



REVELSTOKE FOOD SECURITY STRATEGY

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Prepared for: City of Revelstoke & The Food Security Steering Committee

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Steering Committee

A committee of community representatives was nominated to guide the direction of this project. Many of the committee members served on a previous working group, which helped to guide the development of the Revelstoke Food Charter thus providing continuity of thought and process in the transition from one project to the next.

The consultants would like to thank the Revelstoke Food Security Strategy Committee for their valuable input on this project. The FSS Steering Committee members are as follows:

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Revelstoke's Food Security Vision

Revelstoke will have a secure food system rooted in the community and centered on good food – food that is **HEALTHY, SUSTAINABLE AND AFFORDABLE**. Revelstoke will have a culture that supports local food production where possible and recognizes the importance of food in bringing people together through growing, cooking and eating.

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EXECUTIVE SUMMARY

Revelstoke has long had a history of food security, dating back to its establishment as a CPR town in the 1880s. A culture of gardening and personal food production has continued since its founding. Walking through the city, one will see many backyard gardens managed by both young and old. There may even be the odd squawk from a backyard chicken.

In recent years food security has become an important issue for residents. Spearheaded primarily by the North Columbia Environmental Society (NCES) and Community Connections (CC), Revelstoke now has a robust and active local food scene. More and more community organizations, residents and businesses are becoming involved in food security.

The community took a big step towards becoming more food secure when it developed a Food Charter in 2013. This project was initiated by the NCES and supported by the City of Revelstoke Department of Community Economic Development. A steering committee, made up of local residents and specialists in food security guided the development of the Food Charter.

The Food Security Strategy (FSS) is the next step in Revelstoke's attempt to become more food secure.

The FSS is a research document that undertakes the following tasks:

1. Develop a vision, goals, and objectives to guide the project,
2. Determine Revelstoke's current level of food self sufficiency,
3. Map and identify parcels within the City that may be suitable for food production,
4. Record all the current Programs, Organizations & Policies (POPs) in place that support food security,
5. Assess the strengths of the current POPs and identify gaps,
6. Develop recommendations to address gaps.

A vision for food security in Revelstoke was adopted from the Food Charter. Revelstoke's vision for food security is:

Revelstoke will have a secure food system rooted in the community and centered on good food - food that is healthy, sustainable and affordable. Revelstoke will have a culture that supports local food production where possible and recognizes the importance of food in bringing people together through growing, cooking and eating.

Revelstoke's 5 Food Security Goals are:

- **Access to Food:** Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents.
- **Environmentally Sustainable Food Production:** Increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions.
- **Food Culture:** Promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being.
- **Economic Sustainability:** Support economic development opportunities related to local food production such as food production business, cooperatives, or partnerships through policy, education and networking.
- **Education:** Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke.

Attempts to determine Revelstoke's current level of food self-sufficiency by calculating how much local food is currently available within three "local foodsheds." The three local foodsheds are determined using the following criteria: 1. **Uber Local Foodshed** - within a bikeable distance (16km) from the City, 2. **Local Foodshed** - constrained to Revelstoke's local Columbia Valley (Shelter Bay to Mica Dam), and 3.

Regionally Local Foodshed - Approximately 250km from the City (includes Kelowna, Kamloops, Golden, etc.). Results from the food self-sufficiency study show that **1.6% of Revelstoke's total food is "uber local," 1.8% is "Local," and 5.4% is "Regionally Local."**

Mapping potential food production space in Revelstoke identified 153.4 hectares of land that may be suitable. **29.4 hectares (19%) are ranked highest-potential** because they are large parcels of City-owned land with access to water and could presumably begin food production in the spring of 2015. **14.3 hectares (9%) are ranked second-highest potential** because they are small parcels City-owned land with access to water, and **109.4 hectares (71%) of land are identified as low potential** - emergency reserve lands (lands that currently have activities on them, but could be converted for food production if needed). Less than 2% of privately-owned land was suitable for food production.

There are currently over **20 organizations in Revelstoke that are involved in food security programs**. The two largest organizations are the North Columbia Environmental Society (NCES) with its Local Food Initiative projects, and Community Connections with several projects to support low-income families. There are over **20 businesses with strong ties to Revelstoke that offer local food products**. This doesn't even include the large number of Farmer's Market vendors that supply Revelstoke with fresh produce in the summer months.

Most current food security programs are strong and Revelstoke is doing so much to address food security already. **Program weaknesses are primarily due to funding constraints**. Increases in funding for these projects would strengthen existing programs and further address identified gaps.

Recommendations were developed by conducting group interviews with local food experts to brain-

storm solutions to existing challenges, collecting resident responses through a series of public outreach events and through extensive research. Research involved reviewing other communities food security initiatives and assessing their applicability and expected success in Revelstoke.

Priorities were ranked with the proposed implementation timelines as follows:

- **Very high** - within 6 months of completion of the Food Security Strategy
- **High** - 1-2 years
- **Medium** - 3-5 years
- **Low** - as possible

The top 7 "Very high" recommendations are:

1. **Strengthen food security as a community priority in the 2015 Official Community Plan and Zoning Bylaw updates;**
2. **Establish a Food Security Committee;**
3. **Create a Food Security Coordinator Position;**
4. **Request that a community liaison to the Farmer's Market Board to represent the best interests of the community in improving food security;**
5. **Amend the animal control bylaw to allow backyard chickens and other livestock for food;**
6. **Create an online food security e-hub to be managed by the Food Security Coordinator; and**
7. **Develop a community compost system with end products suitable for agricultural use.**

Revelstoke is currently in a great position to improve its overall level of food security. It has many involved organizations, and a strong food culture. Implementing the 7 "Very high" recommendations is a strong start towards achieving stronger food security.



Introduction

1.1 Background of the Food Security Strategy

Revelstoke's Food Security Strategy (FSS) is the first of its kind in Revelstoke. The 2012 Poverty Reduction Strategy first identified the need to address food security as a priority in Revelstoke. This was supported in the Integrated Community Sustainability Plan in 2013. The creation of the Revelstoke Food Charter in late 2013 is the main initiator of this plan's development. The Charter, crafted by a committee of local residents passionate about accessible, healthy, local food set the groundwork for and was the first step in the development of the FSS.

The creation of Revelstoke's Food Charter in 2013-14 was the catalyst for the Revelstoke Food Security Strategy (FSS). The Charter was adopted by Revelstoke City Council in February, 2014. It is now avail-

able to be endorsed by local organizations and businesses. Several have already signed on such as School District 19, Community Connections, the Revelstoke Childcare Society, and a number of local businesses. The City of Revelstoke's Community Economic Development Department initiated the FSS. The project is overseen by a steering committee of community members and experts in food, health and community. The Real Estate Foundation of British Columbia is funding this project.

The purpose of the FSS is to increase access to healthy, local food for residents. The Strategy is guided by a vision for Revelstoke's Food Security, crafted by the FSS Steering Committee in the early phases of the project.

1.1.1 Revelstoke's Food Security Vision

Revelstoke's Food Security Vision

Revelstoke will have a secure food system rooted in the community and centered on good food – food that is healthy, sustainable and affordable. Revelstoke will have a culture that supports local food production where possible and recognizes the importance of food in bringing people together through growing, cooking and eating.

This strategy is a research-based document. Having no framework from which to operate, research of other strategies, initiatives, and communities is a way to help organize Revelstoke's Food Security Strategy and inform methodologies and recommen-

dations. The FSS is a compilation of many different strategies, plans, and initiatives crafted to address Revelstoke's needs and act as a valuable, actionable document that will strengthen Revelstoke's level of Food Security now and well into the future.

Methodology

2.1 Development of Revelstoke's Food Security Definition, Vision, Goals & Objectives

The definition, vision, goals and objectives (DFGOs) were developed by using the Food Charter as a starting point and by gathering input from the Food Security Strategy Steering Committee. The vision, goals and objectives serve as an extension of the food security definition on the Food Charter, and provide the framework and direction for the Food Security Strategy (FSS) research.

2.2 Recognizing Global Trends and Local Effects

In conjunction with the development of the DFGOs was the creation of a list of broad global-scale food security issues that impact Revelstoke's food security. These global trends have local effects on Revelstoke's food security, and thus need to be addressed in the FSS. These trends are identified on page 15.

2.3 Understanding Revelstoke's Current Food Security

2.3.1 Assessing Revelstoke's Current and Potential Level of Food Security

This part of the plan focused primarily on research of Revelstoke's food security and included the following three steps:

- Understanding what the community is currently doing well by identifying current organizations, programs, policies and plans (PPPs) in place that support food security in Revelstoke. This also provided the opportunity to identify major challenges associated with current PPPs.
- Identifying the major producers, processors, and suppliers in Revelstoke's Food System. Each major actor in this system was interviewed for key information on the service or product they provide, and brief profile descriptions were created for each.
- Measuring our current level of food self-sufficiency by calculating how much food is currently grown, sourced and produced locally.
- Understanding our potential to grow more food locally by mapping potential parcels of land within the City of Revelstoke that may be suitable for food production.



2.3.2 Identifying Challenges & Opportunities

After assessing Revelstoke's current and potential level of food security, the FSS focuses on understanding what the challenges and opportunities are for increasing food security in Revelstoke. This was done in two ways:

- Researching other communities to see what challenges they faced and how they addressed them through specific programs, policies and plans. This research phase focused primarily on similar-sized communities throughout British Columbia, but also included larger communities throughout Canada and the US Pacific Northwest. Through this phase we began to identify challenges and opportunities that were specific to smaller communities and/or applicable to all communities.
- After identifying common challenges and opportunities in other communities, the consultants undertook an extensive public outreach process to identify which challenges & opportunities are the most important to Revelstoke. This phase included two activities:
 - Public outreach – Information booths were set up at 2 farmer's market booths, at Cooper's Foods, Southside Market, and at the Food Bank. The consultants were there to discuss the project and gather information on residents' food habits through discussion and a pre-prepared survey.
 - Food System Actor interviews – Three group interviews were held to gather information on different areas of our food system. Interviews were with 6 local businesses involved in growing and raising food, 4 local businesses involved in meat production and processing, and 3 local residents who are heavily involved in hunting, fishing and gathering.

Results from the research, surveys and interviews were compiled to create a picture of challenges and opportunities specific to Revelstoke.

2.4 Gap Analysis

A Gap Analysis was done using the goals and objectives as a framework. Objectives that were currently being strongly met through existing PPPs were identified as only needing continued support. Objectives where there were weak or no PPPs were identified as needing action. The gap analysis fed into the recommendations phase using the ICSP action table to keep community action plans consistent and easily traceable and revisable.

2.5 Recommendations

Finally, recommendations are made specific to addressing key trends effecting food security, and challenges that have been locally identified. This section of the document identifies and prioritizes suggested actions, which organizations should be the initiator, a rough estimate of cost and identification of known funding sources.



3.0

Key Concepts and Project Vision, Goals, Objectives

3.1 Food Security Definition & Vision

The FSS steering committee did not want “to reinvent the wheel” in developing a definition and vision for food security in Revelstoke. In an effort to honour the large amount of community consultation that went into the Food Charter development by maintaining the words recently identified and endorsed in that document, the food security definition in

the charter was adopted for the FSS. In creating the vision-statement to guide the FSS work, the Charter was used as the framework for crafting a short, concise vision for food security using common language, but with added refinements from the steering committee.

Revelstoke’s Food Charter defines food security as:

“For Revelstoke, food security means that all community residents have access to nutritious, safe, affordable food that meets our needs, supports our cultures, and is produced in ways that are environmentally sound, socially just, adaptable to change and supportive of self-reliance and collaboration.”

Revelstoke’s Food Security Vision:

Revelstoke will have a secure food system rooted in the community and centered on good food – food that is healthy, sustainable and affordable. Revelstoke will have a culture that supports local food production where possible and recognizes the importance of food in bringing people together through growing, cooking and eating.

3.2 Goals & Objectives

Using the CARD Method for soliciting feedback, the consultants gathered information on the critical components of Revelstoke's food security framework to develop the goals and objectives aimed at guiding project research. The Goals & Objectives are:

Goal 1: Access to Food

Goal Statement: Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents.

Objectives:

- Objective 1: Ensure that residents in need have dignified access to healthy and affordable foods
- Objective 2: Facilitate broad-based participation in food sharing and production on private and public land
- Objective 3: Increase household and community-based food preservation, improving access to local food outside of the growing season
- Objective 4: Identify areas suitable for food production within the region and connect potential "producers" with potential "landlords."
- Objective 5: Support land use planning that preserves regional farmlands and increases the use of arable land suitable for food production
- Objective 6: Reduce regulatory barriers to increasing local food production

Goal 2: Environmentally Sustainable Food Production

Goal Statement: Increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions.

Objectives:

- Objective 1: Increase local food production with emphasis on reducing the embodied energy of the food system (encourage organic growing methods, increase water efficiency, decreasing food miles, etc.)
- Objective 2: Reduce food waste whereby organic waste products are used as valuable agricultural inputs and/or products that are still edible are recovered and redistributed
- Objective 3: Encourage responsible and sustainable harvesting of wild foods
- Objective 4: Manage food production in ways that are mindful of and reduce conflict with wildlife

Goal 3: Food Culture

Goal Statement: Promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being.

Objectives:

- Objective 1: Adopt food production as a proud part of our local identity to encourage a thriving local food culture, and retain related knowledge and skills within the community
- Objective 2: Celebrate the diversity of our food cultures and an appreciation for local, healthy cuisine
- Objective 3: Recognize and support the importance of eating together as a family and community to our well-being (physical and mental health)

Goal 4: Economic Sustainability

Goal Statement: Support economic development opportunities related to local food production such as food production business, cooperatives, or partnerships through policy, education and networking.

Objectives:

- Objective 1: Market and sell locally produced food to residents and visitors
- Objective 2: Pay a “fair share” for and promote locally produced food to ensure that food producers are able to meet their costs
- Objective 3: Develop partnerships that increase local food production and ensure economic sustainability
- Objective 4: Encourage economic development opportunities related to local food production alongside a diversity of small, locally-owned business opportunities

Goal 5: Education

Goal Statement: Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke.

Objectives:

- Objective 1: Provide educational events and materials explaining the benefits of healthy eating
- Objective 2: Conduct educational events and deliver materials to illuminate the benefits of local food production, an appreciation for local food, and increase the ability of local residents to produce their own food in a sustainable manner
- Objective 3: Raise awareness around the true value of food and about the economic benefits of a local food system
- Objective 4: Seek food skills development opportunities for residents (in relation to food preparation, processing, meal planning, food safety, etc.)
- Objective 5: Connect students and young adults with opportunities to explore career options in agriculture and participate in local food production through the formal education system
- Objective 6: Determine local food production capacity, limitations and trends.
- Objective 7: Identify and promote the sharing of information and collaboration between local organizations and community and government agencies
- Objective 8: Encourage the consumption of food that is ethically produced (supporting fair treatment of farmers as well as the humane treatment of animals)

3.3 Defining Revelstoke's Foodshed

3.3.1 Three Kinds of "Local"

In order to assess Revelstoke's current level of food self-reliance as a piece of Revelstoke's overall food security we must define what is meant by the term "local." The City of Seattle defines three different foodsheds using transportation models to define each area. A foodshed is the area that food comes from – this includes where it is produced (the land it is grown on), the route it travels, and table location it ends up on. An "uber local" foodshed is defined as being within biking distance (10 miles or 16km) from the City. Seattle's "local" foodshed is considered a relatively short drive - within the county (King County - 46 miles or 74km). The final component of Seattle's foodshed is the conventional food system. A conventional foodshed is considered the national average of 1,500 miles (2,400 km) that the average food travels to grocery stores in the United States. This strategy uses three levels of "local" similar to that of Seattle.

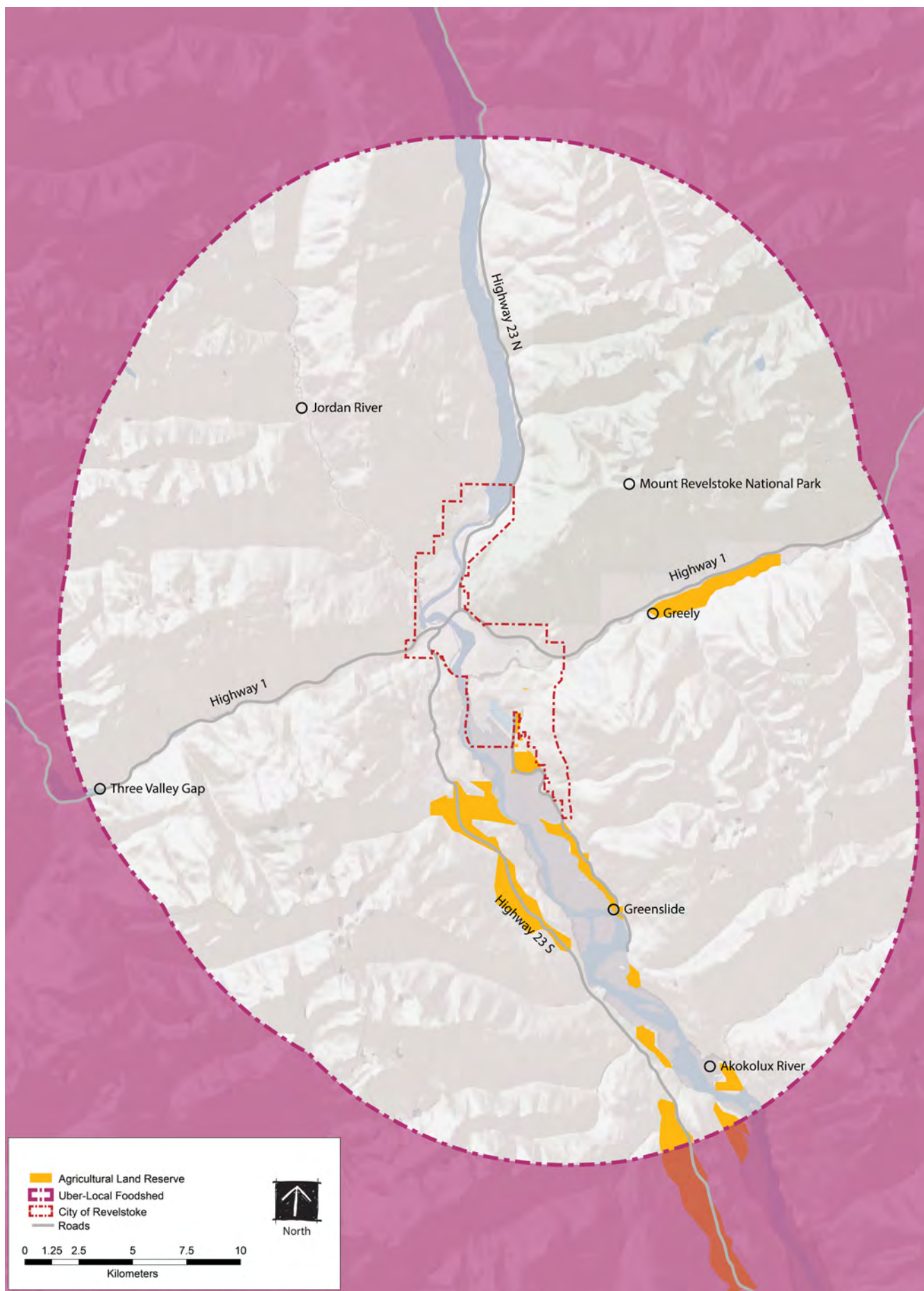
Revelstoke's Uber-Local Foodshed

For the first level of "local," Seattle's definition of an uber-local foodshed has been adopted: a bikeable (10 mile or 16 km) distance from the City. This the most local foodshed referred to in this document.

[See map on next page]

Revelstoke's Local Foodshed



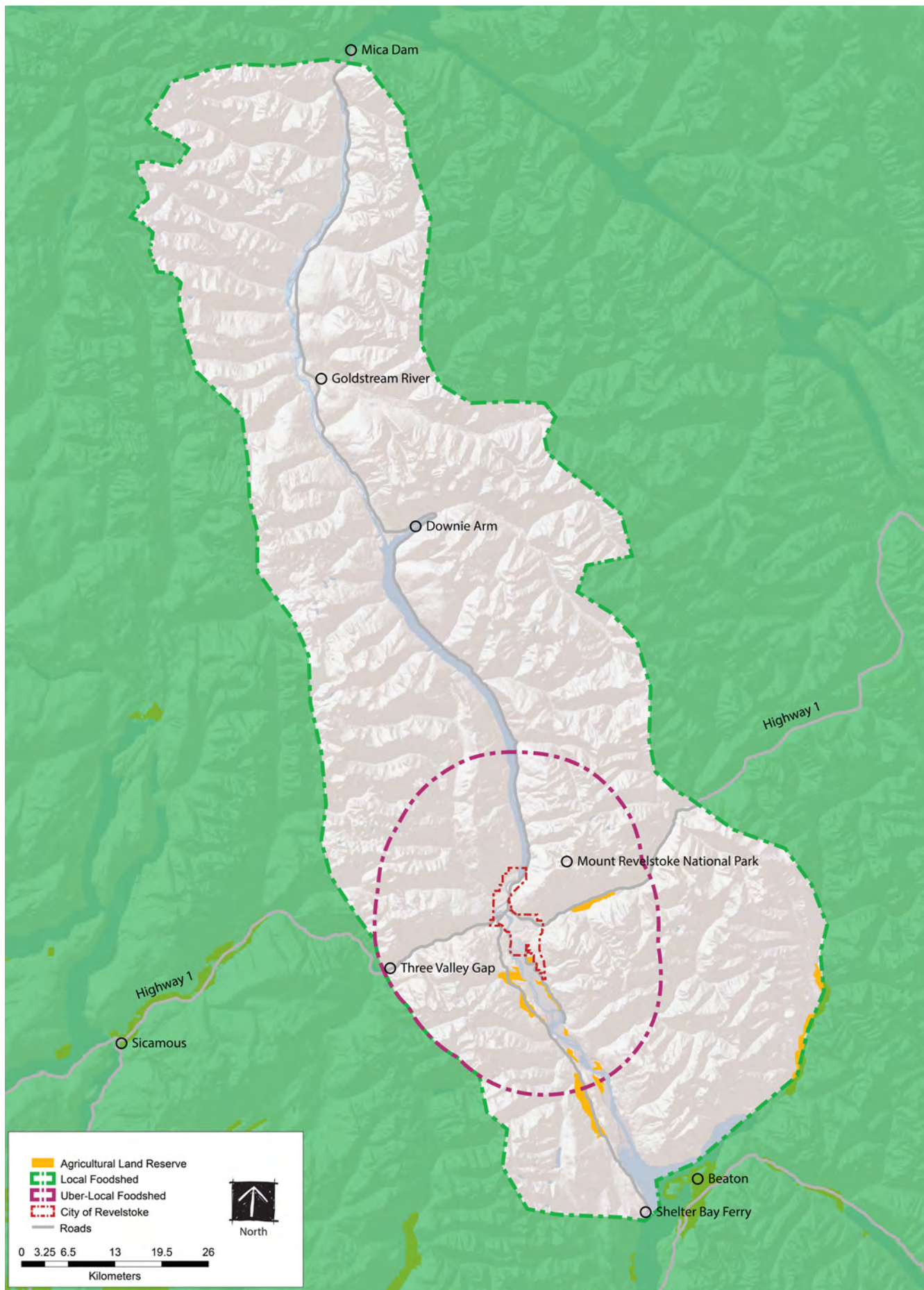


In considering what Revelstoke's "Local" foodshed is the definition acknowledges Revelstoke's surrounding geography and weather that often leaves the community isolated during winter snowstorms and spring mudslides. For this reason, Revelstoke's "Local" foodshed is constrained to drivable distances within the western Columbia Valley – roughly stretching from Shelter Bay to Mica Dam with limited access east and west.

