services network

Co-Funders:

Regional District Fraser Fort George

Regional District Bulkley-Nechako

Regional District Kitimat Stikine

District of Fort St. James

Omineca Beetle Action

BC Ministry of Agriculture

The Rural Businesses Expanding Success (Agreement# 2017060004-01)

Agriculture Expansion work in the Robson Valley - specific workshops with one-one-one support from the facilitators for up to 8 weeks following the workshops and an online webinar series as well as work done towards a collaborating co-operative.

Term: September 1, 2017 to May 31, 2020

Contract Date: October 31, 2017

Funder: BC Rural Dividend Program

Robson Valley Agricultural Market Opportunities Analysis (Project# 7002 30)

The Robson Valley Market Opportunity Analysis and Implementation Plan (RVMOA) had the core objectives of improving our understanding of which markets need to be considered by the Robson Valley agriculture sector, identifying challenges and gaps, and providing recommendations for overcoming these challenges/gaps.

Robson Valley specific report

Term: December 23, 2020 to June 30, 2021

Contract Date: December 18, 2020

Funders: Northern Development Initiative Trust – Strategic Initiatives Fund

Our Contractor: Samantha Charlton

Current:

Robson Valley Agriculture Expansion (Agreement# 2019080226)

A program to support Robson Valley producers in expanding their current operations by accessing new markets, linking to renewed discussions regarding food security within the province, as well as build a more resilient and diversified economy within the Robson Valley.

Robson Valley pilot program

Term: May 20, 2020 to March 2023

Contract Date: March 31, 2020




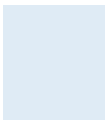
Funders: BC Rural Dividend Program (MFLNRO)

Appendix 2: Local Government Bylaw Review- Detailed Tables

This analysis is aimed at identifying any gaps or problem areas within Official Community Plans (OCPs) within the RDEFG with regard to agriculture bylaws and local government policy. We have developed an evaluation tool to enable a consistent analysis of all of the Official Community Plans. This analysis focuses on policy only and does not consider implementation.

Policy Assessment Tool

Aimed at measuring the strength of agriculture policy in local government plans and strategies.

Strong		The policy and strategy set as a whole (within an agriculture element) is comprehensive and integrated, addressing multiple dimensions of household and community food security.
Medium		The policy and strategy set as a whole (within an agriculture element) has multiple links to agriculture but may be missing some key dimension of agriculture.
Light		The policy and strategy set as a whole (within an agriculture element) has few to no strategies that link directly to agriculture and is missing many key dimensions of agriculture
Not present		The policy and strategy set has no mention or link to agriculture

Electoral Area A - Salmon River-Lakes Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use						
Housing on farmland						
Farmworker housing						
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Subject to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR					Clearly outlined	
Min lot sizes outside and adjacent to ALR						
Buffering					One policy	
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						

Electoral Area A - Salmon River-Lakes Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						

Electoral Area A - Salmon River-Lakes Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.					Support for orgs	
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					Encourage farming in flooding areas	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.						
Enforcement of regulations to protect water systems, riparian areas					One policy	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area C - Chilako River Nechako Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use					One policy	
Housing on farmland					One policy	
Farmworker housing					One policy	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refer to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR					One policy	
Buffering					One policy	
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						

Electoral Area C - Chilako River Nechako Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						

Electoral Area C - Chilako River Nechako Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support					One reference	
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					Flooding in ag areas	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					Scatter policies	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area D - Tabor Lake-Stone Creek Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use						
Housing on farmland					Refers to ALC	
Farmworker housing					One policy	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refers to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current guidelines.	
Edge Planning						

Electoral Area D - Tabor Lake-Stone Creek Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						

Electoral Area D - Tabor Lake-Stone Creek Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					One policy	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					One policy	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area D - Pineview Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use						
Housing on farmland					Refers to ALC	
Farmworker housing					One policy	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refers to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current recommendations	
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						

Electoral Area D - Pineview Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						

Electoral Area D - Pineview Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					One policy	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					One policy	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area F - Willow River-Upper Fraser Valley Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use						
Housing on farmland					Refers to ALC	
Farmworker housing					One policy	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refers to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current guidelines.	
Edge Planning						

Electoral Area F - Willow River-Upper Fraser Valley Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						

Electoral Area F - Willow River-Upper Fraser Valley Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					One policy	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					One policy	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area G - Crooked River-Parsnip Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use						
Housing on farmland					Refers to ALC	
Farmworker housing					Refers to ALC	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refers to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current guidelines.	
Edge Planning						

Electoral Area G - Crooked River-Parsnip Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism					General policy supporting tourism.	
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						

Electoral Area G - Crooked River-Parsnip Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					One policy	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species					One policy - fish	
Managing changes to wildlife and ecological systems.					One policy	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area H - Robson Valley-Canoe Downstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection but doesn't address other aspects of food/agriculture.	
Coordinated approach to land use					One statement	
Housing on farmland					Refers to ALC	
Farmworker housing					One policy	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					One policy and one statement referring to the ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR					Multiple policies	
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current guidelines.	