[See map on next page]

Revelstoke's Regionally-Local Foodshed

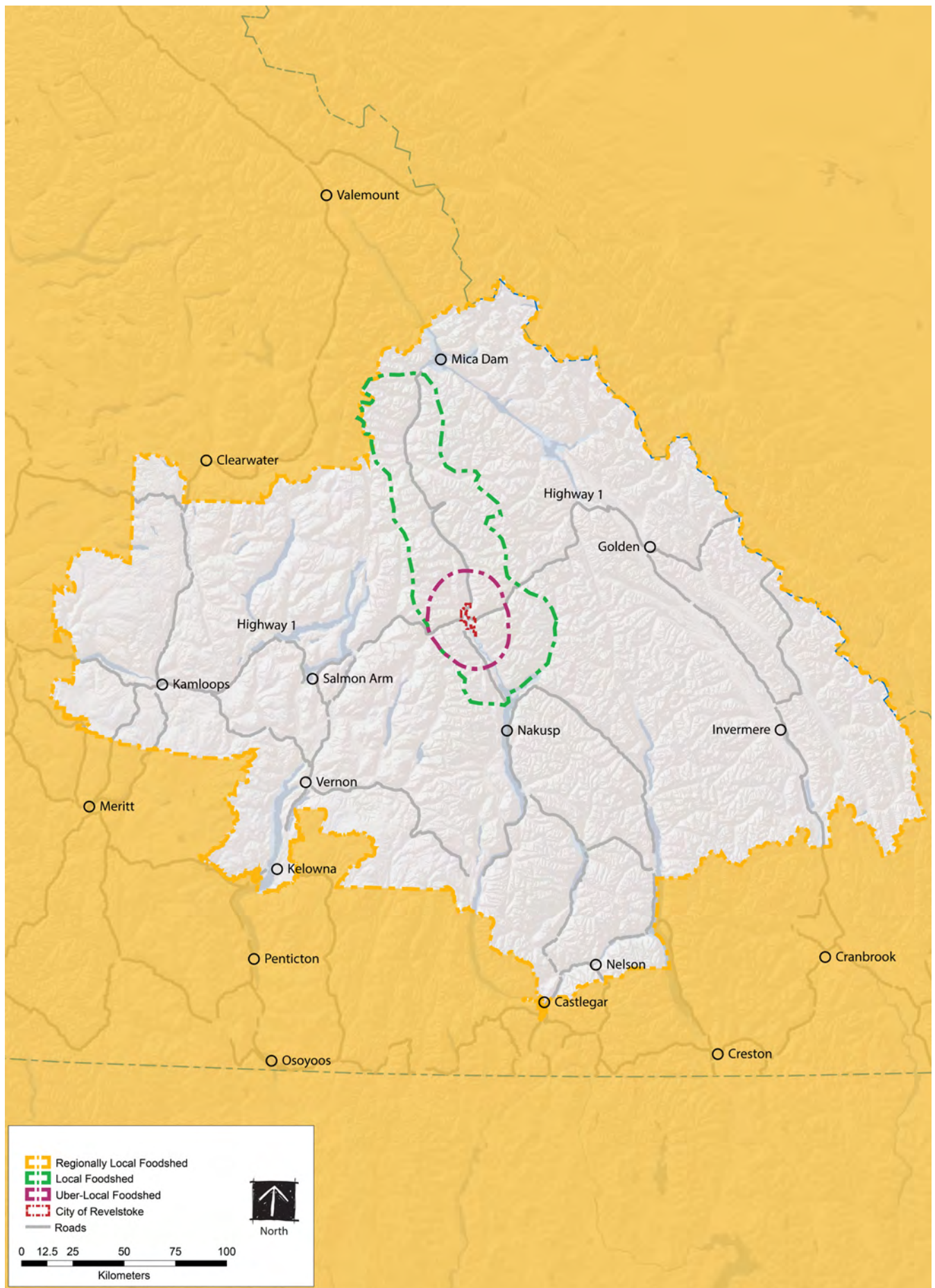




This report also acknowledges a larger “Regionally Local” area of about 250km around the City. This Regionally Local area recognizes and appreciates our neighbouring communities and businesses that contribute to Revelstoke’s overall food security. This includes the numerous businesses that travel up to 500km each Saturday to bring fresh produce to Revelstoke’s Farmer’s Market. It also incorporates a larger regional foodshed that provides hunting and fishing opportunities. Most importantly, by recognizing the Regionally Local foodshed, it encourages Revelstoke to reach out and make connections with its neighbours to improve its food security.

[See map on next page]







4.0

Recognizing Global Trends and Local Effects

In writing a food security strategy for Revelstoke it is important to note that the major global trends affecting food systems inevitably have local effects. To determine recommended local responses aimed at safeguarding community food security, it is important to take note of these general global trends and

their local effects. While there is an incredible source of food system scholarship pointing to innumerable global food system trends, this section highlights 12 trends that have the greatest trickle-down effect on our region.

4.1 Increasing Dependence on Global Food Systems

The primary concern for Revelstoke is the increasing dependence on a global food system that is heavily reliant on fossil fuel and chemical inputs for its high yields. This system is now widely criticized for a number of social, environmental, and economic effects on local food systems (many of which are described in the pages which follow). Generally speaking, the current global food system is seen to have exacerbated food insecurity across North America, despite the increase in over-all food production around the globe.¹ Food insecurity refers to the state of being without reliable access to a sufficient quantity of affordable, nutritious food.²

¹ Marion Nestle (3rd ed. 2010) *Safe Food: The Politics of Food Safety*. University of California Press.

² Oxford University Press (2014). Accessed Sept 2014: <http://www.oxforddictionaries.com/definition/english/food-security>

Revelstoke is relatively isolated as a community. It's closest neighbouring communities are at least a 45 minute drive away. It is constrained on where it can grow food by its surrounding mountains and steep valleys, its short growing season, its need to manage food for wildlife conflicts, and by industries such as forestry and power generation that don't manage the land for food production. Historically, Revelstoke was mostly food self-sufficient. It used to have two dairies, many farms, hunting, fishing, and wild harvesting that would provide all of its food needs. However, like most, if not all communities in Canada, Revelstoke has slowly lost its ability to produce its own food. It now depends heavily on the global food system for its supply of food.

4.2 Food Quality

In an increasingly industrialized food system whereby food products are produced on a massive scale, rising concerns over food quality are noted across North America. This is evidenced by rising rates of food contamination and recalls, concerns about pesticides and other chemicals in food, increased processing of food products, decreasing clarity over the ingredients which make up our foods, lack of regulation around genetic modification of foods/seeds, and the list goes on.³

³ Pollen, M. (2006). *The Omnivore's Dilemma: A natural History of Four Meals*. Penguin Books.

Canadians are eating higher amounts of unhealthy food. According to the 2004 Canadian Community Health Survey Canadians of all ages get more than one fifth of their calories from "other foods." These "other foods" are food and beverages which are not part of the four major food groups. The report also says that fat accounted for an average of 31% of Canadians' daily calories.⁴

⁴ <http://www.statcan.gc.ca/daily-quotidien/060706/dq060706b-eng.htm>

In an effort to regain some control and reassurance over the quality of the food we eat and feed our families there is a movement away from highly processed foods and the centralized food systems where they come from. As a result many communities across North America have noticed a growing interest and

support for small-scale food production, local food products, and simple ingredients similar to that of two generations ago. Revelstoke, like many other communities in our region, has seen rapid growth in the local-food movement in recent years.

4.3 Rising Food Costs and Unequal Access to Food

Despite massive quantities of food for sale in North America, access to healthy and affordable food is out of reach for many, and the trend of increasing food insecurity is getting worse.⁵ In Canada, it is estimated that approximately four million Canadians (including 1.15 million children) experienced some level of food insecurity, representing about 13% of all households in Canada.⁶ The 2013 BC Adolescent Health Survey shows that 6% of youth across BC say they go to bed hungry sometimes and 1% say they go to bed hungry often or always. Youth at greater risk of going to bed hungry included youth whose parent(s) or guardian(s) were unemployed (20%).⁷

Rising food costs are partially to blame for rising food insecurity rates, and increases in food prices are largely the result of price volatility in the global food market. A March 15th, 2012 article in Forbes Magazine entitled, "Why Are Food Prices So High?"⁸ describes 10 influences of the global market increasing food prices. The most significant was a 50% increase in the price of vegetables due to crop damage in Australia, Russia and South America. Other significant factors include growing demand from China and India, the Japanese Tsunami and earthquake, US Government subsidies encouraging etha-

nol production over food, and rising oil prices.

As oil prices rise, the cost of shipping food from California or even Vancouver increases significantly. We've seen the price of gasoline in BC rise from an average of \$73.4 Canadian in 2002 to \$128.5 in 2013 (using Victoria gas prices).⁹ This represents a 75% increase in shipping fuel costs alone in 12 years. This does not include higher costs for pesticide and herbicide production, nor higher costs for farmers to fuel their vehicles to plant, manage, harvest, and package food.

In Revelstoke, a number of studies and detailed records are kept to help quantify the relative levels of food insecurity within the community, many of which are explored in the Revelstoke Community Poverty Reduction Strategy (2012). At the time of publication, the Poverty Reduction Strategy identi-



5 Tarasuk, V., Mitchell, A., Dachner, N. (2012) *Household Food Insecurity in Canada 2012*. Accessed Sept 2014: http://nutritionalsciences.lamp.utoronto.ca/wp-content/uploads/2014/05/Household_Food_Insecurity_in_Canada-2012_ENG.pdf

6 CBC News (Feb 6, 2014). *Food Security in Canada Growing Worse*. Accessed Sept 2014: <http://www.cbc.ca/news/canada/prince-edward-island/food-insecurity-in-canada-growing-worse-1.2525300>

7 Smith, A., Stewart, D., Poon, C., Peled, M., Saewyc, E., & McCreary Centre Society (2014). *From Hastings Street to Haida Gwaii: Provincial results of the 2013 BC Adolescent Health Survey*. Vancouver, BC: McCreary Centre Society. (page 27)

8 <http://www.forbes.com/sites/steveodland/2012/03/15/why-are-food-prices-so-high/>

9 Wiebe, E. (2014). *Gasoline (Gas) Prices in Parts of Canada between 1998 and 2012*. University of Victoria, Climate Lab. Retrieved from: http://climate.uvic.ca/people/ewiebe/gasoline_prices.php

fies that food bank usage has increased dramatically in recent years, which correlates with struggles in finding affordable housing within the community.

In 2013, the trend of increasing food bank use in Revelstoke continued. Statistics gathered in 2013 indicate that the food bank provided services to 289 separate households, which included 342 adults, and 96 children. This is actually slightly lower than the number of households from 2012, but the total number of repeat visitations increased substantially, indicating that the clients required food bank services for longer periods of time. This is illustrated by the total number of repeat visitations to the food bank

having increased from 5227 in 2012 to 7410 in 2013 (this means that 7410 food hampers were provided in 2013).

The March Hunger Count conducted by the food bank each year is perhaps the best resource for estimating food insecurity over time. This count is based on a survey conducted each year (at the most stable time for food banks across the country) to provide Food Banks Canada with a summary of average use. The following chart illustrates dramatic increases in Revelstoke's food bank use between the years of 2009 to 2013.

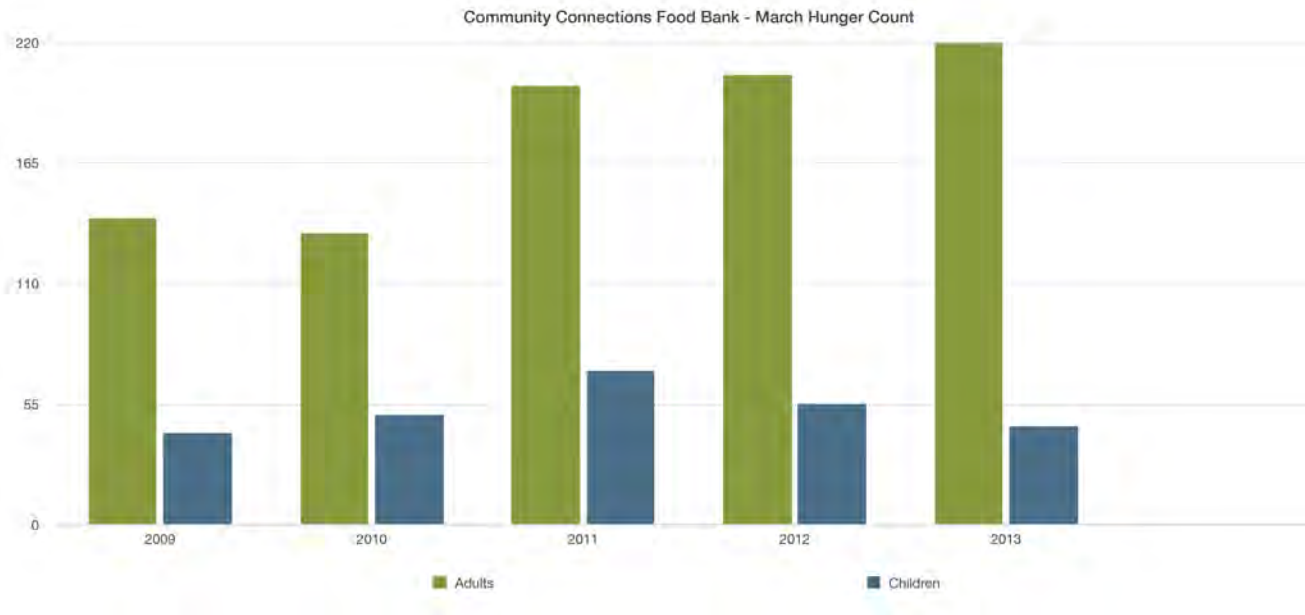


Figure 1. Community Connections Food Bank - March Hunger Count (2013)

Further complicating food insecurity in Revelstoke is the increased demand for food from seasonal workers and visitors. Revelstoke and area's permanent resident population in 2011 is recorded at 7691 people (7,139 + 552 CSRD residents)¹⁰. This number

may jump as high as 12,700 to 13,700 on the busiest day of the tourism season in both winter and summer.¹¹ This increase of 5,000 to 6,000 people means that Revelstoke needs to address access to and cost of food more thoroughly during peak tourist season.

¹⁰ Statistics Canada. 2012. *Focus on Geography Series, 2011 Census*. Statistics Canada Catalogue no. 98-310-XWE2011004. Ottawa, Ontario. Analytical products, 2011 Census. Last updated October 24, 2012. Retrieved from: <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-csd-eng.cfm?LANG=Eng&GK=CSD&GC=5939019>

¹¹ Orlando, A. 2013. *ICSP Study Zeros in on Revelstoke Population, Visitor Count*. Revelstoke Times Review. Revelstoke, BC. February 6th, 2013. Retrieved from: <http://www.revelstoketimesreview.com/news/189867421.html>

4.4 Access to Productive Agricultural land

High quality agricultural land is getting harder and harder for farmers to access as development pressure from growing communities, and various industrial interests drive land prices up putting significant economic pressure on small-scale agriculture. While increasing development of the surrounding land base brings with it a greater need to manage the soil, land, vegetation and water impacts to safeguard community capacity to produce its own food. It is not uncommon for these factors to be left out of land use planning processes.

In Revelstoke, the majority of local agricultural land was lost in the 1960s with the damming of the Columbia River whereby most of the areas arable land

was flooded. As a result of the local geography, with the majority of the areas valley bottom's flooded for major portions of the growing season, access to land suitable for food production is significantly limited.

Revelstoke has difficulties in accessing suitable land for food production. However, there are many creative initiatives that have redefined conventional ideas around what constitutes "land suitable for food production" whereby smaller plots of land have been shown to produce large amounts of food if managed appropriately. With this mindset, there has been a rise in urban agriculture whose methods provide numerous opportunities to help address this issue.

4.5 Declining Food Skills and Knowledge

As a society we are becoming more disconnected from our food by spending less time planning meals, cooking, and growing our food. Additionally, basic nutritional knowledge has also declined. This phenomenon is one of the lesser-known threats to localized food systems since people are losing the basic skills required to utilize (and appreciate) local food products, thus becoming even more dependent on processed foods and eating out.

In the past, cooking growing food, raising animals, harvesting, hunting, and fishing were common skills for most Revelstoke residents. Due to a stronger reliance on a global food system and prepared meals for "busy households" these skills are being lost. In addition, Revelstoke is seeing more immigrants from more urban areas of Canada. Immigrants from more

urban areas may not have grown up with exposure to food growing, and in particular, growing the types of foods that are suitable to Canadian climates.

The loss of food skill in Revelstoke is also evidenced by the low numbers of people engaged in food processing, or food production (apart from food service providers such as servers, and cooks in restaurants) as compared to previous generations. For example, Revelstoke has just two wild game butchers with the skills and knowledge to process wild game. Both are near retirement age and there isn't anyone currently in town with the knowledge, skills and experience to fill the need for wild game processing once they retire. Not addressing this issue will lead to further dependence on resources outside of the community.

4.6 Loss of Localized Food Cultures

It used to be that the regions of the world were characterized by the food that was grown and served there. The diversity in food and food-related customs used to be so rich that variation would exist between just one valley to another. Today, celebration of the regional diversity in food is still evident in the wine

industry whereby the characteristics of an ecosystem and the trade craft methods born out of the area's traditions are revered. While food and celebration are an integral part of any culture, as food becomes increasingly globalized it has become homogenous and the local diversity in food culture has been lost in many

regions of the world. This is perhaps exemplified by the predictability of food whereby a person traveling across Canada can easily order exactly same thing to eat and drink the whole way, since they can expect to stop at the same food chain of their choice in almost any major community.

In Revelstoke, the prevalence of food chains such as

Tim Horton's, McDonalds, and A&W located at the entrance into town are a typical example of homogenized food choices across Canada. That said, Revelstoke has made an effort to prevent these large multi-national food chains from encroaching on local food-related business within the community's downtown core and has been praised by other regional food security discussions for doing so.

4.7 National and Provincial Food Regulation

In today's centralized food system, food regulations are largely controlled by national, provincial and/or corporate bodies. This makes it extremely difficult for small-scale food producers, processors and suppliers to maintain autonomy of the local food system.

Some of the more difficult issues for Revelstoke are the provincial regulations that must be adhered to

in food production, processing and supplying. For example, provincial regulations meant to keep consumers safe from getting ill from improperly prepared food are important for public safety. However, they make sourcing local food in grocery stores, processing locally produced meat, and incorporating wild game, fish and wild harvest food into our diets arduous and extremely challenging.

4.8 Globalized Food Economies

The conventional food system in North America has come increasingly centralized which means that for every dollar spent on food very little of that dollar actually stays in the community. A more localized food system would support a myriad of local business op-

portunities since the majority of the consumer dollar would go directly to the local product or service provider, rather than the few corporations currently controlling the majority of today's food economy.

4.9 Ecological Costs of Agriculture

The majority of food consumed today is produced within a highly industrialized food system associated with huge ecological effects. Large farming operations dependent on substantial inputs of fossil fuels, pesticides, monocropping planting methods, and other chemicals pose significant threats to natural systems around the world. These ecological effects include, but are not limited to: water contamination and over-use, soil erosion and degradation, chemical pollution, genetic erosion and habitat loss.

In recognition of the massive ecological costs of industrial agriculture, there is growing support for small scale, and organic farming methods. Any efforts to increase agricultural activity in the Revelstoke area must keep environmental sustainability in mind. Indeed, much of the interest driving the current support for local food in the community is driven by environmental values.

4.10 Climate Change

Vulnerable Global Supply and Potential Higher Prices

Climate change is a global problem that will affect Revelstoke's food security. Because Revelstoke relies on getting food through the global food system, it means a drought in the United States that reduces the amount of fruits and vegetables will be felt in Revelstoke with less variety of supply and higher prices. Also, a drought

will affect the availability of crops for animal husbandry, resulting in a shortage of feed for meat whether that meat is raised locally or elsewhere. If demand for food stays the same, but the supply drops, the global market will respond by raising the price of food items.

Local Impacts of Climate Change

The Columbia Basin Trust's (CBT) Report, "Climate Change, Impacts and Adaptation in the Canadian Columbia Basin: From Dialogue to Action," highlights several potential impacts of climate change. Some of which can have a positive impact on local

food production and others that increase the threats to food security.

The most positive impact on local food systems is a longer growing season.

Negative effects of climate change include:

- water scarcity;
- more variable temperature;
- more frequent extreme weather events that could effect food supply as a result of closed highways for longer periods due to increased avalanche activity, or flooding and large wind events leading to crop failure;
- changes to terrestrial and aquatic ecosystems that may reduce wild food availability, and;
- increase in pests due to fewer consecutively cold days needed to kill pests, or warmer climates which are more hospitable to pests.

These effects and their potential impact are summarized in a table in Appendix 6:

This, combined with our estimated current level of food self-sufficiency should provide the motivation Revelstoke needs to increase its level of food security.

4.11 Food Waste

While rates of food insecurity continue to rise both locally and globally, the amount of food which is thrown away or otherwise wasted has also substantially increased. A study conducted by the United Nations World Food and Agricultural Organization in 2011 indicates that roughly one third of food produced for human consumption globally is wasted, which amounts to about 1.3 million tons per year.

¹²While food losses take place all along the supply chain from initial agricultural production to consumption, in medium and high-income countries food is more likely to be wasted at the consumption stage, meaning that it is often discarded even if it is still suitable for consumption. This study points out

¹² FAO (2011). *Global food losses and food waste – Extent, causes and prevention*. Rome. Accessed Sept 2014: <http://www.fao.org/docrep/014/mb060e/mb060e00.pdf>

that the more industrialized the food system, the higher the rates of food waste (example: in Europe and North America, the average per capita food waste was found to be 95-115kg/year, as compared to 6-11kg/year in South/Southeast Asia. This broad trend has recently received much critique in Canada as evidenced by the by the British Columbia Knowledge Network's popular new film and educational project "Just Eat It."¹³

13 *Just Eat It* (foodwastemovie.com)

In Revelstoke, the CSRD's waste characterization study (2013) indicates that 32.2% of the total waste picked up via curbside service is made up of food waste.¹⁴ Currently, apart from a few programs which encourage household compost, and a small food recovery program administered via Community Connections, there is little taking place to address the issue of food waste in Revelstoke.

14 2013 Revelstoke Waste Characterization Study (2013).
Columbia Shuswap Regional District. Accessed Sept 2014:
<http://www.csr.d.bc.ca/node/1054>

4.12 Global Trends, Local Effects Summary

A more self-sufficient food system in Revelstoke would ensure that residents have access to healthy, sustainable and affordable food. It would allow Revelstoke to control its own food system to ensure that food is being grown sustainably, without degrading the environment, and ensuring that animals are treated humanely. It would mean that Revelstoke could revisit its previous (and now rising) food cul-

ture. It would benefit from economic opportunities afforded by growing, processing, and distributing food locally thereby keeping money and jobs in the community. It means that Revelstoke could adapt to external forces like climate change and rising oil prices, and keep food skills alive through education and experience in growing its own food.



4.13 Regional Agricultural Trends

This section aims to highlight briefly the regional agricultural trends effecting food security in our region as recently outlined in the Shuswap Agricultural Strategy (June 2014).¹⁵ To begin, it is noteworthy in and of itself that Revelstoke was not included in this study as our region was not deemed to be an agricultural zone of importance to the Shuswap region. Regardless, the agricultural trends within the CSRD certainly do have an effect on Revelstoke's food security and should be briefly addressed (full report is available on-line).¹⁶

Agriculture in the Shuswap region is experiencing great pressure due to development interests in the region that conflict with agricultural use of the land-base. However, despite this pressure the agricultural sector continues to demonstrate economic growth, and the number of farms are not in serious decline (which is in contrast to national trends.) In total, as of 2012 the CSRD has 54,566 ha of Agricultural Land Reserve (ALR). In 2011 there were 38,413 ha of active farmland, which is down from 41,549 ha in 2006, but the number of farms in the region has remained relatively consistent at 616 reported in 2011. While this is a large amount of land being farmed, out of a total of 11,448 ha of crop land, only 116 ha of this is devoted to fruit, 77 ha is devoted to vegetables, and remaining is predominately hay. Next to hay, the largest agricultural crop in terms of crop area is devoted to greenhouse flowers.

¹⁵ Sustainability Solutions Group (2014, June 9). Shuswap Agricultural Strategy. Salmon Arm, BC. Retrieved from: https://growshuswap.files.wordpress.com/2014/06/140617_csrd-ag-strategy-final-report.pdf

¹⁶ Sustainability Solutions Group (2014, June 9). Shuswap Agricultural Strategy. Salmon Arm, BC. Retrieved from: https://growshuswap.files.wordpress.com/2014/06/140617_csrd-ag-strategy-final-report.pdf

The major challenges experienced by the agricultural sector identified in the recently published strategy include the following:

- Aging producer population: average farmer age is 56 and there are significant succession concerns due to few new farmers entering the industry mainly as a result of high land prices.
- Farm profitability: while gross farm receipts increased for the region between 2006-2011 (last census), more than half of the farms in the CSRD make under \$10,000 per year and the ratio of expenses to receipts is higher than the BC and national average
- Economic and environmental changes: markets have become increasingly volatile and unpredictable due to globalized economic trends, and climate change
- Water management: approximately 10% of agricultural land is irrigated reliant upon decreasing groundwater supplies, and varying lake water levels
- Protection of agricultural land: pressure to take land out of the ALR to be developed for other uses is on the rise (and government policy on ALR protection is in flux)
- Awareness of public and decision-makers: general lack of understanding of the realities of farming and its importance to local community and economy

5.0

Understanding Revelstoke's Level of Food Security

Before making suggestions on what needed to be done to address Revelstoke's food security, it is important to have an understanding of what is already being done in this regard. Towards this effort, a large inventory of all major programs, projects, policies (PPPs) was created. With this information we are able to see what we are currently doing well as a commu-

nity. The leaders of these PPPs were asked to identify any major challenges they face, and an assessment of their strength in meeting the goals and objectives identified in this strategy document took place. These latter details appear in the "Gap Analysis" section of this document.

5.1 Current Organizations, Programs, Policies & Plans in Place

The following table provides an overview of the organizations, programs, projects, and policies that currently address food security. For more detailed information, refer to Appendix 2: Programs, Organizations & Policies.

Table 1: Food Security Programs, Policies & Plans Currently in Place

Lead	Programs
Community Connections	Food Bank - core free food distribution program
	Kids Snack Program (supporting food bank program)
	Plant a Row Grow a Row (supporting food bank program)
	Wild Food Donations (supporting food bank program)
	Farm Donations (supporting food bank program)
	Food Share Donor Program (reclaiming excess food for use in food bank)
	Baby Bundles program for infants & new mothers (supporting food bank program)
	Breakfast Program
	Suspended Soup Program
	Food Skills for Families (and other food-education programs)
	Plants for Monashee Court
Community Connections (and BC Farmer Market Association)	Farmers Market Coupon Program (supporting food bank program)
NCES (& Community Connections)	Revelstoke Food Charter

Table 1: Food Security Programs, Policies & Plans Currently in Place

NCES	Downtown Community Garden
	Garden Guru Series
	Little Sprouts
	Incredible Edible Film Fest
	Midsummer Nights Green - farm to table dinner
	Harvest Palooza
	Garlic Fest
	Mountain Harvest (book and spin-off projects)
	Land Share
	Food at Work
	Garden and Art Tour
	Farm to Table (elementary and high school program)
	Food Equipment Loan Program
	Heritage Seed Swap and Seed Library
NCES (RVAC)	Community Garden North
SD19	Healthy Habits
	Lunch Program (lunch for students without)
	Begbie View School Garden
SD19 (& BC Gov't, AITC Milk)	BC School Fruit and Vegetable Nutritional Program (healthy snacks, some schools have milk)
SD19 (& BC Interior Health)	Health Promoting Schools Coordinator
BC Interior Health	Breastfeeding Educational Materials
Mountain Midwifery	Mountain Midwifery breastfeeding support
Multi-Cultural Society	Carousal of Nations

Table 1: Food Security Programs, Policies & Plans Currently in Place

Bear Aware	Gleaning Project
RUC	Soup and Smile
	Annual Plant Sale
Rod & Gun Club	Fathers Day Fishing
	Annual Awards Banquet Dinner
Terra Firma Farms	CSA - Food Box Program
BC Farmers Market Association	Summer Farmers Market
Farm Market Board	Winter Farmers Market
Revelstoke Fair Trade Society	Fair Trade Town project
Lead	Policies in Place
City of Revelstoke	Chicken/livestock bylaw <i>in progress</i>
	Healthy food & beverage sales in public buildings policy
	Special events policy requiring food safe requirement
	Revelstoke Solid Waste and Recycling Bylaw No. 2006
	Revelstoke Pesticide Use bylaw No. 1988
Columbia Shuswap Regional District	Electoral Area 'B' Zoning Bylaw No. 851 permits horticulture in all zones
Lead	Plans in Place
City of Revelstoke	Integrated Community Sustainability Plan (2013) coordinates actions from various plans and acts as a "Master Document" for all community priority actions. This plan has numerous supportive actions for all elements of Revelstoke's food system.
	Poverty Reduction Strategy (2012) has priority actions relating to access to healthy food
	Revelstoke Official Community Plan bylaw No. 1950 has policies supportive of urban agriculture, animal husbandry, and Agricultural Land Reserve protection within City limits
Columbia Shuswap Regional District	Solid Waste Management Plan
	Electoral Area 'B' Official Community Plan Bylaw No. 850-1 supporting agricultural use, food security and Agricultural Land Reserve protection

5.2 Profiles of Local Commercial Food Producers, Processors & Suppliers

Profiles of local food producers, processors & suppliers highlights what Revelstoke currently has for food businesses and describe what each one offers, and recognizes their importance to Revelstoke's level of food security.

5.2.1 Food Producers

Food producers are businesses that devote land and space to growing or raising food. This does not include individuals who grow their own food. This

type of food production is typically of a larger scale, and can be implemented on larger parcels identified through the mapping.

Terra Firma

Terra Firma is a small organic farm located off Mt. Begbie Rd. just outside Revelstoke. Terra Firma started producing food in 2011. Since then they have grown every year and currently farm a total of 2 hectares. They grow and sell a variety of organic vegetables, plant starters (fruit, vegetables, herbs and flowers) eggs and chickens. In 2014 they raised about 565 chickens in total which was a mix of meat and laying hens. Recently they started a food-box program which is run as a small CSA (community supported

agricultural project). Terra Firma's products can be purchased at the weekly summer farmer's markets and at Mountain Goodness Natural Foods during the growing season. Food is also available in bulk to local restaurants and for purchase at the farm. Terra Firma is the only uber-local, certified organic farm for Revelstoke. Terra Firma has employed one summer student in the past, however they did not hire anyone this year.

Nadja Luckau

Nadja is a (small-scale) SPIN farmer operating on three different residential properties in Revelstoke working a total of approximately 0.4 hectares of land. Two of these properties had established gardens spaces. The largest property has not been

cultivated before. She has an agreement with each land-owner where she is allowed to grow food on their property and sell the food products at the Revelstoke Farmer's Market (summer). As payment for the use of land Nadja exchanges food.

Bird Tree Urban Farms

BTUF is a (small-scale) SPIN farm run by Kristina Metzloff operating on four different residential properties in Revelstoke and one outside of the City. The four properties within the City account for 236m² of

land. Kristina sells her products to local businesses who primarily purchase herbs and salad greens. As payment for the use of land Kristina exchanges food.

Greenslide Cattle Co

Greenslide Cattle Co was established in 2000 and since then has produced local, grass-fed, hormone-free beef south of Revelstoke on Airport Rd, and

other grazing sites south of Revelstoke accessible via barge. (Privately-owned land now part of Greenslide Cattle Co. sustained a cattle herd since 1969 until

present, with the exception of 1985-1994.) The cattle are raised on land that is unsuitable for vegetable production, as much of it is hilly, treed and not easily accessed. (Due to government regulations, there was a period of time whereby Greenslide could not sell their products legally, but have been selling regularly since the regulations made it possible again since about 2008.) The Grahams maintain a herd of about 260 animals which include about 80 cows with their spring calves, a dozen two year old heifers and four bulls (many ranchers breed their heifers as yearlings in order to get them into calf production sooner, they keep them separate for an extra year to let them fully

develop, resulting in much easier first-time births.)

Beef can be purchased direct from the farmers and is delivered to customer's doors. Greenslide also has a partnership with Dolan Home Deliveries to have meat delivered throughout Revelstoke, and with Revy Mountain Meals for sale in the store. Greenslide also supplies beef to local restaurants and caterers for use in their menu items. La Baguette took over 1,000 kg of beef over the 2013-2014 ski season for burgers sold at Revelstoke Mountain Resort. Greenslide would be considered a local supplier. They are not certified organic, but operate under the same principles. They do not support any employees.

Wildflight Farm

Wildflight Farm is Revelstoke's largest supplier of regionally-local certified organic produce. The farm is located on the Shuswap River in Mara, BC and is 10 hectares (3 of which are rented). The farm produces certified organic vegetables, herbs, berries and eggs. Wildflight sells food year-round at Revelstoke's Summer and Winter Markets. Wildflight occasionally sells plant starters in the spring at the summer farmer's market. Wildflight has recently decided to

stop selling eggs at the Revelstoke Farmer's market. In the winter and early spring Wildflight sell a selection of their own products, as well as products they store for regional farmers (and some imported organic produce from farmers in California.) Wildflight Farms support 8 full-time employees in the growing the season and 2 full-time employees in the winter (plus a number of casual part time positions at varying times of the year.)

D-Dutchman Dairy

D-Dutchman is a dairy farm located in Sicamous, BC who milk an average of 120 cows at a time, and farm just over 100 hectares of land. They operate in accordance with organic principles choosing not to use growth hormones and only use medications such as antibiotics when absolutely necessary. D-Dutchmen Dairy is Revelstoke's only supplier of regional dairy

(produced commercially). D-Dutchman milk, butter and ice cream is sold in-store at Southside Market and delivered door-to-door to Revelstoke residents, local restaurants, cafes, and offices through Dolan Home Delivery. They support approximately 15 full-time employees.

5.2.2 Food Processors

Food Processors are the businesses that are taking raw materials and creating food products. These typically include bread and pasta, entire meals, sausages, etc. We considered only the businesses that were producing food for consumption at home.

Therefore we did not include restaurants and take-out restaurants, because it would be extremely difficult to track and measure.

The Modern Bakeshop & Cafe

The Modern is a cafe and bakery located in downtown Revelstoke and has been open since 2005. The bakery supplies a small amount of bread and baked goods to local residents for consumption at home

and does catering. The Modern source some local and regional ingredients, mainly from Wildflight Farms for use in the café. They employ an average of 20 full time employees.

La Baguette

La Baguette is a cafe, bakery, and catering business that was opened in 2010(although their catering business had already been established). After several years selling home-made pasta and other food products, La Baguette opened a commercial location near Coopers Foods, and another cafe located at the Revelstoke Mountain Resort during the ski

season. La Baguette sells bread, pasta, cheese and other goods for consumption at home. They source numerous local and regional ingredients for their food, purchasing from Terra Firma Farms, a variety of individuals selling items like wild mushrooms, or seasonal fruit, etc. They support an average of 20-45 full-time employees depending on the season.

Revy Mountain Meals

Revy Mountain Meals was started in 2009 and offers a variety of take-home items and prepared meals. Revy Mountain Meals produces lasagna's, shepherd's pies, and other similar pre-made meals. RMM also produces pasta sauces and soups that can be

purchased in store for consumption at home. RMM sources some local ingredients including seasonal fruit for baking, wild mushrooms, locally-made BA Sausages, and Greenslide beef. Mountain Meals supports an average of 4 full-time employees.

BA Sausages

BA Sausages was established by Barry and Cheri Asmundson in 2012. BA offers fresh and smoked sausages, meat platters, smoked meat trays, and custom wild meat processing. Most of the meat is locally sourced with pork predominantly from the Kelowna area, with roughly 10-20% coming from Al-

berta, Saskatchewan, and Manitoba. Beef is from Alberta, bison from the Bentley/Rimby area of Alberta, and poultry from Armstrong. BA sells its products locally at both summer and winter farmer's markets and will deliver door-to-door. BA employs one person in addition to themselves.

Kurt's Sausages

Kurt's Sausages is based in Salmon Arm, and up until 2014 had sold its locally made sausages at the Revelstoke Farmer's Market and Revelstoke Winter Market. Kurt's uses Free Range, antibiotic-free, hormone-free pork for their sausages. The pork was predominantly from Alberta. Beef is from both BC and Alberta, but is all processed in Alberta. Kurt's was a strong presence at past markets, but no longer sells

its foods at the farmer's market.¹⁷ Kurt's is also selling a small selection of sausages through Ray's Butcher Shop as of May 2014 and Dolan Home Delivery as of September 2014. Kurt previously supported one part-time employee in Revelstoke (number of employees supported in Salmon Arm not known).

¹⁷ Bailey, S. (2014, May 13). *Farm & Craft Market defends itself [letter to the editor]*. Revelstoke Current. Retrieved from: <http://www.revelstokecurrent.com/2014/05/13/farm-craft-market-defends-itself/>

Ray's Butcher Shop

Ray's Butcher Shop opened in 2011 and supplies chicken, beef, and pork products locally. Ray's offers raw products (chicken breast, whole chickens, steaks, roasts, chops, ribs, etc.) as well as a selection of in-house made sausages and imported smoked meats (products are not organic and are sourced from conventional sources). He recently started selling Kurt's Sausages. While Ray indicates that there is

a desire from local residents to be able to purchase local meat and desire by the owners to supply it, provincial regulations are noted as a significant barrier. The lack of a local meat packaging/processing plant and higher costs of locally produced meat means that most of the products supplied come from the lower mainland. Ray employs an average of three full-time employees.

Wild Game Processors

In addition to BA Sausages, there are two small-scale wild game processors in Revelstoke. Alex Cameron and Rick Vigue will process meat from wild game harvested in and around Revelstoke. Both process primarily deer, with some elk and moose. Deer make up roughly 2/3 of the meat produced. Alex and Rick

process roughly 85% of all the wild game in Revelstoke. Rick Vigue used to process beef for Greenslide Farms, but noted that a change in Provincial regulations has prevented him from continuing this service. Alex and Rick do not have employees.

Stoke Roasted Coffee Company

A local coffee roaster, which has been in business since 2008. While they do not deal in local food products, they provide a local food processing service for a food product consumed in large quantities which would otherwise be sourced from outside

the community. They source raw coffee beans from around the world, all of which have been certified by varying bodies regulating environmental, and socially conscious values are upheld. Stoke Roasted Coffee support one part-time employee.

Clayoquot Botanicals

Clayoquot Botanicals provides hand-crafted herbal teas and medicinal products. As much as is possible, base ingredients are sourced locally from both wild and cultivated sources. Ingredients not sourced lo-

cally are all certified organic, and in some cases certified fair trade. This small business was established in Tofino BC, but moved to Revelstoke in 2009.

Mt Begbie Brewery

Mt Begbie Brewery produces a wide-diversity of micro-brewed beers and has been in operation since 1996. They have grown to become a fairly large and successful business exporting their beer to many communities across western Canada, and winning numerous awards for their products. Mt. Begbie Brewery aims to source as many ingredients as locally as possible, including honey and malt-grain (ap-

proximately 104,000kg/yr) from Armstrong, Stoke Roasted Coffee from Revelstoke, hops from various BC sources, etc. Notably, all spent grains are then donated to Greenslide Cattle Co and used as cattle feed.

5.2.3 Food Suppliers

Food Suppliers are the organizations and businesses that bring food to Revelstoke such as farmer's markets, and grocery stores. These businesses typically have a higher volume of food items and supply the

majority of Revelstoke residents with their food. These businesses also have the greatest opportunity to increase Revelstoke's level of food security, by offering locally-grown, affordable foods.

Revelstoke has two seasonal farmer's markets, where residents can purchase locally grown and produced food.

Revelstoke Summer Farmer's Market

The Revelstoke Summer Farmer's Market is a member of the BC Association of Farmer's Markets, holds markets every Saturday from May to the end of Oc-

tober. The Summer Farmer's Market has operated in Revelstoke for about 30 years and is Revelstoke's largest supplier of locally-grown and produced food.

Revelstoke Winter Farmer's Market

The Revelstoke Winter Farmer's Market is the second market in the community and is run by an independent board. This market runs from November to April, with market days every two weeks on

Thursdays. The number and variety of vendors is not as substantial as the summer market, but residents still have access to seasonal vegetables, meats, eggs, and other goods throughout the winter.



Coopers Foods

Coopers is Revelstoke's largest food supplier. Coopers is part of the Overwaitea Food and Drug Group, Canada's largest western-based food chain (owned by the Jim Pattison Group.) The supermarket has a wide array of food options, and a recent revamping of store products and appearance has resulted

in an increase of products produced in BC on the shelves. Recently, a few regionally-local products such as cows milk from the Kootenays, goats milk and cheese from Salmon Arm and crackers from Grindrod have been added to their inventory. The manager brought on to lead the store's 'revamp'

appeared very supportive of community initiatives such as the food bank, but has recently been transferred. It is yet to be determined what directions the new manager will champion.

Manager Rob Bett explains that the biggest challenge in bringing in more local food is a regulatory one. Food producers wanting to sell their food in the retail store are required to meet Provincial Foodsafe regulations. Most smaller food producers however are not certified. Further to this, food suppliers selling at any Coopers

Store must be approved by head office. An approval process most smaller food producers aren't willing to undertake.

Cooper's largest customer request is for more local food. The food supplier considers local to cover anything produced in BC. The store's fastest growing area of food is organics. Currently, Coopers offers a some organic produce and products, with fewer products in the winter and spring months.

Southside Market

Southside Market is the second-largest food supplier in Revelstoke and is also owned by the Overwait-ea Food and Drug Group. They stock a small amount of BC food products including regionally-local meat (Kelowna/Kamloops area), and D-Dutchman prod-

ucts. None of the fruits and vegetables stocked are produced within Revelstoke's local foodshed. Southside estimates that less than 1% of the food it stocks is from within Revelstoke's local foodshed.

Mountain Goodness Natural Foods

Mountain Goodness Natural Foods is a small independent food supplier specializing in natural, healthy foods. They employ and support an average of 5 full time employees. Most of their products are certified organic, or close to upholding these standards. They offer some locally produced food options such as fruit and vegetables from Wildflight Farms and Terra Firma Farms, regionally local beef, chicken, goat milk products, honey, bulk dried goods such as oats, flour and bean, etc. While there are many regionally-local

food products that Mountain Goodness would have a market for (such as tofu from the Nelson-area) the main challenge faced by the store is in the transportation of getting these products here with regards to ease of ordering and cost. Additionally, Mountain Goodness is unable to sell uber-local products since they do not satisfy provincial health standards (e.g. ungraded eggs, backyard vegetable producers without insurance, etc.) Dolan Home Delivery

Dolan Home Delivery

Dolan Home Delivery is located in Salmon Arm and delivers milk and dairy from D-Dutchman farm, as well as other locally and/or organically produced meats, cheeses, baked goods, eggs and honey. Dolan delivers door-to-door in Revelstoke every Tuesday and Friday. The selection offered through Dolan Home Delivery has grown substantially from

initially offering dairy products, to now offering locally-raised beef, chicken, pork, bison and other meats, and locally-produced products such as bread, and pies. A number of restaurants and cafes also use products provided by Dolan Home Delivery.