Electoral Area H - Robson Valley-Canoe Downstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;					One policy	
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						

Electoral Area H - Robson Valley-Canoe Downstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy	
Mitigating flooding					One policy	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					One policy	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Electoral Area H - Robson Valley Canoe Upstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Address farmland protection and the importance of agriculture.	
Coordinated approach to land use					Briefly touches on it.	
Housing on farmland					Refers to ALC	
Farmworker housing					One policy	
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Directs to residential areas and refers to ALC	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current guidelines.	
Edge Planning						

Electoral Area H - Robson Valley Canoe Upstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism					Supports tourism in general	
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						

Electoral Area H - Robson Valley Canoe Upstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					Comprehensive policies throughout OCP.	
Mitigating flooding					One policy	
Adapting to increase climate variability					One policy	
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					A few policies	
Enforcement of regulations to protect water systems, riparian areas					Scattered policies	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						

Electoral Area H - Robson Valley Canoe Upstream Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Incorporating UNDRIP						

City of Prince George Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Multiple policies supporting agriculture.	
Coordinated approach to land use						
Housing on farmland					One dwelling per 15 ha.	
Farmworker housing						
Agritourism accommodation					Considering support for agri-tourism.	
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Strong policy support	

City of Prince George Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR					Minimum lot sizes for lands generally adjacent to ALR lands.	
Buffering					.	
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)					Development of a farm and farmer resource centre with abattoir facilities as well as developing a beef cluster.	
Niche value-added processing					Development of a farm and farmer resource centre.	

City of Prince George Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism					Considers agri-tourism	
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).					Multiple policies supporting local markets.	
Capture greater local and provincial market share;					Development of a regional "brand".	
Production and value-added processing servicing growth niche markets;					Development of a farm and farmer resource centre.	
Additional finishing and value-added processing operations;					Development of a farm and farmer resource centre.	
Integrated opportunities for production and marketing;					Development of a regional "brand".	

City of Prince George Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Strategic partnerships to facilitate communication, policy development, and common goals;					Development of a regional "brand".	
Education and training on production, markets and marketing techniques;					Development of a farm and farmer resource centre.	
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.					Encourages partnerships between a variety of resource sectors to support agriculture.	
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.					General support for food and agriculture education.	

City of Prince George Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Extension support						
Marketing campaign					Development of a regional "brand".	
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					Multiple policies	
Mitigating flooding					Multiple policies	
Adapting to increase climate variability					Multiple policies	
Managing changing pests, diseases, and invasive species					Multiple policies	
Managing changes to wildlife and ecological systems.					Multiple policies	
Enforcement of regulations to protect water systems, riparian areas					Multiple policies	
Urban Agriculture						
Community gardens						
Edible landscaping						
Green roofs						
Bees and hens						
Urban farming						
Community food infrastructure and education						
Community kitchens					Multiple policies supporting kitchens.	

City of Prince George Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Food rescue and warehouses and distribution hubs for food in the non-profit sector						
Food skill classes/programs						
Environment/ restorative						
Salmon, migratory water bird, habitat protection					Multiple policies	
Soil health					Multiple policies	
Reducing cosmetic pesticide use					Multiple policies	
Onsite composting					General support	
Rainwater collection					One supportive policy	
Promoting pollinators					One supportive policy	
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

District of Mackenzie Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					Multiple policy areas	
Coordinated approach to land use						
Housing on farmland						
Farmworker housing						
Agritourism accommodation						
Subdivision and minimum lot size						
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)						
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering						
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						

District of Mackenzie Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Agritourism						
Investment recruitment					Strong support	
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).					General support	
Capture greater local and provincial market share;					General support	
Production and value-added processing servicing growth niche markets;					General support	
Additional finishing and value-added processing operations;					General support	
Integrated opportunities for production and marketing;					General support	
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						

District of Mackenzie Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Extension support						
Marketing campaign					General support for a regional food culture/identity.	
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					One policy - no concrete actions	
Mitigating flooding					General support	
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					Crop protection policy	
Enforcement of regulations to protect water systems, riparian areas					General support	
Urban Agriculture						
Community gardens					Strong support	
Edible landscaping					Supports food production in public and private spaces.	
Green roofs						