5.3 Measuring Revelstoke's Current Level of Food Self-Sufficiency

Measuring Revelstoke's Current Level of Food Self Sufficiency was done in the following ways:

1. Develop criteria for what types of foods should be included in the calculation
2. Tabulate the amount of local food
3. Develop a criteria for how to measure food requirements per person
4. Calculate amount of local food available per person

These steps are explained in further detail below.

5.3.1 Criteria for What Types of Foods to Include in Local Food Calculation

Some items were easy to include as "Local Food" items. Raw food products such as fruit, vegetables, milk and animals raised for food were easy items to measure and trace their origin. Value-added items such as bread, sandwiches, cheese, etc. were more difficult to measure, because while they may be produced or processed in Revelstoke, sourcing the raw ingredients is more challenging. For this reason we have tabulated the amount of value-added products produced and sold in Revelstoke, but did not include this in Revelstoke's overall food self-sufficiency score. However, where it could be shown that a specific amount of value-added food ingredients were sourced locally (within one of our three "local foodshed" areas) these foods were included in the overall calculation.

The food self-sufficiency measurement focused on foods that were either grown, raised or processed here in Revelstoke by a local business. The criteria include items that are intended to be sold for consumption at home. This means that restaurants weren't included in this calculation. The rationale here was that there is no reasonable way to measure how much food is consumed by locals vs. how much food is consumed by visitors. That said, the calculation does include bakeries and cafes, etc. but only for items intended for consumption at home. As an example, the study calculates the amount of bread (loaves) sold by La Baguette and the Modern, but doesn't include the number of muffins, sandwiches and desserts sold.

5.3.2 Tabulating the Amount of Local Food

Food from Local Producers, Processors & Suppliers

The amount of local food was calculated by asking our local producers, processors, and suppliers to share how much food they sell. Farmer's Market vendors were also asked to share their food sales for this study.

Information from commercial food producers and food processors was not easily accessible. The two

large food suppliers in town could not provide numbers on how much food they sell. So this study was not able to include counts of local food from these sources¹⁸. Both suppliers said that less than 1% of what they sell would fit into our regional foodshed.

¹⁸ Southside Market was able to provide an estimate of the number of Litres of D-Dutchman milk sold each week so this was included in the total local food calculation.

Personal Food Production

Since the Food Security Strategy is about becoming more food self-sufficient, this study also includes an estimate of annual food from personal food production. This measurement examined the following personal food sources:

1. Home Vegetable Gardens – The methodology for this is described in Appendix 4;
2. Backyard Chickens - for eggs only;
3. Hunting & Fishing – Hunting numbers were gathered from local wild game producers: Rick Vigue, Alex Cameron & BA Sausages & Fishing numbers were gathered from creel surveys of the Arrow Lakes¹⁹ & Lake Revelstoke²⁰
4. Wild Harvesting (e.g. mushrooms, berries, herbs, etc.) – Wild harvesting of fruit and mushrooms has long been a tradition for many Revelstoke locals. While the report does recognize that wild harvesting contributes to food security, measuring the amount of wild harvesting taking place (especially trying to get information on those secret mushroom stashes) is too difficult to measure.

¹⁹ *Trend in Angling and Piscivore Condition Following Eleven Years of Nutrient Additions in Arrow Lakes Reservoir (Arrow Lakes Reservoir Creel Survey 2003-2009).*

²⁰ *Lake Revelstoke Reservoir Creel and Visitor Use Survey 2000*



5.3.3 Criteria for Measuring Food Requirements Per Person

Research for the FSS began with a 2006 Report by the Government of British Columbia, Ministry of Agriculture called, "B.C.'s Food Self-Reliance - Can B.C.'s Farmers Feed Our Growing Population?" In it, the daily food requirement per person was calculated (given in grams per food group). Further to this, the report also calculated the amount of land required to produce enough food to feed one person in BC at 0.524 hectares. Both of these calculations were highly valuable in determining both the amount of food the average British Columbian needs daily and annually, and the amount of land required to grow and raise food to provide food for everyone in BC. These

calculations were based on consumption numbers (the actual amount of food that was consumed by British Columbians), and organized by food groups as identified in Canada's Food Guide.

In later phases of the FSS, the steering committee and other community members who reviewed the draft report, raised concerns over the use of Canada's Food Guide as a basis for measuring Revelstoke's Food Security. Alternative Food Guides were reviewed and are described further in section XX. However, this study uses the Canada Food Guide in this report for the following reasons:

1. Most people in Canada are aware of the food groups so there is no need to define what is in each food group;
2. We can compare what other provinces and countries are doing therefore allowing the use of those examples as scenarios and recommendations for Revelstoke's Food System (ex. Reviewing how reducing our meat intake by 50% affects land requirements for food and our overall ability to feed ourselves.
3. It was used as the basis for the BC Food Self-Reliance report in which:
 - a. The background data around consumption habits and agricultural practices are specific to the Province of British Columbia. Other food models from Europe are less applicable;
 - b. Weights of annual recommended and real consumption data for each food group are given. This means these numbers can be used to calculate annual food requirements for the entire population of Revelstoke; and
 - c. Real consumption data is used to measure land requirements for food per person;

The BC Self-Reliance Report provides numbers on annual Raw Weight/Year (Table 5 on p. 12) that were used to measure annual food requirements for all of Revelstoke. To do this, the annual raw weights per food group were multiplied by Revelstoke's population. The table below breaks down the annual food requirements for all of Revelstoke.

Table 2: Annual Food Requirements for Revelstoke (kg)

Food Group	Servings/day	Raw Weight/day (g)	Raw Weight/Year (kg)	For All of Revelstoke (Calculated) (kg)
Dairy	2.87	718	262.0	1,870,418.0
Meat	2.25	188	68.6	489,735.4
Grains	8.5	140	51.1	364,802.9
Vegetables	3.75	225	82.1	586,111.9
Fruit	3.75	319	116.0	828,124.0
Total				4,139,192.2



5.3.4 Calculating Local Food Per Person in Revelstoke

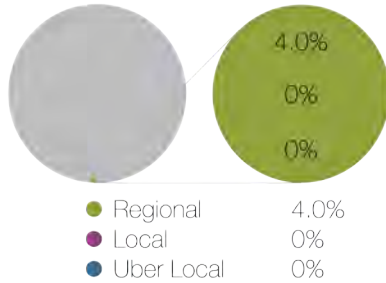
Revelstoke's level of food security was tabulated by dividing the total annual amount for each food group by the total annual required amount of food, shown in the table above. Two totals are shown. One total that is specific to the 5 food groups, and another total that includes the value-added totals. The results are summarized in the table below:

Table 3: Revelstoke's Level of Food Self Sufficiency

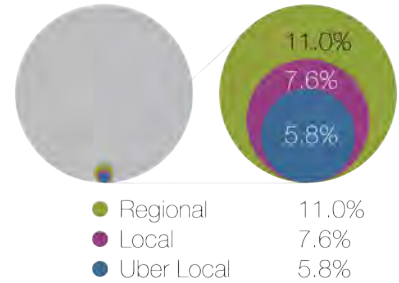
Food Group	Revelstoke Annual Food Required (kg)	Annual Uber Local Food (kg)	Uber Local Percentage	Cumulative Annual Local Food (kg)**	Local Cumulative Percentage	Cumulative Annual Regionally Local Food (kg)***	Regionally Local Cumulative Percentage
		Uber Local only		Cumulative Uber Local & Local		Cumulative Uber Local, Local & Regionally Local	
Dairy	1,870,418.0	0	0.00%	0	0.00%	74,950	4.01%
Meat & Alternatives	489,735.4	28,305	5.78%	37,286	7.61%	53,675	10.96%
Grains	364,802.9	0	0.00%	0	0.00%	120	0.03%
Vegetables	586,111.9	37,905	6.47%	37,905	6.47%	86,665	14.79%
Fruit	828,124.0	950	0.11%	950	0.11%	7,950	0.96%
Total	4,139,192.2	67,161	1.62%	76,141	1.84%	223,360	5.4%
Value-Added		195		195		3,567	
Total (incl. Value-Added)	4,139,192.2	67,356	1.63%	76,336	1.84%	226,927	5.5%
<i>*Percentages of food self-sufficiency based on daily recommended consumption from Canada's Food Guide. See B.C.'s Food Self-Reliance Report for more information</i>							
<i>**Local Cumulative values include total food from uber local + total food from local</i>							
<i>***Regionally Local cumulative values include total food from uber local + local + regionally local</i>							



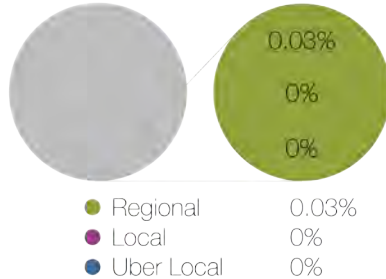
Dairy



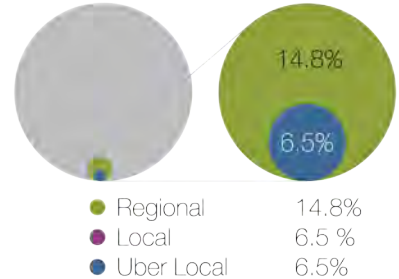
Meat & Alternatives



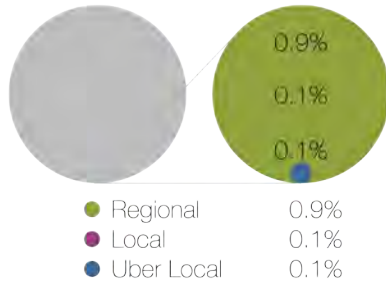
Grains



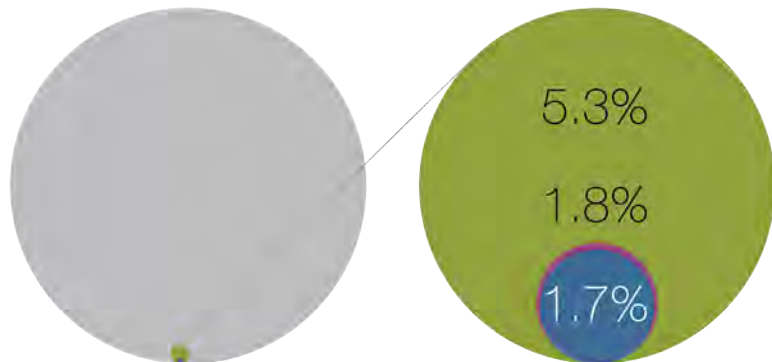
Vegetables









Fruit






Overall Food Security



Regional	5.3%
Local	1.8%
Uber Local	1.7%

	Regional	Local	Uber Local
	1.6%	1.1%	0%
		Hunting	
	0.2%	0.2%	0%
		Fishing	
	4.7%	3.1%	3.1%
		Commercial Meat Production	
	24.4%	17%	17%
		Eggs	
	11%	7.6%	5.8%
	Total (Not including value-added)		
	18,930 kg	Value-Added Products within the regional foodshed	

	Regional	Local	Uber Local
	6.0%	6.0%	6.0%
	Personal Vegetable Production (Home Gardens)		
	8.8%	0.5%	0.5%
	Commercial Vegetable Production		
	14.8%	6.5%	6.5%
		Total	

Results

Calculating Revelstoke's level of food self-sufficiency is an extremely difficult and complicated process. This analysis of Revelstoke's food self-sufficiency isn't meant as a statistical/scientific measurement, but more as a means of giving a general idea of where Revelstoke is currently. It's a starting point and motivator to push those self-sufficiency numbers up.

These results show that Revelstoke is a long way off from achieving 100% food self-sufficiency at all local foodshed scales. That said, some positive aspects of Revelstoke's level of access to food include:

- Revelstoke is almost 15% food self-sufficient in the regionally-local category for vegetables.
- A rough estimate of backyard gardens and yield in Revelstoke shows that backyard gardens account for about 6% of the total annual amount of vegetables required per person.
- If you compare average annual BC consumption data with local availability for eggs, Revelstoke is 17% self sufficient in the Uber-Local category, and 24.4% self-sufficient in the regionally-local category. This is due mainly to the number of families with backyard chickens.

Constraints

These results are likely to be slightly lower than the actual values recorded as a result of various constraints in gathering this data. Constraints in measuring Revelstoke's level of food self-sufficiency include:

- Comparing recommended amounts of food (from the BC Self-Sufficiency Report) with actual consumption amounts: What's recommended isn't often what's done. A better measure would be actual total consumption amounts per person in Revelstoke, compared with a measurement of how much is local, but this data is not available.
- Gathering information from all market vendors was challenging, as the Summer Farmer Market manager would not share the contact information or a list of all vendors. Therefore, data collection involved approaching farmers at the market stalls, which was done, but it is likely that some vendors were missed since not every vendor attends every market. In addition, farmers were often busy working stalls and therefore wouldn't always have the time to sit down and share data.
- Contact information was provided for winter market vendors, though few responded to emails and phone messages. (Data collection took place in the summer months.)
- The numbers used in this calculation are estimates. Few food producers, processors, or suppliers kept track of the amounts of food sold in weight. Numbers represent best guesses and "average days" extrapolated over an entire year.
- Calculating the amount of fruit that is grown and harvested uber-locally was too difficult to measure. The only data source available for uber-local fruit included in the calculation were numbers from Revelstoke's Gleaning Project.
- The inability to measure how much food is collected through wild harvesting

5.4 Mapping our Potential for Food Production

Mapping potential food production involves two tasks. The first is to understand how much land would be required to produce enough food for every resident in Revelstoke. The second assesses vacant or semi vacant land and flat-roof buildings within the City and identifies these areas as potential food

production sites. **Section 5.4.1** discusses how much land is needed to provide food for every Revelstoke resident using the same BC Self Reliance Report criteria. **Section 5.4.2** describes the two maps that show potential food production land and rooftops, and a ranked assessment of each parcel.

5.4.1 Land Requirement Calculations

The City of Revelstoke has 4,076 ha. of total area within its municipal boundaries. Given that there are 7,139 residents with a land requirement of 0.524 ha. of space per person, Revelstoke would need 3,741 ha. of space to produce all the food it needs. This does not leave a lot of room for houses, roads and other infrastructure, steep slopes, natural areas, parks, and water bodies in the remaining 335 ha. of land.

It is therefore evident that in order to secure enough local food for the population, Revelstoke must look beyond its municipal boundaries in considering level of food security. Note that even though Revelstoke will never likely produce enough to food to feed its population uber-locally, there are many other reasons to increase the amount of food grown at all levels of "local," as described in section 4 of this document.

Land Requirement Considerations

Consideration #1 – Land for Meat and Dairy

There are three considerations to be aware of with this study. The first is that 0.524 ha. per person for annual food production is as large as it is primarily because of the land required for raising meat and dairy. The land required for raising meat is 75% of the total land required for one person. Dairy makes up 13% of additional land required. Combined **meat and dairy require 88% of the land**. Earth Day Canada says that a meat-based diet requires 7 times more

land than a plant-based diet.²¹ So simply encouraging less meat and dairy consumption and more fruit, vegetable and grain consumption would significantly reduce the amount of land needed for one person.

²¹ <http://www.earthday.ca/giveitup/assets/images/factsheet.pdf>

Consideration #2 – Recommended Consumption vs. Actual Consumption

As noted in B.C.'s Self Sufficiency Report, on average British Columbians eat too much meat and not enough fruits and vegetables. The 2004 Canadian Community Health Survey shows that 7 out of 10 children aged four to eight, and half of all adults, do not eat the recommended daily minimum of five servings²² of vegetables and fruit. According to

²² This is based on the previous Canadian Food Guide recommendations (1992). The current food guide (2007) now recommends 7 or more servings of vegetables and fruit for adults. The B.C.'s Food Self Reliance Report lists 7.5 recommended servings of vegetables and fruit per day.

Earth Day Canada²³ Canadians consume 137 lbs (62 kg) of red meat and poultry per year. This averages to 100 grams per day, which is 33% more than recommended amount.

Therefore the 0.524ha. number is likely below the level of actual demand, when using traditional meat raising methods.

²³ <http://www.earthday.ca/giveitup/assets/images/factsheet.pdf>

Consideration #3 – Yield Calculations for Food Production

The report uses yield data stating that 6,600 kg of vegetables can be grown on 1 hectare of land. This equates to 0.66kg/m². Compare that with numbers put out by square foot gardening of 7kg/m², and it is evident that there is a severe gap between conventional agricultural methods used to get yields from conventional methods, versus more intensive local methods.²⁴

However the number put forth by the Government

²⁴ Terra Firma Farms averages about 0.86 kg/m² in their greenhouses. This number was used to measure estimated yield from backyard gardens in Section "5.3.2 Tabulating the Amount of Local Food"

of BC is a suitable starting point. As Revelstoke continues to increase its level of food security and better record results these numbers can be updated. For the purpose of the mapping component the 0.524ha. per person per year will be used to assess Revelstoke's availability of land.





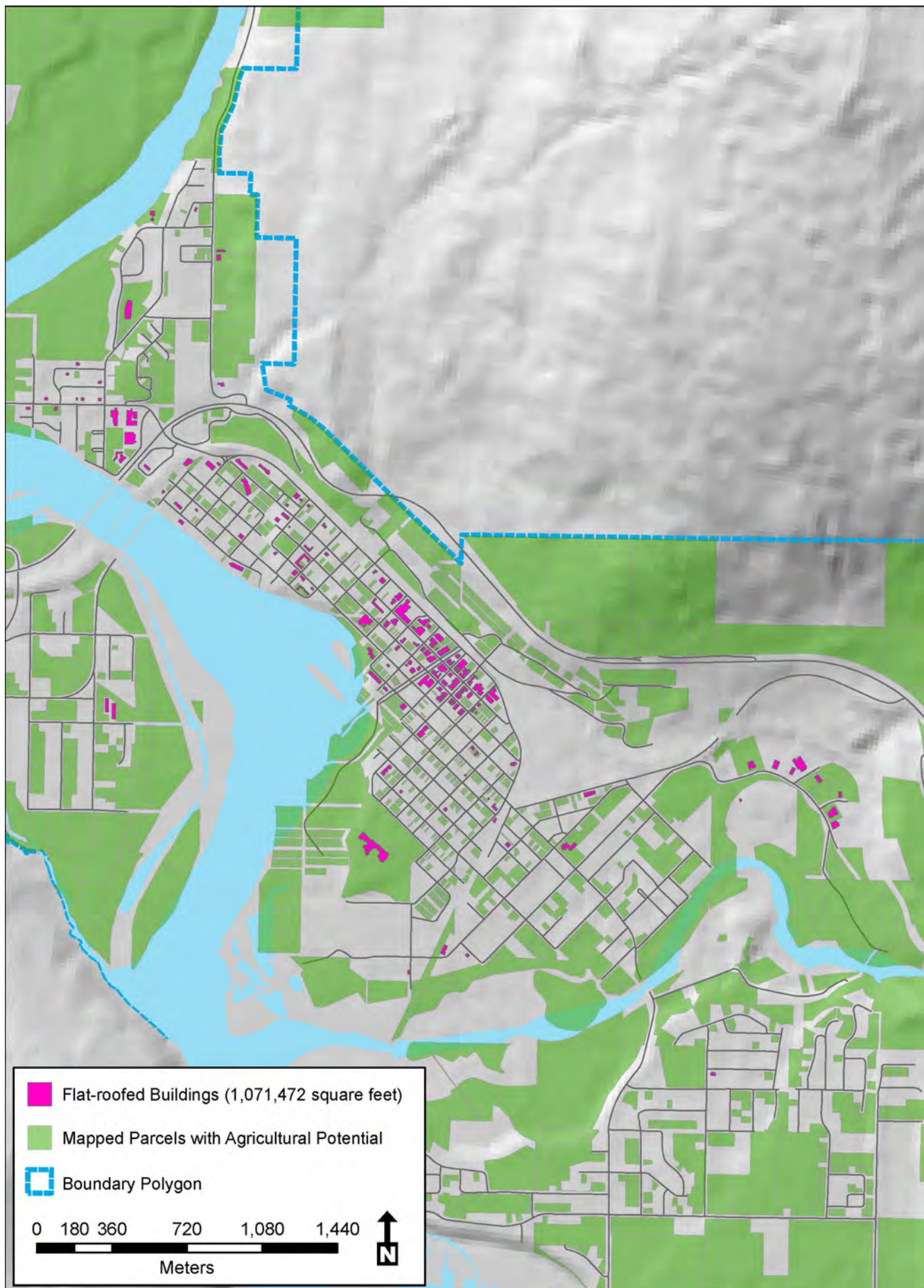
5.4.2 Map 1: Potential Food Production Space – All Lands and Rooftops

The selection criteria included vacant lots over 0.05 hectares (5,000 ft²), an average residential lot in Revelstoke, unused road right-of-ways, back alleys, and also included rooftops from flat-roofed buildings that could be used for food production.

Revelstoke has roughly 153.5 hectares of vacant or semi-vacant land that may be suitable for hosting food production. In addition to vacant land it

also has almost 10 hectares of flat topped roof space. Some study would be required to determine which roofs would accommodate food production. It does indicate a significant opportunity for increasing food production within City limits, especially in the downtown area where there are many flat-roofed buildings grouped together.

[see opposite page]



5.4.3 Map 2: Ranked Lands For Potential Food Production

The selection criteria for the second map included vacant lots over 5,000 ft² (an average residential lot in Revelstoke). The selection criteria was ranked as follows:

1. Large public parcels with water access and a small/no building coverage (<10%)
2. Small public parcels with water access and a small/no building coverage (<40%)
3. Large private parcels with water access and small/no building coverage (<10%)
4. Small private parcels with water access and small/no building coverage (<40%)
5. Emergency Reserve Lands. ERLs were included in the calculation, but are unlikely to see food production in the near future. These parcels are lands that currently have a different use, but could be put into use for food production if our global food system became dramatically less reliable. The ERLs include areas such as the golf course, soccer fields, heavily treed lots, lots with no water coverage, etc.

N/A – All lands publicly- or privately-owned, under 5,000 ft², OR without access to water within 7m, OR within the drawdown zone, OR, parcels requiring remediation (gravel pits, log yards), OR cemetery, OR parcels with less than 10% coverage, OR within the ICSP habitat ranks 2-4, OR within the river.

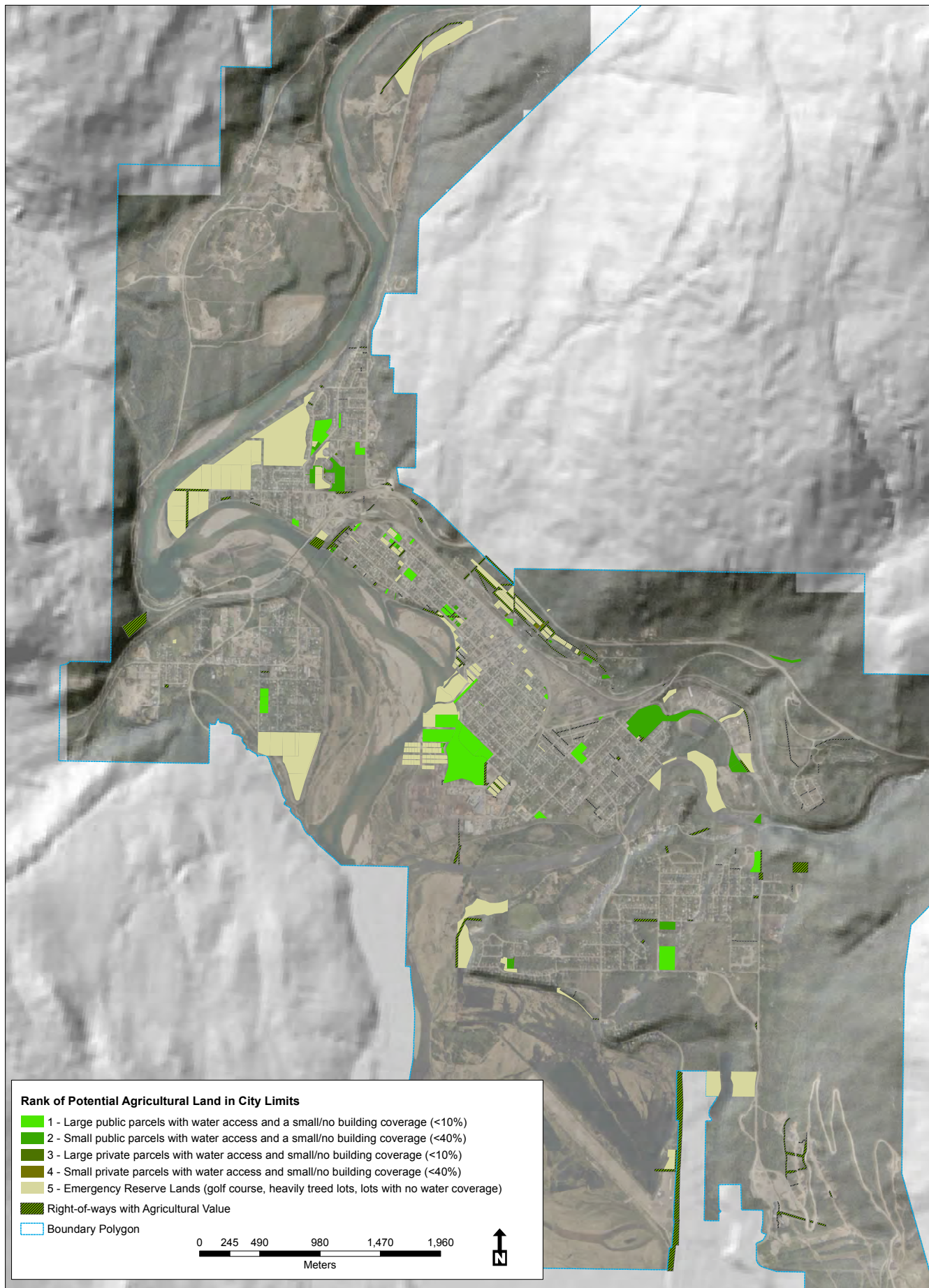
Additionally trees that had steep slopes (>25%) or were heavily treed (manually selected based on parcel size and amount of forest coverage) were demoted two ranks to recognize the practical difficulty in converting these lands to agricultural production.

Of the total 153.4 hectares of land the ranked land breaks down as follows:

1. 29.4 ha. (19%) is ranked 1 – Large parcels of City-owned land with access to water and little building coverage,
2. 14.3 ha. (9%) is ranked 2 – Small parcels of City-owned land with access to water,
3. 0.27 ha (<1%) is ranked 3 – large parcels of privately-owned land with access to water and little building coverage,
4. 0.13 ha. (<1%) is ranked 4 – small parcels of privately-owned land with access to water and little building coverage, and
5. 109.4 ha. (71%) is identified as emergency reserve lots.

This suggests that the City of Revelstoke has the opportunity to put 43.7 ha. of land into food production. Using the Government of BC numbers, this would be enough to feed an additional 83 people year-round.

[see opposite page]





6.0

Identifying Key Challenges

6.1 List of Current and Potential Issues

Through the review of current organizations, programs, policies and plans in place (locally and regionally), a number of issues and challenges encountered to date were recorded. These issues were compiled along with the issues and challenges identified through our research phase. This includes common challenges from other communities engaged in food security as well as through our group interviews and survey. Identifying key challenges leads into our Gap Analysis on p. 48.

6.1.1 Access to healthy, local food

- Rising rates of food bank usage
- Affordability of locally-produced food for low-income families
- Higher than average cost of living for residents (higher food, transportation, housing costs) means less money available for food
- Inconsistent supply of organic and/or local food means larger suppliers are less likely to sell these
- Highway closures and increased visitors mean higher stress on food supply at specific times
- Declining level of food production, processing and cooking skills
- Challenging terrain and short growing seasons mean more difficulty acquiring wild foods

6.1.2 Policy and regulatory (national/regional)

- Provincial Health regulations make growing and distributing local meat and poultry difficult
- Trade policies and supermarket purchasing patterns favour large scale (often foreign) farms
 - Regulations designed for global scale food systems
 - Mandates are counter to local needs
 - Reduced food choices through suppliers and economies of scale at local grocery stores (lots of the same foods re-packaged in various ways, but ultimately contain the same limited number of ingredients.)
 - Local example: It seemed promising that Terra Firma Farms was going to sell produce at Coopers Foods, but HACCP certification standards require procedures so arduous and costly for small-scale producer that Terra Firma Farms deemed it not feasible.
- Revelstoke is not included in regional food security and agricultural plans (e.g., Revelstoke and Golden have been left out of the recent Columbia-Shuswap Regional District's Agricultural Strategy.)
- Organic certification is difficult without long-term land leases

- Provincial regulations surrounding wild game, resale, and food bank use
- Wild land management policies that do not consider food production limit wildlife, fish, and wild harvest food abundance

6.1.3 Policy and regulatory (local)

- By-law and policy limitations with regards to a growing urban farming sector
- Limited existing regulatory support for food production throughout the city
- No current lease agreements in place for food production on city-owned land
- Water restrictions within city limits

6.1.4 Programs and Partnerships

- Access to long-term sustainable funding is the biggest challenge for all existing and future programs
- Revelstoke does not appear to have been considered in any of the regional food security gatherings, such as Food Forum conferences and other strategic planning events (although Revelstoke is not an agricultural producer at the regional scale, in this light, the community should be considered an important market base for the region.)
- Access to funding for coordinator wages limited, especially for mid to long term positions (6 months plus)
 - Funding for capital project costs is easier to access, e.g., funds for building supplies for new community garden easy, but funds for coordinator to manage the space and educational programming at the site difficult.
 - The food bank faces this issue perhaps more than anyone - although their supporting programs which are the capacity-building programs (as opposed to emergency response) are the most difficult to fund with regards to coordinator hours
- Most food security programming relies heavily on volunteer contributions, and as such, volunteer burn-out is listed as a primary threat to these programs.
- Access to regional goods such as numerous value-added products available in the west Kootenays (such as tofu, sauces, prepared meals, etc.) is hampered by limited access to transportation for these goods to retailers in Revelstoke. (This suggests numerous partnership opportunities in getting these goods to a Revelstoke market.)

6.1.5 Economic Development (local)

- Low wages, long hours, and seasonal work schedule for farmers is a disincentive to continue or take up farming long-term. Retaining employees for management roles is difficult due to the seasonal nature of the work.
- High start-up costs in purchasing land and installing infrastructure needed combined with difficulties

receiving start-up capital loans

- Little business training and retirement planning / transition planning for food producer businesses
- Backyard and community gardening does not meet total community food need, and has potential to compete with local farmers who have better chance of meeting these needs
 - However, local food producers saw this as a benefit because it helped people to understand the amount of work involved in growing your own food and it helped develop an appreciation for local farmers
- Lack of farming mentorship in Revelstoke, limited access to borrowed/shared farming equipment and resources (such as purchasing locally produced compost), and the knowledge of neighbouring farmers.
 - Local food producers and processors have said they are willing to help mentor new business-owners to support & enhance the local industry
- Climate influences such as short growing seasons, and snow loads making season extension difficult, or at minimum, expensive.
- Food is perishable so getting it to market quickly and efficiently is critical for maximizing profit for food businesses and reducing food waste
- Higher costs associated with producing quality food (i.e. grass fed beef takes much longer to get to maturity than hormone-boosted grain-fed beef)

6.1.6 Food production in relation to wildlife conflict.

- Several species, including black bears, grizzly bears, and coyotes are likely to be attracted by some types of backyard food production.
- Bears and coyotes are attracted to chickens which should be protected by electric fencing. Beehives should also be protected by electric fencing.
- Fruit and nut trees are also bear attractants, though timely harvesting can reduce the potential conflict.

7.0

Gap Analysis

The gap analysis reviews the Food Security objectives and assesses how well current programs, policies and plans address each objective. A rating from very weak to very strong provides a quick assessment of which objectives are well served by existing programs and where recommendations need to be made. Programs, organizations and policies (POPs)

were given strength ratings based on how well they addressed relevant objectives. The number and strength of the POPs was used to determine the strength of each objective as summarized below. See Appendix 2 for the full list of POPs and their ratings.

Table 4: Revelstoke Food Security Gap Analysis

Goals & Objectives	Strength
Goal: Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents	
Objective 1: Ensure that residents in need have dignified access to healthy and affordable foods	medium-strong
Objective 2: Facilitate broad-based participation in food sharing and production on private and public land	medium
Objective 3: Increase household and community-based food preservation, improving access to local food outside of the growing season	weak
Objective 4: Identify areas suitable for food production within the region and connect potential “producers” with potential “landlords.”	very weak
Objective 5: Support land use planning that preserves regional farmlands and increases the use of arable land suitable for food production	very weak
Objective 6: Reduce regulatory barriers to increasing local food production	very weak
Goal: Environmentally sustainable food production - Increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions	
Objective 1: Increase local food production with emphasis on reducing the embodied energy of the food system (encourage organic growing methods, increase water efficiency, decreasing food miles, etc.)	medium-weak
Objective 2: Reduce food waste whereby organic waste products are used as valuable agricultural inputs and/or products that are still edible are recovered and redistributed	weak
Objective 3: Encourage responsible and sustainable harvesting of wild foods	very weak
Objective 4: Manage food production in ways that are mindful of and reduce conflict with wildlife	strong

Table 4: Revelstoke Food Security Gap Analysis

Goal: Food Culture - Promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being.	
Objective 1: Adopt food production as a proud part of our local identity to encourage a thriving local food culture, and retain related knowledge and skills within the community	medium
Objective 2: Celebrate the diversity of our food cultures and an appreciation for local, healthy cuisine	strong
Objective 3: Recognize and support the importance of eating together as a family and community to our well-being (physical and mental health)	weak
Goal: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking	
Objective 1: Market and sell locally produced food to residents and visitors	medium-weak
Objective 2: Develop partnerships that increase local food production and ensure economic sustainability	weak
Objective 3: Encourage economic development opportunities related to local food production alongside a diversity of small, locally-owned business opportunities	weak
Goal: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke	
Objective 1: Provide educational events and materials explaining the benefits of healthy eating	medium
Objective 2: Conduct educational events and deliver materials to illuminate the benefits of local food production, an appreciation for local and healthy food, and increase the ability of local residents to produce their own food in a sustainable manner	strong
Objective 3: Raise awareness around the true value of food and about the economic benefits of a local food system	very weak
Objective 4: Seek food skills development opportunities for residents (in relation to food preparation, processing, meal planning, food safety, etc.)	weak-medium
Objective 5: Connect students and young adults with opportunities to explore career options in agriculture and participate in local food production through the formal education system	very weak
Objective 6: Determine local food production capacity, limitations, and trends	medium
Objective 7: Identify and promote the sharing of information and collaboration between local organizations and community and government agencies	weak
Objective 8: Encourage the consumption of food that is ethically produced (supporting fair treatment of farmers as well as the humane treatment of animals)	very weak

Recommendations

8.1 Broad Recommendations

8.1.1 *Continue to provide in-kind, financial partnership, support for programs and food culture*

The biggest challenge for existing programs is securing long-term sustainable funding. Annual funding applications drain administrative time and place stress on these programs. The City of Revelstoke can ensure that these great programs continue by providing in-kind support for these programs and by

partnering in funding applications. The resident and business community can support these programs through continued attendance at events, partnering with local food producers, and promoting food as an important part of Revelstoke's culture as a way to attract people to visit and relocate in Revelstoke.

8.2 Very High Recommendations

Very high recommendations are summarized on the next page. They were identified from the long list of recommendations (see Appendix 1), and are highlighted (opposite) ahead of the high priority lists (p. 54-59) described for each FSS Goal. These recommendations are very high because:

1. They are core initiatives that need to be put in place in order to provide support for future food security initiatives; or
2. They are easily implementable and build strong support for food security initiatives.

8.3 Prioritized Recommendations

Prioritized recommendations were derived from many community sources and background research. These recommendations address specific gaps noted through the gaps analysis. Recommendations are prioritized ranks with identified community leads. These recommendations were collected by:

- Conducting group interviews with local food experts to creatively imagine solutions to existing challenges. Three interviews were conducted with fruit and vegetable growers, meat producers and processors, and hunters, fishers and wild harvesters;
- Conducting a survey distributed at five public outreach events identifying key challenges and recommendations on local food; and
- Research into other communities that have undertaken a food security strategy or that have other innovative food security programs in place

Priorities should be timed as follows:

- **Very high** - within 6 months of completion of the Food Security Strategy
- **High** - 1-2 years
- **Medium** - 3-5 years
- **Low** - as possible

Table 5: Very High Priority Recommendations

Recommendation	Lead	Rationale
1. Include food production in the 2015 Official Community Plan and zoning updates for 2015 update. Add food security language to that document would strengthen the community's commitment to increasing local food access and production	City EPB, Stakeholders	Including stronger food security language in the OCP provides stronger support for food security initiatives and encourages the City to support community food security initiatives
2. Establish a long-term Revelstoke Food Security Committee to guide future actions in addressing the recommendations of this strategy report and other community food security initiatives. The committee should be made up of representatives from all the major food security actor organizations (including members of the steering committee for the Food Security Strategy and relevant business leaders.) One major goal of this committee would be address program overlap, competition for funds, and improve working relationships across sectors and between organizations.	City, NCES, CC, IH, SD19	Food security in Revelstoke has grown to the point where there are many programs, organizations and policies in place. Having a food security committee to oversee these projects improves the implementation of recommendations in this plan to improve overall food security.
3. Allocate resources for a paid position dedicated to coordinate community-wide food security initiatives such that the recommendations from the Revelstoke Food Security Strategy are acted upon, and to facilitate increased collaboration amongst all partner groups. This position would take direction from and report to the Revelstoke Food Security Committee.	City, NCES, CC, IH, SD19	There are so many food security initiatives currently in place, and more recommended through this plan. Having a paid coordinator will help improved implementation.
4. Request that a community liaison be appointed to the summer and winter farmers market boards such that the best interests of the community are taken into consideration in market management decisions and attempt to diversify the offerings at the farmer's market for local consumers.	RSFM, RWFM, City CED	This would give the community a voice as to what services they would like to see at the market and would reduce conflict surrounding vendors allowed or prohibited at the market.
5. Amend the local animal control bylaw to permit chickens, bees and other small livestock for food production in all single-family residential zones in the City	City, NCES, Stakeholders	The framework for the bylaw is in place. An internal review at the City and adoption by council is all that is needed. Revelstoke's highest area of food security is from backyard chickens. Allowing chickens would show City support for backyard chickens and encourage increasing them as a local, healthy and sustainable food source.
6. Community Food Security e-Hub: develop one on-line source which is easy to find and navigate that provides resources addressing a broad array of food security issues and initiatives. [Currently in Progress, to be hosted on the North Columbia Environmental Society website.]	NCES	This will be the go-to place for food security information in Revelstoke. It should be managed by the Food Security Coordinator.
7. Develop a community compost system whereby end-product is suitable for agricultural use. [In progress]	CSRD, City	This is currently in progress and helps to reduce waste and encourage a more sustainable food system.

Goal 1: Access to food

Goal: Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Recommendation	Lead	Cost	Priority
Include food production in the 2015 Official Community Plan and zoning bylaw updates for 2015 update. Add food security language to that document would strengthen the community's commitment to increasing local food access and production	City, Stakeholders	Lowest	very high
Request that a community liaison be appointed to the summer and winter farmers market boards such that the best interests of the community are taken into consideration in market management decisions and attempt to diversify the offerings at the farmer's market for local consumers.	RSFM, RWFM, City CED	Lowest	very high
Amend the local animal control bylaw to permit chickens, bees and other small livestock for food production in all single-family residential zones in the City.	City, NCES, stakeholders	Lowest	very high
Expand Farmer's Market Coupon program to year-round (include winter market).	CC (supporting food bank program)	Low	high
Ensure that BCIH nutritional policies and guidelines are adhered to in addition to giving preference to the use of locally-sourced ingredients wherever possible in choosing foods provided in City-owned buildings and by SD19 lunch, snack and milk programs.	SD19, BCIH, City	Lowest	high
Commit and ensure long-term funding needs for access to food programs for low income families.	all levels of govt and CBT	Highest	high
Provide in-kind support to lead organizations working to increase Revelstoke's food security.	City	Low	high
Enhance capacity of schools to establish school gardens via cultural support for use of gardens as valuable learning tool and working towards addressing key challenges such irrigation, volunteer or staff time for garden management, and summer use.	SD19, PAC	Low	high
Educate hunters, fishers and foragers about the possibility of donating to the food bank.	RRGC, CC	Lowest	high
Explore use of SD19 lands such as fields at abandoned school sites for food production, and potential establishment of incubator farm or food hub if building space was also allocated to the project. Short-term: Feasibility study, and establishment of partnerships. Medium term: establishment of productive gardens. Long term: establishment of health-promoting programs utilizing indoor and outdoor space.	SD19, City, NCES	High	high
Add new pieces of equipment such as smaller canning pots, meat-grinders and gardening equipment to the NCES Food Equipment Loans Program	NCES	Low	high

Goal: Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Recommendation	Lead	Cost	Priority
Make City-owned land available for food production, available to urban Farmers with a minimum 5-year lease for fruit & vegetable products (renewable every two years), minimum 15-year for animals (renewable every 5 years, non-binding for first 5 years)	City	Low	high
Consider having the City act as a guarantor and negotiate use of private land for food production on behalf of local food production businesses to produce food on privately-owned land with long-term leases.	City, CoC, Local food businesses Private land-owners	Low	high
Allow Queen Victoria Hospital lands to be used for food production by urban farmers. Food grown on site could be used in the internal food service and lands could be used for other IH health programs. Short-term: Feasibility study, and establishment of partnerships. Medium term: establishment of productive gardens. Long term: establishment of health-promoting programs utilizing the space.	IH, RFSC, Urban Farmers	Low	high
Landshare Program: Ensure that groundwork for program is in place, and include legal resources to safeguard land-owner and land-use relations such as legal land-use agreements, lease templates, operational website, etc.	NCES	Low	high
Support the preservation of (and oppose removal of) ALR land from the registry in and around the City via written letters	City, NCES	Lowest	high
Adopt a "Buy Local Policy" for local food (similar to the local wood policy adopted by Council in January 2011) that prioritizes buying local food for meetings, etc.	City, CoC	Low	high
Plant edible landscaping on City property in high pedestrian traffic areas to encourage harvesting and reduce potential wildlife conflicts	City	Low	high
Exclude gardens from watering restrictions	City EPB	Low	high
Amend zoning bylaw to include urban Farming and Market Gardens in all zones and allow farm-gate sales in all single family residential and commercial zones.	City EPB	Low	high
Advocate for land management practices (forestry, mining, power generation, etc.) that allow for increasing food production in addition to resource use (selective logging, strategic dam outflow management, etc.)	City, RRG, RCFC, NCES	Lowest	high

Goal 2: Environmentally sustainable food production

Goal 2: Environmentally sustainable food production - Increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions

Recommendation	Lead	Cost	Priority
Develop a community compost system whereby end-product is suitable for agricultural use. [In progress]	CSRD, City	Highest	very high
Encourage the use of rain water for garden use rather than relying solely on municipal water system via education and subsidized equipment for rain collection.	City, CSRD	Lowest	high
Deliver educational programs to urban gardeners addressing water conservation	City, CSRD, NCES	Low	high
Advocate for permitted use of greywater systems so that greywater from households may be used for garden use (in addition to uses such as flushing toilets.)	City	Low	high
Actively enforce residences violating the pesticide/herbicide ban in Revelstoke, and advocate for the restriction sales of pesticides/herbicides	City, NCES	Medium	high
Support the labelling of non-organic, genetically-modified foods, terminator seeds and seed patenting	City, NCES, Local businesses	Lowest	high
Improve marketing for "Plant a Row, Grow a Row" program	CC (supporting food bank program)	Lowest	high
Expand the Food Recovery Program to enable increased participation from local businesses, and establish an efficient system for collecting and dropping off excess food to people in need. Consider new reception sites in addition to the food bank.	CC, Local businesses	Medium	high
Create courses for new hunters & fishers that incorporate conservation information while also teaching technique, proper processing and disposal of unusable animal parts, field dressing, butchering, and cooking. Course could also address the emotional or spiritual elements of killing for food. (This course would be offered as an additional, more detailed follow-up to the CORE course.)	NCES, RRG, Active hunters, Local biologists	Low	high
Include discussion and education around sustainable harvest into Garden Guru Workshop Series dealing with wild harvest	NCES	Lowest	high
City of Revelstoke to take an active role in managing fruit trees located on public lands to decrease wildlife conflict. City to cover costs of either ensuring trees on public lands are picked, or cutdown. Require that residents with fruit actively maintain and harvest/dispose of fruit through the property maintenance bylaw, and actively enforce this bylaw.	City EPB, RBA	High	high
Encourage electric fencing for animal husbandry within City limits to reduce conflict with wildlife via an incentive program such as waiving licensing fee for small livestock if electric fencing is installed	City EPB, RBA	Lowest	high

Goal 3: Food Culture

Goal 3: Food Culture - Promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being.