District of Mackenzie Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Bees and hens					Supports the keeping of bees and small livestock.	
Urban farming					General support in multiple policies.	
Community food infrastructure and education						
Community kitchens					General support	
Food rescue and warehouses and distribution hubs for food in the non-profit sector						
Food skill classes/programs						
Environment/ restorative						
Salmon, migratory water bird, habitat protection						
Soil health						
Reducing cosmetic pesticide use						
Onsite composting					General support	
Rainwater collection						
Promoting pollinators						
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Village of McBride Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag					General support	
Coordinated approach to land use						
Housing on farmland						
Farmworker housing						
Agritourism accommodation						
Subdivision and minimum lot size					Refers to ALC policy	
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refers to ALC policy	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR						
Min lot sizes outside and adjacent to ALR						
Buffering					One policy - does not meet current guidelines.	
Edge Planning						
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						

Village of McBride Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)						
Agritourism						
Investment recruitment						
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).						
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						

Village of McBride Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk						
Mitigating flooding						
Adapting to increase climate variability						
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.						
Enforcement of regulations to protect water systems, riparian areas						
Urban Agriculture						
Community gardens						
Edible landscaping						
Green roofs						
Bees and hens						
Urban farming						
Community food infrastructure and education						
Community kitchens						
Food rescue and warehouses and distribution hubs for food in the non-profit sector						

Village of McBride Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Food skill classes/programs						
Environment/ restorative						
Salmon, migratory water bird, habitat protection						
Soil health						
Reducing cosmetic pesticide use						
Onsite composting						
Rainwater collection						
Promoting pollinators						
First Nation Relationships						
Indigenous food systems						
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						

Village of Valemount Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Protection of agricultural land/ lands in the ALR, discouraging non-farm development, maintaining farmland for farming						
General policy statement supporting ag						
Coordinated approach to land use						

Village of Valemount Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Housing on farmland					Refers to ALC policy	
Farmworker housing						
Agritourism accommodation						
Subdivision and minimum lot size					Strong policy support	
Forage strategy						
Limiting non-farm uses on farmland (e.g. refuse disposal, truck parking)					Refers to ALC policy	
Preventing conflict between agricultural and developed areas						
Min lot sizes inside the ALR					Strong policy support	
Min lot sizes outside and adjacent to ALR					Refers to ALC policy	
Buffering					Refers to current guidelines	
Edge Planning					Refers to current guidelines	
Agriculture Economy, regional processing, storage, distribution						
Beef industry Cluster (finishing and processing)						
Niche value-added processing						

Village of Valemount Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Market opportunities for primary producers (organics, honey, diversified livestock, agroforestry and non-timber forest products, greenhouse)					One policy regarding capturing market opportunities	
Agritourism					General support for tourism.	
Investment recruitment					General support	
Local markets (farmers' markets, regional food retailers and hotel, restaurant and institutional wholesalers).					Strong policy support	
Capture greater local and provincial market share;						
Production and value-added processing servicing growth niche markets;						
Additional finishing and value-added processing operations;						
Integrated opportunities for production and marketing;						
Strategic partnerships to facilitate communication, policy development, and common goals;						
Education and training on production, markets and marketing techniques;						
Changing demographics and consumer preference for fresh foods and healthy products;						
Regional organization to provide a unified voice for the sector;						
Cooperative organizations and strategic alliances to build economies of scale.						

Village of Valemount Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Education in agriculture						
Funding for education groups						
Agricultural education, research and development.						
Extension support						
Marketing campaign						
Environmental Protection and Climate Adaptation						
Decreasing wildfire risk					Exploring the creation of an emergency management plan.	
Mitigating flooding						
Adapting to increase climate variability					Multiple policy areas	
Managing changing pests, diseases, and invasive species						
Managing changes to wildlife and ecological systems.					Policy for working with wildlife in rural/agricultural areas.	
Enforcement of regulations to protect water systems, riparian areas					Multiple policy areas	
Urban Agriculture						

Village of Valemount Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
Community gardens					Strong policy support	
Edible landscaping					Strong policy support	
Green roofs						
Bees and hens					Strong policy support	
Urban farming					Strong policy support	
Community food infrastructure and education						
Community kitchens					General support	
Food rescue and warehouses and distribution hubs for food in the non-profit sector						
Food skill classes/programs						
Environment/ restorative						
Salmon, migratory water bird, habitat protection					Multiple policy areas	
Soil health						
Reducing cosmetic pesticide use						
Onsite composting					Strong policy support	
Rainwater collection					Strong policy support	
Promoting pollinators					Strong policy support	

Village of Valemount Official Community Plan						
Ag. Bylaw Area	Policy assessment				Potential gap/opportunity	Notes
	Strong	Medium	Light	Not present		
First Nation Relationships						
Indigenous food systems					Acknowledgement of Indigenous food systems.	
Recognize Indigenous rights to hunt, fish, trap etc.						
Incorporating UNDRIP						