Recommendation	Lead	Cost	Priority
Consult with teachers on how to most effectively and efficiently include "Farm to Table" educational content (exemplified in the NCES Farm to Table educational program) into their lesson plans, or by inviting the NCES to deliver their ready-made program to grade 4/5 and grade 10/11 students.	RFSC, NCES, SD19, School staff	Low	high
Create and/or maintain an annual fall celebration to celebrate the local harvest (either replace or be combined with the NCES Harvest Paloza and the new Garlic Festival).	NCES, CoC, local farmers	Low	high
Include an activity within the Screen Smart agenda which helps to support the importance of eating together as families, and as a community.	Screen Smart (SD19)	Lowest	high
Host a regional food forum to identify key regional food security issues and opportunities and establish relationships to other communities within Revelstoke's regionally-local food shed.	RFSC, City CED, NCES, CBT	Medium	high

Goal 4: Economic Sustainability

Goal: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Recommendation	Lead	Cost	Priority
Develop a sticker or seal that local restaurants and businesses can display to customer's indicating that they source food from within the "Regionally Local" area of ~250km. This will allow residents and visitors to choose restaurants that support local businesses and should increase demand for local food products.	Local food businesses City CED, CoC Local restaurants	Low	high
Include information on where to find locally-produced foods in Revelstoke in the Revelstoke Tourism Dining Guide.	CoC	Low	high
Develop local food maps for residents and tourists, highlighting local food businesses, Farms, processors, suppliers and restaurants selling and promoting local food updated annually. Make maps available online through the City, chamber, food security website, and in print at the chamber and local restaurants.	Local food businesses, City CED, CoC, Local restaurants	Low	high
Establish farmer-processor/s partnerships whereby processors (such as restaurants, or bakers) identify products they can predict demand for and order these products from local farmers prior to planting season so the farmer can then plan to meet this market demand	RFSC, Local food producers and businesses	Lowest	high
Establish Farmer to Farmer partnerships to coordinate which items they produce in order to not saturate the market by producing the same thing, and to provide the community with variety and meet market demands	RFSC, Local food producers	Lowest	high
Host bi-annual working meetings for businesses in the food industry to encourage partnerships, making new connections, discussing challenges and opportunities and brainstorm ideas on how to improve business for all groups	City CED, CoC, Local producers, processors and distributors	Low	high
Seek local contractor to manage the high school cafeteria whose mandate includes sourcing local, healthy food.	SD19	Lowest	high
Develop a social enterprise around the selling of value-added food products in Revelstoke whereby funds raised got to support key educational programs addressing local food security.	NCES	Medium	high
Consider giving tax breaks for local food businesses producing, processing or supplying local food (agricultural uses within city limits, businesses using locally-sourced ingredients)	City	Low	high
Consider providing tax breaks for land-owners leasing property for food production	City	Medium	high

Goal: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Recommendation	Lead	Cost	Priority
Develop a feasibility study to attract new value-added food businesses to Revelstoke with a specific focus on using waste fruit and/or vegetable products. Value-added businesses could include: dried fruit, juice and other products from rogue fruit trees, distillery from rogue trees, cheese, etc.	City CED, CoC, RBA	Medium	high
Develop a feasibility study to attract new farming businesses to Revelstoke with a specific focus on expanding animal husbandry. Currently there are no sources of local duck, lamb, pork, goat, or dairy.	City CED, CoC, Local Meat producers Local Food suppliers	Medium	high
Create an community-owned or non-profit commercial kitchen facility for processing of local food to encourage business startup opportunities. Explore the same for community-owned abattoir. Short term: feasibility study; Medium Term: design facility; Long Term: build & manage the facility	City, NCES, RRG, CC, BCIH	Highest	medium-high
Establish a food coop which purchases food from local suppliers, as well as other products such as bulk goods to provide access to affordable, good quality foods	RFSC	High	medium-high

Goal 5: Education

Goal: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Recommendation	Lead	Cost	Priority
Establish a long-term Revelstoke Food Security Committee to guide future actions in addressing the recommendations of this strategy report and other community food security initiatives. The committee should be made up of representatives from all the major food security actor organizations (including members of the steering committee for the Food Security Strategy and relevant business leaders.) One major goal of this committee would be address program overlap, competition for funds, and improve working relationships across sectors and between organizations.	City, NCES, CC, BCIH, SD19	Low	very high
Allocate resources for a paid position dedicated to coordinate community-wide food security initiatives such that the recommendations from the Revelstoke Food Security Strategy are acted upon, and to facilitate increased collaboration amongst all partner groups. This position would take direction from and report to the Revelstoke Food Security Committee.	City, NCES, CC, BCIH, SD19	Medium	very high
Community Food Security e-Hub: develop one on-line source which is easy to find and navigate that provides resources addressing a broad array of food security issues and initiatives. [Currently in Progress, to be hosted on the North Columbia Environmental Society website.]	NCES	Low	very high
Connect with the Healthy Habits for Kids program leader to discuss collaboration. Discuss possible strategies for addressing the mutual challenge of finding time in a full curriculum for each program.	NCES, SD19 (Begbie View Elementary and the SD19 Healthy Schools Coordinator)	Lowest	high
Offer food and nutrition skill building programs highlighting local foods and how to prepare them in nutritious and delicious ways.	CC	Low	high
Increase the participation of high school students in the Farm-to-Table program by increasing the number of classrooms enrolled in the program which include at least one core class so that most students receive the education (currently, the only classes to host the program are electives).	NCES, SD19 Highschool staff	Lowest	high
Develop an education campaign around the economic benefits of buying from and supporting local food producers and paying a fair share for healthy, local food	RFSC, CoC, City CED	Low	high
Preference locally-sourced food in teachings from programs like Food Skills for Families or the high school Foods Lab whereby people are taught how to prepare foods that are grown here, how to save money while shopping local, where to find these ingredients, etc.	CC, BCIH, NCES, SD19	Lowest	high

Goal: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Recommendation	Lead	Cost	Priority
Use the high school cafeteria as location to teach food skills and provide valuable experience around sourcing local foods, preparing nutritious meals, food budgeting, etc.	SD19	Low	high
Establish more school-gardens that are easy-access to students and teachers during class time. (Only Begbie View Elementary has a school garden, new in 2014.)	SD19	Low	high
Invite local food businesses (specifically producers and processors) to the annual high school job fair	Local food businesses, City CED, CoC, SD19	Lowest	high
Partner with local food businesses to offer work experience placements in the high school work experience program in the areas of local food production, processing and supply.	SD19, Local food businesses	Low	high



9.0

Conclusion

Revelstoke has a rich, yet under-appreciated agricultural history as a result of many generations of immigrants having cleared the land and trees so they could feed their families many years ago. Today, much of that agricultural land lies within local drawdown zones created by the damming of the Columbia River in the late 1960's. The need to feed the local population has never gone away of course and so in combination with the local changes to geography, and the rise of an industrialized global food system, the way in which Revelstoke residents fed themselves changed dramatically in a short period of time. Today, however, there is an increasing awareness of the importance for communities to maintain or reassert some autonomy over their food system. This strategy document rises out of this local food movement evidenced by the growing interest in local food sustainability here in Revelstoke.

While there are many barriers and challenges to overcome in increasing Revelstoke's level of food security, performing the research summarized in this document has provided some powerful insight into how Revelstoke can move forward in meeting its food security vision for the future.

APPENDICES

1. Recommendations
2. Programs, Organizations & Policies
3. Acronyms & Glossary
4. Calculating Yields from Backyard Gardens
5. Survey and Results Summary
6. Local Effects of Climate Change
7. Sources Reviewed
8. Potential Funding Sources

Appendix 1: Recommendations

Goal 1: Access to food

Goal: Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents			
Recommendation	Lead	Cost	Priority
Objective 1: Ensure that residents in need have dignified access to healthy and affordable foods			
Expand Farmer's Market Coupon program to year-round (include winter market).	CC, (supporting food bank program)	Low	high
Ensure that BCIH nutritional policies and guidelines are adhered to in addition to giving preference to the use of locally-sourced ingredients wherever possible in choosing foods provided in City-owned buildings and by SD19 lunch, snack and milk programs.	SD19, BCIH, City	Lowest	high
Commit and ensure long-term funding needs for access to food programs for low income families.	all levels of govt and CBT	Highest	high
Provide in-kind support to lead organizations working to increase Revelstoke's food security.	City	Low	high
Establish an additional bi-monthly farmers market for mid-week evenings to increase accessibility of local products to individuals who are unable to do their shopping during current market hours.	RSFM	Medium	medium
BC School Fruit and Vegetable Nutritional Program: identify locally-sourced foods which could be purchased for this program (within Revelstoke's food shed) and preference purchase of these products wherever possible. (Currently food provided from this program is not sourced from within Revelstoke's regionally-local food shed.)	BC School Fruit and Vegetable Nutritional Program, SD19	Low	medium
Promote breastfeeding as a way to increase food security for infants and children and encourage public buildings and businesses to provide welcoming spaces for breastfeeding mothers	BCIH, City, MtnMW	Lowest	Medium
Objective 2: Facilitate broad-based participation in food sharing and production on private and public land			
Enhance capacity of schools to establish school gardens via cultural support for use of gardens as valuable learning tool and working towards addressing key challenges such irrigation, volunteer or staff time for garden management, and summer use.	SD19, PAC	Low	high
Educate hunters, fishers and foragers about the possibility of donating to the food bank.	RRGC, CC	Lowest	high

Goal: Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Recommendation	Lead	Cost	Priority
Explore use of SD19 lands such as fields at abandoned school sites for food production, and potential establishment of incubator farm or food hub if building space was also allocated to the project. Short-term: Feasibility study, and establishment of partnerships. Medium term: establishment of productive gardens. Long term: establishment of health-promoting programs utilizing indoor and outdoor space.	SD19, City, NCES	High	high
Expand the Food at work Project with approvals from the City of Revelstoke's Public Works and Engineering, Planning and Building Departments.	NCES, City PW, City EPB	Lowest	medium

Objective 3: Increase household and community-based food preservation, improving access to local food outside of the growing season

Add new pieces of equipment such as smaller canning pots, meat-grinders and gardening equipment to the NCES Food Equipment Loans Program	NCES	Low	high
Establish a community greenhouse heated with biomass technology as pilot project to assess degree to which growing season can be extended, technological solutions to dealing with large snow-loads, and low light growing conditions while still maintaining an economically sustainable greenhouse.	City CED, CoC, RCEC	Highest	medium

Objective 4: Identify areas suitable for food production within the region and connect potential "producers" with potential "landlords."

Make City-owned land available for food production, available to urban Farmers with a minimum 5-year lease for fruit & vegetable products (renewable every two years), minimum 15-year for animals (renewable every 5 years, non-binding for first 5 years)	City	Low	high
Consider having the City act as a guarantor and negotiate use of private land for food production on behalf of local food production businesses to produce food on privately-owned land with long-term leases.	City, CoC, Local food businesses Private land-owners	Low	high
Allow Queen Victoria Hospital lands to be used for food production by urban farmers. Food grown on site could be used in the internal food service and lands could be used for other IH health programs. Short-term: Feasibility study, and establishment of partnerships. Medium term: establishment of productive gardens. Long term: establishment of health-promoting programs utilizing the space.	IH, RFSC, Urban Farmers	Low	high
Landshare Program: Ensure that groundwork for program is in place, and include legal resources to safeguard land-owner and land-use relations such as legal land-use agreements, lease templates, operational website, etc.	NCES	Low	high

Objective 5: Support land use planning that preserves regional farmlands and increases the use of arable land suitable for food production

Goal: Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Recommendation	Lead	Cost	Priority
Include food production in the 2015 Official Community Plan and zoning bylaw updates for 2015 update. Add food security language to that document would strengthen the community's commitment to increasing local food access and production	City, Stakeholders	Lowest	very high
Support the preservation of (and oppose removal of) ALR land from the registry in and around the City via written letters	City, NCES	Lowest	high
Adopt a "Buy Local Policy" for local food (similar to the local wood policy adopted by Council in January 2011) that prioritizes buying local food for meetings, etc.	City, CoC	Low	high
Plant edible landscaping on City property in high pedestrian traffic areas to encourage harvesting and reduce potential wildlife conflicts	City	Low	high
Include requirements for irrigated community garden space in new housing developments including the Bridge Creek Affordable Housing Society	City, RCHS	Medium	low

Objective 6: Reduction in regulatory barriers to increasing local food production

Request that a community liaison be appointed to the summer and winter farmers market boards such that the best interests of the community are taken into consideration in market management decisions and attempt to diversify the offerings at the farmer's market for local consumers.	RSFM, RWF, City CED	Lowest	very high
Amend the local animal control bylaw to permit chickens, bees and other small livestock for food production in all single-family residential zones in the City.	City, NCES, stakeholders	Lowest	very high
Exclude gardens from watering restrictions	City EPB	Low	high
Amend zoning bylaw to include urban Farming and Market Gardens in all zones and allow farm-gate sales in all single family residential and commercial zones.	City EPB	Low	high
Advocate for land management practices (forestry, mining, power generation, etc.) that allow for increasing food production in addition to resource use (selective logging, strategic dam outflow management, etc.)	City, RRG, RCFC, NCES	Lowest	high
Advocate for the Province to re-instate the road/rail kill provision that allows animals killed by trains and cars to be harvested and processed for food for private individuals (or a buyers club/co-op) or for donation to the food bank.	City, CC, RRG, CPR, MOT	Lowest	medium
Request that Revelstoke and Area B in the next CSRD Agricultural Strategy update (final draft released June 2014)	City CED, CSRD	Lowest	medium

Goal 2: Environmentally sustainable food production

Goal 2: Environmentally sustainable food production - Increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions

Recommendation	Lead	Cost	Priority
Objective 1: Increase local food production with emphasis on reducing the embodied energy of the food system (encourage organic growing methods, increase water efficiency, decreasing food miles, etc.)			
Encourage the use of rain water for garden use rather than relying solely on municipal water system via education and subsidized equipment for rain collection.	City, CSRD	Lowest	high
Deliver educational programs to urban gardeners addressing water conservation	City, CSRD, NCES	Low	high
Advocate for permitted use of greywater systems so that greywater from households may be used for garden use (in addition to uses such as flushing toilets.)	City	Low	high
Actively enforce residences violating the pesticide/herbicide ban in Revelstoke, and advocate for the restriction sales of pesticides/herbicides	City, NCES	Medium	high
Support the labelling of non-organic, genetically-modified foods, terminator seeds and seed patenting	City, NCES, Local businesses	Lowest	high
Improve marketing for "Plant a Row, Grow a Row" program	CC (supporting food bank program)	Lowest	high
Establish a Farm Equipment Share/Loan System	Local farmers	Highest	medium
Create annual seed swap with predictable date and assign a leader to manage seed library with in-depth knowledge of proper seed storage, value of heritage and organic seed, and capacity to manage the library.	NCES, local farmers and gardeners	Lowest	medium
Provide education on how to mitigate contaminated sites for food production (potentially included in the Garden Guru Series.) Research potential contaminants on lands identified in the Revelstoke Food Security Strategy's mapping work and ensure that these are addressed that educational resources on how to deal with these contaminants are made available via the community food security e-hub.	City, NCES	Low	medium
Objective 2: Reduce food waste whereby organic waste products are used as valuable agricultural inputs and/or products that are still edible are recovered and redistributed			
Develop a community compost system whereby end-product is suitable for agricultural use. [In progress]	CSRD, City	Highest	very high
Expand the Food Recovery Program to enable increased participation from local businesses, and establish an efficient system for collecting and dropping off excess food to people in need. Consider new reception sites in addition to the food bank.	CC, Local businesses	Medium	high

Goal 2: Environmentally sustainable food production - Increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions

Recommendation	Lead	Cost	Priority
Objective 3: Encourage responsible and sustainable harvesting of wild foods			
Create courses for new hunters & fishers that incorporate conservation information while also teaching technique, proper processing and disposal of unusable animal parts, field dressing, butchering, and cooking. Course could also address the emotional or spiritual elements of killing for food. (This course would be offered as an additional, more detailed follow-up to the CORE course.)	NCES, RRG, Active hunters, Local biologists	Low	high
Include discussion and education around sustainable harvest into Garden Guru Workshop Series dealing with wild harvest	NCES	Lowest	high
Objective 4: Manage food production in ways that are mindful of and reduce conflict with wildlife			
City of Revelstoke to take an active role in managing fruit trees located on public lands to decrease wildlife conflict. City to cover costs of either ensuring trees on public lands are picked, or cutdown. Require that residents with fruit actively maintain and harvest/ dispose of fruit through the property maintenance bylaw, and actively enforce this bylaw.	City EPB, RBA	High	high
Encourage electric fencing for animal husbandry within City limits to reduce conflict with wildlife via an incentive program such as waiving licensing fee for small livestock if electric fencing is installed	City EPB, RBA	Lowest	high

Goal 3: Food Culture

Goal: Food Culture - Promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being.

Recommendation	Lead	Cost	Priority
Objective 1: Adopt food production as a proud part our local identity to encourage a thriving local food culture, and retain related knowledge and skills within the community			
Consult with teachers on how to most effectively and efficiently include "Farm to Table" educational content (exemplified in the NCES Farm to Table educational program) into their lesson plans, or by inviting the NCES to deliver their ready-made program to grade 4/5 and grade 10/11 students.	RFSC, NCES, SD19, School staff	Low	high
Host a regional food forum to identify key regional food security issues and opportunities and establish relationships to other communities within Revelstoke's regionally-local food shed.	RFSC, City CED, NCES, CBT	Medium	high
Create a seasonal calendar with monthly messages and gardening tips using local knowledge collected for the Mountain Harvest book.	NCES	Low	medium
Objective 2: Celebrate the diversity of our food cultures and an appreciation for local, healthy cuisine			
Create and/or maintain an annual fall celebration to celebrate the local harvest (either replace or be combined with the NCES Harvest Paloza and the new Garlic Festival).	NCES, CoC, local farmers	Low	high
Objective 3: Recognize and support the importance of eating together as a family and community to our well-being (physical and mental health)			
Include an activity within the Screen Smart agenda which helps to support the importance of eating together as families, and as a community.	Screen Smart (SD19)	Lowest	high
Develop a community food event similar to Paris' white picnic on the Champs Elysees to celebrate eating together as a community.	NCES, RMS	Low	medium

Goal 4: Economic Sustainability

Goal 4: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Recommendation	Lead	Cost	Priority
Objective 1: Market and sell locally produced food to residents and visitors			
Develop a sticker or seal that local restaurants and businesses can display to customer's indicating that they source food from within the "Regionally Local" area of ~250km. This will allow residents and visitors to choose restaurants that support local businesses and should increase demand for local food products.	Local food businesses City CED, CoC Local restaurants	Low	high
Include information on where to find locally-produced foods in Revelstoke in the Revelstoke Tourism Dining Guide.	CoC	Low	high
Develop local food maps for residents and tourists, highlighting local food businesses, Farms, processors, suppliers and restaurants selling and promoting local food updated annually. Make maps available online through the City, chamber, food security website, and in print at the chamber and local restaurants.	Local food businesses, City CED, CoC, Local restaurants	Low	high
Objective 2: Develop partnerships that increase local food production and ensure economic sustainability			
Establish farmer-processor/s partnerships whereby processors (such as restaurants, or bakers) identify products they can predict demand for and order these products from local farmers prior to planting season so the farmer can then plan to meet this market demand	RFSC, Local food producers & businesses	Lowest	high
Establish Farmer to Farmer partnerships to coordinate which items they produce in order to not saturate the market by producing the same thing, and to provide the community with variety and meet market demands	RFSC, Local food producers	Lowest	high
Host bi-annual working meetings for businesses in the food industry to encourage partnerships, making new connections, discussing challenges and opportunities and brainstorm ideas on how to improve business for all groups	City CED, CoC, Local producers, processors & distributors	Low	high
Create an community-owned or non-profit commercial kitchen facility for processing of local food to encourage business startup opportunities. Explore the same for community-owned abattoir. Short term: feasibility study; Medium Term: design facility; Long Term: build & manage the facility	City, NCES, RRGC, CC, BCIH	Highest	medium-high
Establish a food coop which purchases food from local suppliers, as well as other products such as bulk goods to provide access to affordable, good quality foods	RFSC	High	medium-high
Develop an incubator farm to provide business and mentorship advice and educational support to new food production businesses	Local food businesses, City CED, CoC	High	medium

Goal 4: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Recommendation	Lead	Cost	Priority
Build on the success of Terra Firma's CSA program by providing a pick-up location in town, and encourage subscribers to visit the farm by requiring a pick-up of the first box of the season, with accommodations made for families that are unable to travel to the farm (i.e. low-income, elderly, non-car owners, etc.)	TFF, Local producers	Lowest	medium
Improve the marketing of local CSA programs to include hard copy information at Farmer's Markets to attract more participants	Local producers	Lowest	medium
Establish a farmers co-op to pool products from different farms which are then sold under one business of which each contributing farmer holds a share.	Local food businesses, City CED	Low	medium

Objective 3: Encourage economic development opportunities related to local food production alongside a diversity of small, locally-owned business opportunities

Seek local contractor to manage the high school cafeteria whose mandate includes sourcing local, healthy food.	SD19	Lowest	high
Develop a social enterprise around the selling of value-added food products in Revelstoke whereby funds raised go to support key educational programs addressing local food security.	NCES	Medium	high
Consider giving tax breaks for local food businesses producing, processing or supplying local food (agricultural uses within city limits, businesses using locally-sourced ingredients)	City	Low	high
Consider providing tax breaks for land-owners leasing property for food production	City	Medium	high
Develop a feasibility study to attract new value-added food businesses to Revelstoke with a specific focus on using waste fruit and/or vegetable products. Value-added businesses could include: dried fruit, juice and other products from rogue fruit trees, distillery from rogue trees, cheese, etc.	City CED, CoC, RBA	Medium	high
Develop a feasibility study to attract new farming businesses to Revelstoke with a specific focus on expanding animal husbandry. Currently there are no sources of local duck, lamb, pork, goat, or dairy.	City CED, CoC, Local Meat producers & suppliers	Medium	high
Provide start-up support for lawn-to-garden consulting businesses	RFSC, CFDC	Low	medium
Develop a food harvesting/processing program for low-income individuals as a business to help with income	RBA, CC	Medium	medium
Encourage the Province of BC to study the economic value of hunting and fishing with regards to understanding how much money is generated locally by hunting activities	City CED, CoC, RRG	Lowest	low

Goal 5: Education

Goal: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Recommendation	Lead	Cost	Priority
Objective 1: Provide educational events and materials explaining the benefits of healthy eating			
Connect with the Healthy Habits for Kids program leader to discuss collaboration. Discuss possible strategies for addressing the mutual challenge of finding time in a full curriculum for each program.	NCES, SD19 (Begbie View Elementary and the SD19 Healthy Schools Coordinator)	Lowest	high
Offer food and nutrition skill building programs highlighting local foods and how to prepare them in nutritious and delicious ways.	CC	Low	high
Objective 2: Conduct educational events and deliver materials to illuminate the benefits of local food production, an appreciation for local food and increase the ability of local residents to produce their own food in a sustainable manner			
Increase the participation of high school students in the Farm-to-Table program by increasing the number of classrooms enrolled in the program which include at least one core class so that most students receive the education (currently, the only classes to host the program are electives).	NCES, SD19 Highschool staff	Lowest	high
Objective 3: Raise awareness around the true value of food and about the economic benefits of a local food system			
Develop an education campaign around the economic benefits of buying from and supporting local food producers and paying a fair share for healthy, local food	RFSC, CoC, City CED	Low	high
Objective 4: Seek food skills development opportunities for residents (in relation to food preparation, processing, meal planning, food safety, etc.)			
Preference locally-sourced food in teachings from programs like Food Skills for Families or the high school Foods Lab whereby people are taught how to prepare foods that are grown here, how to save money while shopping local, where to find these ingredients, etc.	CC, BCIH, NCES, SD19	Lowest	high
Use the high school cafeteria to teach food skills and provide valuable experience around sourcing local foods, preparing nutritious meals, food budgeting, etc.	SD19	Low	high
Hunting & fishing recruitment program targeting residents with little or no experience in hunting in fishing who are interested in starting.	RRGC or NCES	Lowest	medium

Goal: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Recommendation	Lead	Cost	Priority
Use the newly upgraded kitchen facility at Columbia Park elementary school to teach food skills to students	SD19 (Columbia Park Elementary)	Lowest	medium
Objective 5: Connect students and young adults with opportunities to explore career options in agriculture and participate in local food production through the formal education system			
Establish more school-gardens that are easy-access to students and teachers during class time. (Only Begbie View Elementary has a school garden, new in 2014.)	SD19	Low	high
Invite local food businesses (specifically producers and processors) to the annual high school job fair	Local food businesses, City CED, CoC, SD19	Lowest	high
Partner with local food businesses to offer work experience placements in the high school work experience program in the areas of local food production, processing and supply.	SD19, Local food businesses	Low	high
Objective 6: Determine local food production capacity, limitations, and trends			
Develop a Gardening Challenge where residents track food production from their property (measured in sq. ft) over a three year period	NCES	Low	medium
Objective 7: Identify and promote the sharing of information and collaboration between local organizations and community and government agencies			
Establish a long-term Revelstoke Food Security Committee to guide future actions in addressing the recommendations of this strategy report and other community food security initiatives. The committee should be made up of representatives from all the major food security actor organizations (including members of the steering committee for the Food Security Strategy and relevant business leaders.) One major goal of this committee would be address program overlap, competition for funds, and improve working relationships across sectors and between organizations.	City, NCES, CC, BCIH, SD19	Low	very high

Goal: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Recommendation	Lead	Cost	Priority
Allocate resources for a paid position dedicated to coordinate community-wide food security initiatives such that the recommendations from the Revelstoke Food Security Strategy are acted upon, and to facilitate increased collaboration amongst all partner groups. This position would take direction from and report to the Revelstoke Food Security Committee.	City, NCES, CC, BCIH, SD19	Medium	very high
Community Food Security e-Hub: develop one on-line source which is easy to find and navigate that provides resources addressing a broad array of food security issues and initiatives. [Currently in Progress, to be hosted on the North Columbia Environmental Society website.]	NCES	Low	very high

Objective 8: Encourage the consumption of food that is ethically produced (supporting fair treatment of farmers as well as the humane treatment of animals)

Increase efforts to raise awareness about social injustice common to the current globalized food system, and the alternatives locally available to support the social, economic and environmental values within the food system.	RFTS	Lowest	medium
Increase efforts to encourage local suppliers of food in Revelstoke to source Fair Trade products (or their equivalent).	RFTS	Lowest	medium

Appendix 2: Programs, Organizations & Policies

Goal 1: Access to food

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents					
Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Objective 1: Ensure that residents in need have dignified access to healthy and affordable foods				Medium-strong	
Soup & Smile	RUC	Provides generously portioned meal to anyone in need for a suggested donation of \$0-\$5. 100% volunteer run program.	y	very strong	volunteer burn-out projected
Food Bank - core free-food distribution program	CC	Coordinates free food distribution to those who are in need in the community of Revelstoke. The Food Bank program was created to primarily meet the needs of Revelstoke citizens.	y	strong	sustainable funding
Farmers Market Coupon Program	CC (supporting food bank program)	Coupons to be redeemed at Revelstoke Summer Farmers Market provided to low-income individuals, families, and seniors who could not otherwise afford the relatively higher prices of Farmers Market food. Coupons made available via the BC Farmers Market Assoc.	y	strong	government support for winter market does not exist
ICSP Strong Community Capacity High Priority Action to implement the Poverty Reduction Strategy (Action Plan p. 21)	SDC, City, BCIH, CC, MCFD, OC, WORK BC, Churches, SD19	Implement the Poverty Reduction Strategy (perhaps concurrently with the Substance Use Strategy) through a broad community coalition with a focus on addressing: - Expanding school breakfast/lunch and emergency food stores programs for elementary schools where needed - Long-term stability for the Food Bank - Increasing the frequency and distribution points for free or low-cost hot lunches - Exploring the feasibility of establishing a food coop	n/a	strong	

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
ICSP High Priority Healthy Living Action to explore and support options to expand local gardening and agriculture activities (Action Plan p. 21)	NCES, City, CC, SD19	ICSP High Priority Healthy Living action to "explore and support options to expand local gardening and agriculture activities such as backyard chickens and bees; school gardens/ greenhouses; expand 'Field to Table' program; community gardens on City lands, edible landscaping on City lands, greenhouse attached to district energy system, etc.	n/a	strong	
ICSP Healthy Living Objective to "Support all citizens to access healthy foods (appendix 2 - p. 8)			n/a	medium	
Kids Snack Program	CC (supporting food bank program)	For food bank recipients with children, a 5-day supply of healthy snacks is provided for the children to take with them to school, daycare, etc.	y	medium	sustainable funding
SD19 lunch, snack and milk programs	SD19 (& PAC)	Snacks of regional fruit and vegetables made available to students. Healthy lunches are purchased for students without lunches and are meant to follow the BC Healthy Food Guidelines. There is also a program providing students with milk in some schools.	y	medium	some teachers note the food provided via this program is not actually that healthy
Healthy food in public buildings	City PRC	Food services provided by City of Revelstoke in public buildings (such as the recreation centre and the arena) call for 60/40 ratio in concessions and vending machines of healthier choices to standard choices.	y	medium	some community members note that the "healthy" choices still aren't very healthy, and none are locally-sourced

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
BC Fruit and Vegetable Nutritional Program	SD19 (& Province of BC)	A nutritional program whereby BC fruit and vegetables are delivered in schools across the province. All schools in Revelstoke are registered with this program, and some schools in Revelstoke also receive milk in addition to fruit and vegetables.	y	medium	although food is from BC, most of it is not from within our region
Public transit	City		y	weak	long wait times between service, limited number of stops for community bus, every expensive to run
Objective 2: Facilitate broad-based participation in food sharing and production on private and public land				medium	
Community Food Drives	CC (supporting food bank program)	Numerous food drives throughout the year to collect food donations for the Food Bank – mainly non-perishable and cash donations.	y	very strong	Large volunteer input required to ensure success
Annual Plant Sale	RCU	Main objective of this event is to raise funds for the church, but it also provides local gardeners with local plant starts that result in the production of many pounds of tomatoes.	y	strong	reliant upon two main volunteers who are likely to retire soon
Gleaning Project	RBA	Project provides access to free, locally grown fruit to whoever would like to take advantage. There is more fruit harvested than can be utilized while it is fresh, Bear Aware has partnered with the North Columbia Environmental Society who collect the fruit and coordinate work parties each year to process and preserve the fruit so that it can be given out at the food bank once the fresh fruit is out of season.	y	medium	Bear Aware resources stretched by this program, they would rather another group lead the gleaning and they focus on the education of wild-safe principles
Downtown Community Garden	NCES (& RUC)	Garden space provides cheap access to an irrigated garden space, which produces very high yields per square foot each year. Plot holders retain as much of the harvest as they want, and all excess is donated weekly to the food bank.	y	medium	plot holders tend to loose interest in their gardens near the end of the season

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Food Share Donor Program	CC (supporting food bank program)	Donation of excess food from local businesses. This program is made possible under the Food Donor Encouragement Act (BC provincial Bill 10) by limiting the liability of businesses donating food to food banks thereby increasing donation levels.	y	weak	great potential, but requires more support via more staff and sustainable funding
Harvest Palooza	NCES	Generate modest donations for food bank (entry to event free for those who brought donations for the food bank). Community Connections was invited to raise awareness about Revelstoke's food insecurity status and solicit for donations.		weak	Did not take place in 2014 due to low attendance in 2013, potential to revisit for 2015
Food at Work Project	NCES	Demonstrates to the public and business community that growing food can be just as pleasing to the eye as flowers, and how easy it can be to grow certain foods just about anywhere. Aims to replace conventional landscaping and flower-pots with food-crops in the downtown core. Harvests used by business staff, donated to food bank, or available to general public for use.	y	weak	low support
Begbie View Elementary, school garden	SD19	The garden beds at Begbie View elementary grow edible snack foods like peas and carrots to provide healthy, free snacks. The Early Childhood Development Centre uses the garden in the summer months. The garden is small, and there are plans to expand the garden space with the addition of native plants, traditionally used by First Nations in the area. (Built primarily for educational purposes as opposed to growing large amounts of food.)	y	weak	irrigation not installed, clear management plan not yet established
Land Share Program	NCES	Aims to increase access to arable land for people who can't afford to purchase land for food production, and provide mentorship opportunities with senior gardeners	IP	n/a	

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Community Garden - North	NCES (& RVAC)	A new community garden (ready for planting in the spring of 2015) will provide irrigated garden space with which to grow their own food. Garden plots will be larger to allow for increased harvests, and more land/plot-holders than the downtown community garden. A portion of the land will be devoted to foods grown exclusively for food bank use.	IP	n/a	wait times for City approval of landscaping plans on the site delayed project significantly
Objective 3: Increase household and community-based food preservation, improving access to local food outside of the growing season				weak	
Food Equipment Loans Program	NCES (RUC & BMK)	Loans food-processing equipment to anyone in Revelstoke at low or no cost making preservation and processing of local foods possible for individuals who do not otherwise have the tools to do so. Has resulted in more people learning techniques such as canning and dehydration. Equipment used every year in work-bees which process large amounts of fruit for donation to the food bank.	y	medium	easy pick-up and drop-off of equipment previously an issue, and currently being addressed by moving equip to new, more accessible location
Winter Farmers Market	RWFM	Bi-monthly indoor farmers market whereby a number of local and regional food products are made available for sale.	y	medium	market hours have been recently extended, but are still inaccessible to many who work regular 9am-5pm type jobs
Garden Guru (and canning work-bees)	NCES	Numerous workshops focusing on food preservation techniques have resulted in more people preserving local harvests. Annual work-bees to process fruit gleaned via the Bear Aware program take place in the fall.	y	weak	quantity of food preserved as a result of this program is difficult to measure, thus strength of program difficult to assess
Objective 4: Identify areas suitable for food production within the region and connect potential “producers” with potential “landlords”				very weak	

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Land Share Program	NCES	Developing a website to identify potential food production sites and connect land-owners with people interested in working on the land to grow food.	IP	n/a	
Objective 5: Support land use planning that preserves regional farmlands and increases the use of arable land suitable for food production				weak	
OCP Health & Wellness Supporting Policy on food security education through experience growing food (p. 42)	City EPB	Official Community Plan Health & Wellness Supporting Policy: "Increase community awareness of food security issues by encouraging local food production and purchasing, potentially creating local food co-ops." (p. 42)	n/a	strong	there is support for food security initiatives through these important documents, but there is little actual support beyond the text and policies
OCP General Land Use Community Goal (p. 54)	City EPB	Official Community Plan Land Use Community Goal: "Increase land use resilience by allowing and encouraging local food production, local materials and services use, and protection of the local and regional agricultural lands." (p. 54)	n/a	strong	
5 Agricultural Land Use Policies in the OCP (p. 68)	City EPB	5 Agricultural Land Use Policies in the OCP (p. 68): - Apply Agricultural Policies to lands designated as Agricultural on Schedule F. - Consider supporting requests for exclusion from the Agricultural Land Reserve on a case-by-case basis that is consistent with other policies in this section. - Support production of locally grown food products and urban agriculture. - Support community gardens as a way of locally producing food. - Support hobby farms in areas designated Rural Residential or Agriculture.	n/a	medium	
ICSP Open Space & Urban Vegetation Med-High Priority (Action Plan p. 11))	City	Complete and implement a Revelstoke Urban Forestry/Tree Preservation Strategy. Consider the inclusion of: food trees species that are consistent with Bear Aware practices (mainly nuts).	n/a	medium	

Goal 1 : Access to food - Promote and support dignified access to nutritious, safe, affordable food as a basic human right for all residents					
Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
OCP Land Use designation policies for T-1 Natural Ecosystems (p. 60)	City EPB	Official Community Plan Land Use Designation Policies for T1-Natural Ecosystem Land Use (p. 60) "This land use may include parks, and trails identified within a conservancy plan, and may be used for the conservation of large agricultural land holdings."	n/a	weak	
Objective 6: Reduction in regulatory barriers to increasing local food production				very weak	
None				very weak	

Goal 2: Environmentally sustainable food production

Goal 2: Environmentally sustainable food production - increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Objective 1: Increase local food production with emphasis on reducing the embodied energy of the food system (encourage organic growing methods, increase water efficiency, decreasing food miles, etc.)				weak-medium	
Annual Plant Sale	RUC	Sale of the goat manure at annual plant sale has become very popular, providing local gardeners with access to chemical-free fertilizers in an area where manure is not readily available.	y	strong	
Downtown Community Garden	NCES (& RUC)	Garden uses only organic methods of gardening, and for the most part, encourages the growth of only organic seed and plant stock. Uses the square-foot-planting method which is known to be a good approach to increasing productivity in small spaces while being very water efficient.	y	strong	
Garden Guru Workshop Series	NCES	All workshops addressing gardening focus almost exclusively on organic, water-efficient, wildlife-friendly gardening methods. Supplementary environmental education regarding food waste, human-wildlife conflict, invasive plant species, etc. are also addressed by partnering with other organizations such as Columbia Shuswap Invasive Plant Society, Bear Aware, the Columbia Shuswap Regional District, etc.)	y	strong	challenging to attract new social groups not already environmentally conscious to workshops
Farm Donations	CC (supporting food bank program)	Donations of excess product donated directly from farmers (has just begun with farms such as Terra Firma Farms who regularly donate.	y	medium	there are very few farmers to participate, but products donations such as eggs are very high value
Food Equipment Loans Program	NCES (RUC, & Big Mtn Kitchen)	A variety of food processing equipment available for loan. Sharing resources in this way helps to decrease consumerism of these products.	y	medium	

Goal 2: Environmentally sustainable food production - increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Heritage Seed Swap & Seed Library	NCES		y	weak	the seed swaps held are intermittent and the seed library is dependent upon unpredictable donations which are not assessed for quality
Pant a Row Grow a Row	CC (supporting food bank program)	Community gardeners encouraged to plant an extra row of food for donation to Food bank. A number of community members regularly donate food from their own gardens to the food bank.	y	weak	community awareness of this program is quite low
Wild Foods Donations	CC (supporting food bank program)	Canadian food banks are now permitted to accept items such as wild meat if they are processed in a safe manner.	y	weak	not common-knowledge that the food bank can accept wild foods
Community Garden - North	NCES (& RVAC)	Garden will be managed in accordance to organic and sustainable gardening methods. The space is right beside an active railway bed where CP rail regularly sprays pesticides, thus project will provide an example project on how to address and rehabilitate contaminated garden sites. This space will also include native plant species, providing habitat for urban insects, native pollinators, etc. The broader landscaping plan includes fruit and nut trees which will be used to teach no-spray, wild-safe management of tree crops.	IP	n/a	proximity to railroad poses issues of soil contamination which have been costly to address
Objective 2: Reduce food waste whereby organic waste products are used as valuable agricultural inputs and/or products that are still edible are recovered and redistributed				weak	

Goal 2: Environmentally sustainable food production - increase access to local and regional food that is sustainably and ethically produced through personal, business and municipal government actions

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Gleaning Project	RBA	Project sees that unharvested fruit is collected to decrease bear attractants within the City of Revelstoke, while also seeing that this potential waste-fruit is put to good use as much as is possible.	y	strong	redistribution of gleaned fruit is not the primary mandate of Bear Aware and therefore this program puts strain on the organizations core operations when funding is scarce
Food Share Donor Program	CC	Donation of excess food from local businesses. This program is made possible under the Food Donor Encouragement Act (BC provincial Bill 10) by limiting the liability of businesses donating food to food banks thereby increasing donation levels. Helps to decrease food waste.	y	weak	not highly utilized, would require coordinator to increase program-use
Objective 3: Encourage responsible and sustainable harvesting of wild foods				very weak	
Garden Guru Workshop Series	NCES	Some of the workshops included in this series focus specifically on wild food products such as mushrooms, fish, and herbs. Within the workshop, sustainable methods of harvest, and discussion around sustainable levels of harvest take place	y	medium	no clear guidelines on the topic of sustainable levels of harvest are available
Objective 4: Manage food production in ways that are mindful of and reduce conflict with wildlife				medium-strong	
Gleaning Project	RBA	Fruit trees gleaned in this program are done so primarily to wild-life attractants within the urban context. Also, the trees gleaned tend not to be sprayed with pesticides, or fertilized with chemical fertilizers, thus posing little other environmental threat while still providing great quantities of healthy food.	y	strong	sustainable funding

Goal 3: Food Culture

Goal 3: Food Culture - promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being					
Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Objective 1: Adopt food production as a proud part our local identity to encourage a thriving local food culture, and retain related knowledge and skills within the community				medium	
Garden Guru Workshop Series	NCES	The program goal of recruiting locals to share their knowledge via this workshops series aims to keep local knowledge and food culture 'alive' by ensuring this knowledge and passion are passed on. The regularly high attendance at workshops helps to demonstrate to the 'experts' (usually seniors) that their knowledge and skills are valued by the predominately younger generations attending the workshops.	y	very strong	
Mountain Harvest	NCES, RMA	The production of this book which illustrates to senior gardeners that their skills, knowledge, and gardens are valued. This book has quickly become a cultural product documenting the relatively recent local food movement in Revelstoke, as well as the agricultural history of the area.	y	very strong	
Downtown Community Garden	NCES (& RUC)	In addition to the community gathering opportunities communal gardens like this provide, this garden space is located in Revelstoke's downtown core and has become a highly valued space by locals and tourists alike.	y	very strong	
Garden & Art Tour	NCES (& RVAC)	Tour celebrates creativity of gardening and art in Revelstoke. It shows scale and diversity of local gardens, provides gardeners with a chance to shine, and gives residents a chance to check out other people's spaces and learn from their successes and failures. The artwork further celebrates the concept of local food, gardening, and a connection with the land.	y	strong	

Goal 3: Food Culture - promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Farm to Table (elementary and high school programs)	NCES	Students in this program are taught to think about the value of food to their community in terms of culture, health, economic and environmental issues. After this educational program is delivered, students (and their teachers) demonstrated increased enthusiasm for local, healthy food as reported by teachers.	y	strong	challenge for teachers to find time for program in their plans, especially high school
Revelstoke Garlic Festival	NCES Local-Producer	In the fall of 2014 the first Garlic Festival was hosted at a local producer's urban property whereby the celebration and sale of local food products took place and the NCES supported with educational materials and event promotion. The event was small, but well-attended and projected to take place again next year.	y	strong	
Food at Work	NCES	Aims to show the public and business community that growing food can be just as pleasing to the eye as flowers, and demonstrate how easy it can be to grow certain foods just about anywhere.	y	medium	low levels of participation
Plants for Monashee Court	CC	Program provides funding to purchase potted plants such as flowers and tomatoes for seniors living in an assisted living complex, enabling them to stay connected with their gardening skills and providing the rewards of a seasonal harvest.	y	medium	very small program, potential to expand to other senior homes if funds and capacity existed
Rod & Gun Club local food events	RRGC	Both the Fathers Day Fishing event and the annual Awards Banquet dinner serve to foster a sense of pride in the harvest of local food from surrounding natural environment. Both of these events are very popular, supporting a local hunting and fishing culture.	y	medium	
Gleaning Project	RBA	Provides social interactions while food gathering, and connections between fruit tree owners and those who have volunteered to harvest their surplus fruit and vegetables.	y	weak	

Goal 3: Food Culture - promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Begbie View Elementary school garden	SD19	Students will likely gain an appreciation for where their food comes from as a result of this garden and get excited about healthy food as a result of having grown it themselves.	y	weak	the project is new and it has yet to be seen how it is utilized by teachers to teach values, and assess cultural shifts
Community Garden - North	NCES (& RVAC)	In addition to the community gathering opportunities communal gardens like this provide, this garden space will be located at a prime cultural centre for Revelstoke, the Revelstoke Visual Arts Gallery, and a positive effect on Revelstoke's food culture is projected.	IP	n/a	
Landshare Project	NCES	Landshare program aimed to support new relationships between senior gardeners and individuals interested in gardening, and keeping farming traditions alive in Revelstoke.	IP	n/a	
Objective 2: Celebrate the diversity of our food cultures and an appreciation for local, healthy cuisine				strong	
Midsummer Night's Green - Local fine dining event	NCES	Focused mainly on elevating the cultural status of locally-harvested food by presenting the base ingredients in a classy, delicious, celebratory, and beautiful outdoor environment. Menu aims to make every-day, simple ingredients widely abundant in the Revelstoke region an absolute pleasure to eat and share with others.	y	very strong	requires large volunteer input and generous donations
Carousel of Nations	RMS	An annual event to celebrate diversity in Revelstoke via food, music, dancing, arts/crafts, info booths, etc.	y	strong	sustainable funding
Harvest Palooza	NCES	Event designed to foster a local food culture in Revelstoke through celebration of local harvests, sharing food and eating it together, sharing knowledge, providing prizes to reward culinary efforts and gardening skills, encouraging inter-generational interaction, etc.	n	weak	this event ran for three years, but was not funded in the fall of 2014

Goal 3: Food Culture - promote the significance of food quality, cooking and preserving skills, food traditions and the importance of eating together to our health and well-being

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Objective 3: Recognize and support the importance of eating together as a family and community to our well-being (physical and mental health)				weak	
Soup & Smile	RUC	Provides a social gathering place. The Church feels that most people return for the social opportunity this meal provides.	y	strong	
Breakfast Program	CC	Provides a social opportunity for people to prepare and share breakfast together once a week. The space and basic ingredients are provided by Community Connections, and attracts a group made up of predominately men.	y	medium	
Food Skills for Families	BCIH, CC	Program aims to increase cooking skills, nutritional knowledge and appreciation for healthy food in at-risk populations. Programs are social experiences whereby new relationships are often formed.	y	medium	the program does not feature/ preference locally-sourced food
Suspended Soup Program	CC	Program provides coupons to low-income individuals that can be used to purchase soup and coffee and participating local cafes. This program is meant to provide affordable opportunities to connect with public spaces.	y	medium	
Screen Smart	SD19, RCS	A an annual week-long challenge and series of community events to decrease the amount of time families spend in front of screens, and raise awareness about the side-effects of increasing levels of screen time. The benefits of eating together as a family and/or community (away from screens) has not been explicit in the messages and opportunities provided during Screen Smart, but there is great potential here to have this included.	y	weak	

Goal 4: Economic Sustainability

Goal 4: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Objective 1: Market and sell locally produced food to residents and visitors				weak	
Summer Farmers Market	RSFM	This outdoor market runs annually from May to October every Saturday in downtown Revelstoke, and attracts a variety of local and regional vendors selling arts/crafts and food.	y	very strong	decisions made regarding market structure, vendor approvals, etc. are made by a board without serious consideration of community need/interest
Winter Farmers Market	RWFM	This indoor market is held twice per month at the Revelstoke Recreation Centre from 12pm until 5pm on Thursdays from November till April. This market typically attracts fewer vendors than the summer market, but still offers a variety of local and regional food products.	y	strong	
Objective 2: Develop partnerships that increase local food production and ensure economic sustainability				weak	
Farmers Market Coupon Program	CC (supporting food bank program)	Coupons provided by BC Farmers Market Association, and distributed by food bank supporting small-scale local food producers at the Farmers Market while providing low-income earners access to the local-food market.	y	strong	sustainable funding for administration of the program despite large support on the part of local vendors and program users

Goal 4: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Terra Firma CSA (food box program)	TFF	A weekly food box provided using a CSA model. CSA: Community supported agriculture aims at providing farms with early season capital when they need it the most. Subscribers pre-purchase a share (in this case, a food box), and typically take the risk of smaller portions if crops fail. Food boxes are picked up at the farm providing an opportunity to see first-hand where the food comes from.	y	strong	satisfying all subscribers who have varying tastes and experience cooking/ preparing a variety of vegetables. Box p/up at the farm not convenient for all subscribers.
Landshare Project	NCES	Aims to support farming enterprise opportunities by facilitating partnerships between land-owners and food producers thus providing access to affordable land.	IP	n/a	
Objective 3: Encourage economic development opportunities related to local food production alongside a diversity of small, locally-owned business opportunities				weak	
Midsummer Night's Green - Local fine dining event	NCES	Event serves as fundraiser. Event budget also aims to purchase base ingredients from local suppliers and processors (e.g., Terra Firma Farms and La Baguette Catering) to support their growth. Event has potential to attract tourists from out of town.	y	very strong	volunteer intensive
Annual Plant Sale	RUC	Serves as effective fundraiser for United Church which increases in popularity each year with increase in gardening.	y	strong	
Mountain Harvest, book	NCES, RMA	The book has sold enough copies at this point that all future copies sold will raise funds for future NCES projects.	y	strong	
ICSP Workforce Very High Priority encouraging youth business opportunities including food businesses (p. 69)	YIC, WorkBC, SD19, City CED	Expedite the involvement of youth (14-29 year olds) in local employment (e.g. via job mentoring, co-op programs apprenticeships, food security businesses), particularly by identifying and actively addressing employment barriers – see Youth Action Plan.	n/a	medium	

Goal 4: Economic Sustainability - Support economic development opportunities related to local food systems such as food production business, cooperatives, or partnerships through policy, education and networking

Program / Project / Policy / Plan	Lead	Description	Program in Place?	Strength	Main Challenges
Community Garden - North	NCES (& RVAC)	Social enterprise plans for the third phase of this project include the production of local herbs to be made into tea and sold at the cafe planned for the site. Also a small flower business is proposed with local flower arrangements to be sold at the Farmers Market and businesses such as restaurants. For all revenue-generating activities, the NCES hopes to employ youth in the summer months.	IP	n/a	third phase of the project has not yet begun so evaluation of project not possible

Goal 5: Education

Goal 5: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke					
Program / Project / Policy / Plan	Lead	Description	Program	Strength	Main Challenges
Objective 1: Provide educational events and materials explaining the benefits of healthy eating				medium	
Mountain Midwifery Breastfeeding support	MtnMW	Hands-on education and home support for new mothers and babies on breast feeding.	y	very strong	while any new mothers may use this service many people think it is for midwifery patients only
Healthy Habits Program	SD19 (Begbie View Elementary)		y	strong	financial support and time to administer the program and fit it into an already busy curriculum
Breast Feeding Educational materials	BCIH	BC Interior Health has a policy to promote breast feeding and does so via the sharing of educational materials which are available from family doctors and at Queen Victoria Hospital.	y	medium-strong	it has been reported that educational messaging and suggested techniques for breastfeeding are varied amongst IH staff and can be confusing to new mothers
Nutrition and Education Program	CC, BCIH	Educational programming for Food Bank recipients and other low-income earners such as seniors on nutrition, safe food handling and storage, cooking, economical food choices, etc. The Food Skills for Families is included here.	y	medium	sustainable funding for admin time
BC Fruit and Vegetable Nutritional Program	SD19 (& Province of BC)	A nutritional program whereby BC fruit and vegetables are delivered in schools across the province. Information shared with students by teachers and to parents via newsletters.	y	medium	

Goal 5: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Program / Project / Policy / Plan	Lead	Description	Program	Strength	Main Challenges
Farm to Table (elementary and high school programs)	NCES	The most in-depth school program at both the elementary and high school levels that investigates the food system, and helps students to make connections between their food choices, their health, and community well being. The program links to curriculum deliverables in the areas of socials, science, planning, etc. The program also provides hands-on learning opportunities through supervised field-trip activities to the supermarket, the farmers market, and Terra Firma Farms.	y	medium - weak	the program builds on concepts already taught by teachers about healthy eating, time does not allow for in-depth exploration of healthy food alternatives
Health Promoting Schools Coordinator	SD19 (BCIH)	A SD trustee is appointed to administer the BC Interior Health's "Health Promoting Schools" initiative, defined by the 4 pillars of health.	y	weak	SD trustee in charge of this program is new to the position and not yet familiar with the resources he had available to him, or ideas of his own on how to develop this role to support program goals
Objective 2: Conduct educational events and deliver materials to illuminate the benefits of local food production, an appreciation for local food and increase the ability of local residents to produce their own food in a sustainable manner				strong	
Downtown Community Garden	NCES (& RUC)	Garden caters primarily to new gardeners whereby garden coordinator and communal garden approach work to teach the skills necessary to start and maintain a garden. Garden is tied in with a regular workshop series (Garden Guru), plot members attend free of cost. Downtown location of the garden attracts many visitors, interpretive signage tells about the square foot gardening method, importance of an organic gardening approach, the garden community, average harvest, etc.	y	very strong	

Goal 5: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Program / Project / Policy / Plan	Lead	Description	Program	Strength	Main Challenges
Garden Guru Workshop Series	NCES	Workshop series aims to increase people's knowledge and skill level so that they are better equipped to grow/produce/harvest, process, and preserve food locally.	y	very strong	
Farm to Table (elementary and high school programs)	NCES	same description as above	y	strong	
Little Sprouts	NCES	A program for pre-schoolers and their parents to explore and have fun around a variety of farming/gardening themes such as planting a garden, celebrating pollinators, enjoying seasonal harvests, selling garden products, etc.	y	strong	
Gleaning Project	RBA	Education aimed at raising residents' awareness of the need to manage wildlife attractants such as poorly managed fruit trees. Program reminds residents of the connection their actions have on the wild spaces and fauna surrounding them.	y	medium	
Mountain Harvest, book	NCES, RMA	Information documented in book provides gardening tips and local resources. Book puts the current emphasis on local food into historical context within the region.	y	medium	
Incredible Edible Film Festival	NCES	Films chosen to raise awareness of and share important information about a variety of food system topics such as more sustainable alternatives to the industrial food system, genetically modified organisms, urban livestock, young agrarians, etc.	y	medium	
Community Garden - North	NCES (& RVAC)	This garden site will be utilized in the garden guru series as another demonstration site for these educational workshops. All phases in the development of this project to involve educational opportunities as much as possible (e.g., the construction of raised beds, installing irrigation, planting fruit and nut trees, planning and planting perennial herb gardens, etc., will all become workshops open to the public.)	IP	n/a	

Goal 5: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Program / Project / Policy / Plan	Lead	Description	Program	Strength	Main Challenges
Objective 3: Raise awareness around the true ECONOMIC value of food and about the economic benefits of a local food system				very weak	
None					
Objective 4: Seek food skills development opportunities for residents (in relation to food preparation, processing, meal planning, food safety, etc.)				weak-medium	
Garden Guru Workshop Series	NCES	Numerous workshops focusing on food preservation techniques and culinary skills take place every year via this program. While meal planning and food safety are not key themes addressed they are touched upon when teaching workshops whereby these concepts are relevant (e.g., most food preservation workshops provide suggestions on how to use the product throughout the winter months in weekly cooking, as well as how to preserve foods safely).	y	very strong	
Fathers Day Fishing	RRGC	Fathers Day Fishing provides an opportunity to learn valuable food skills – in this case, how to catch and process a fish.	y	medium	
Nutrition and Education Program	CC, BCIH	Educational programming for Food Bank recipients and other low-income earners such as seniors on nutrition, safe food handling and storage, cooking, economical food choices, etc. Programs such as Food Skills for Families are included here.	y	medium	
School Kitchen: renovation project	SD19 (Columbia Park Elementary)	Funding allocated to kitchen renovation project to accommodate more cooking within the school (current facility is outdated and not accessible to students).	y	medium	
Food Skills Camp for Youth	NCES, CC	A weekend camp to help high school youth become more familiar with what they eat via local farm tours, workshops, lessons on food systems, sharing meals, and teaching participants how to cook delicious and nutritious meals from locally-sourced ingredients.	y	n/a	camp is new and hadn't taken place at the time of writing.

Goal 5: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Program / Project / Policy / Plan	Lead	Description	Program	Strength	Main Challenges
Objective 5: Connect students and young adults with opportunities to explore career options in agriculture and participate in local food production through the formal education system				very weak	
Farm to Table (elementary and high school programs)	NCES	The high school program highlights farming as a potential occupation that is often over-looked. Students in high school program are asked to think about the costs of farming versus the costs of food and think about small-scaling farming as a business potential.	y	weak	it is not the main focus of the program to explore career opportunities in agriculture thus it is not explored in any depth
Begbie View Elementary, school garden	SD19	Small raised beds recently installed do not yet have established educational programming, but has provided students with the experience of planting and harvesting from their own garden. This site will include an area dedicated to traditional Aboriginal foods, in addition to being used by classrooms teaching lessons on science, health, the environment, etc. Gardens will provide valuable hands-on learning opportunities.	y	n/a	too early to assess
Objective 6: Determine local food production capacity, limitations, and trends				medium	
Revelstoke Food Security Strategy	City CED	Research conducted to determine baseline local food production, capacity, limitations and trends effecting food security.	IP	n/a	
Objective 7: Identify and promote the sharing of information and collaboration between local organizations and community and government agencies				weak	
Food Security Strategy	City CED	Group-interview component of Food Security Strategy provided opportunities for dialogue and discussion around potential collaborations.	IP	n/a	
Objective 8: Encourage the consumption of food that is ethically produced (supporting fair treatment of farmers as well as the humane treatment of animals)				very weak	

Goal 5: Education - Increase knowledge of food security, local food systems and actions that can strengthen food security by public officials, community agencies, business owners and residents of Revelstoke

Program / Project / Policy / Plan	Lead	Description	Program	Strength	Main Challenges
Incredible Edible Film Festival	NCES	A variety of films raised awareness about inhuman treatment of animals and people in the current industrial food system, and event organizers provided information on where to source alternatives whereby ethical treatment of animals and people were upheld in the production of various food products.	y	medium	
Fair Trade Town	RFTS	Since 2009, Revelstoke has been endorsed with the "Fair Trade Town" status as a result of work by the Fair Trade Society who aim to increase awareness of Fair Trade. They advocate for the support of Fair Trade products to help improve the livelihoods for people (mostly farmers) in the poorest countries of the world whose products are regularly consumed in our community. Improvements include fair prices, social and economic premiums, fair and safe labour, environmental sustainability, access to credit, and long-term contracts for producers.	y	weak	there is little awareness of the Fair Trade Town designation within the community, and little progress has been made since the designation on increasing this awareness and access to these products in recent years

Appendix 3: Acronyms & Glossary

Acronym Key

BCIH	BC Interior Health	RCEC	Revelstoke Community Energy Corporation
BMK	Big Mountain Kitchen	RCFC	Revelstoke Community Forest Corporation
CBT	Columbia Basin Trust	RCHS	Revelstoke Community Housing Society
CC	Community Connections	RCS	Revelstoke Childcare Society
CFDC	Community Futures Development Corporation	RFSC	Revelstoke Food Security Coordinator
City	City of Revelstoke	RFTS	Revelstoke Fair Trade Society
City CED	City of Revelstoke Community Economic Development Department	RMA	Revelstoke Museum & Archives
City EPB	City of Revelstoke Department of Engineering, Planning & Building	RMS	Revelstoke Multicultural Society
City PRC	City of Revelstoke Department of Parks, Recreation & Culture	RRGC	Revelstoke Rod & Gun Club
City PW	City of Revelstoke Public Works Department	RSS	Revelstoke Secondary School
CoC	Revelstoke Chamber of Commerce	RSFM	Revelstoke Summer Farmer's Market
CPR	Canadian Pacific Railway	RUC	Revelstoke United Church
CSRD	Columbia Shuswap Regional District	RVAC	Revelstoke Visual Arts Centre
MCFD	Ministry of Children and Family Development	RVAS	Revelstoke Visual Arts Society
MOT	BC Ministry of Transportation	RWFM	Revelstoke Winter Farmer's Market
MtnMW	Mountain Midwifery	SD19	School District 19 (Revelstoke)
NCES	North Columbia Environmental Society	TFF	Terra Firma Farms
PAC	Parent Advisory Council	WorkBC	Work BC Employment Services
RBA	Revelstoke Bear Aware	WSS	Women's Shelter Society
		YIC	Youth Initiative Committee

Cost Categories

\$0 - \$999	Lowest
\$1,000 - \$9,999	Low
\$10,000 - \$49,999	Medium
\$50,000 - \$99,999	High
> \$100,000	Highest

Glossary

Agricultural Land Reserve: A zone of agricultural land regulated by the province of British Columbia to preserve and protect farmland from development pressure. The zone includes 4.7 million hectares of public and private land on which agriculture is promoted and non-agricultural uses are controlled (Government of British Columbia).

Community Garden: Community gardens are shared green spaces planned and maintained by individuals, institutions, and/or members of the community. They come in all different shapes and sizes. With the increase in environmental awareness, sustainability, and growing interest in local food production, community gardens are becoming increasingly more popular in the urban environment (City of Oshawa).

Community Supported Agriculture: [Members of a CSA, purchase a “share” of vegetables from a regional farmer which is either delivered, dropped off, or made available for pickup.] (Just Food)

Edible Landscaping: Landscaping, typically in the public realm, that is designed with edible fruit, berries and nuts for public consumption. These landscapes are generally maintained by the city or volunteer residents or organizations (Creasy, 2009).

Embodied Energy: The energy used during the entire life cycle of a product including the energy used for manufacturing, transporting, and disposing of the product (US Department of Energy).

Food Hub: A business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers in order to satisfy wholesale, retail, and institutional demand (Healthy Food Access Portal).

Food Security: For Revelstoke, food security means that all community residents have access to nutritious, safe, affordable food that meets our needs, supports our cultures, and is produced in ways that are environmentally sound, socially just, adaptable to change and supportive of self-reliance and collaboration (Revelstoke Food Charter).

Foodshed: The geographical area between where food is produced and where the food is consumed (Michigan State University).

Incubator Farm: A land-based multi-grower project that provides training and technical assistance to aspiring and beginning farmers (Overton, 2013. p. 7)

Land Share: [A Landshare brings together people who have a passion for home-grown food, connecting those who have land to share with those who need land for cultivating food] (Landshare Canada).

Market Garden: The practice of growing a range of fresh produce, herbs and other foods for selling to restaurants and other food markets (Government of Alberta, 2008).

SPIN Farming (Small Plot Intensive Farming): A vegetable farming system, usually in urban settings, that makes it possible to earn significant income from land bases under an acre in size. It is considered non-technical, easy to learn, and inexpensive to implement (SPIN Farming LLC, 2012).

Appendix 4: Calculating Personal Food Production from Gardens in Revelstoke

Recognizing Revelstoke's already thriving gardening culture, the local food calculation also included a rough estimate of food from backyard gardens. This was done in the following way:

1. Using a random number generator to randomly select 1 block each from 16 randomly selected residential streets (total 143 residential streets - 11% sample size). Commercial or commuter streets without any houses on them were manually excluded from the list of 197 total streets;
1. Use Google Earth's measuring tool to calculate the total area (m^2) of gardens visible on google earth;
2. Adding the garden areas from all 16 blocks together (Total area of all garden space) and dividing by the total number of houses from all 16 blocks, to get the average size of a garden plot per household ($13.3m^2$);
3. Dividing the average garden plot size per household by Revelstoke's average number of people per household gives the average garden plot size per resident. The average number of people per household was determined by dividing Revelstoke's population (7,139) by the number of Total Private Households (3,075).²⁵ This average was 2.3 people per household. The average garden size plot per resident is $5.8m^2$. The estimated total amount of backyard garden space in Revelstoke is $41,406m^2$;
4. Determining the average yield per m^2 of garden space. Information on the yield possible from $1 m^2$ of land varied greatly between a Government of BC Report on Food Self-Reliance (see below) and square foot gardening. To address this dramatic difference, the Steering Committee suggested using yield numbers from a local vegetable grower. This would represent a happy medium between large-scale agricultural activities with large land requirements and intensive SPIN farming methods with much higher yields. The average yield from the local farm was $0.85kg$ of food per m^2 ; and
5. Tabulating the estimated yield: $0.85kg/m^2 \times 42,406m^2 = 35,195kg$ of vegetables from backyard gardens.

25 <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-csd-eng.cfm?LANG=Eng&GK=CSD&GC=5939019>

Appendix 5: Survey and Results Summary

Summary

The survey results have been summarized below. These results were used to better understand key issues and opportunities around food security in Revelstoke. These results were integrated into key issues and used to direct further research to attempt to address these issues.

Total number of questionnaires filled: 74

Locations questionnaires were filled: Summer Farmers Market, Garlic Festival, Revelstoke Fall Festival, South-side Market, Coopers Foods, Food Bank

1. Do you grow or raise your own food? (Circle)	Yes	No
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1.a) Why or why not?

Yes (50): Enjoy being outside in the garden/gardening is fun, decreased cost of eating nutritious organic food, enjoyment from taste of fresh food, control over food inputs, grew up gardening, education for children, climate change action, increase self-sufficiency

No (24): Limited time, limited space, not interested

2. Do you hunt, fish or forage for your own food?	Yes	No
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2.a) Why / Why not?

Yes (44): Excuse to spend time in nature, health benefits of wild foods, flavor, instinct, climate change action, low to no cost, abundant/easy access, self-sufficiency, teaching children, spiritual

No (30): limited time, lack of skill, disapprove of killing wild animals

If YES to 1 or 2:

3.a) What do you grow, raise, hunt or forage? (ex: vegetables? fruit? eggs? fish? mushrooms? deer?)

Garden products in order of popularity: vegetables (wide variety), fruit (mostly berries followed by tree crops such as plums and apples), eggs, three people listed honey

Wild Forage in order of popularity: berries (mainly huckleberries), fish (mainly kokanee), mushrooms (mainly chanterelles), game (mainly deer)

3.b) Approximately how much do you grow/raise/forage/fish/hunt? (ex: number of pounds, food will last you XX weeks, etc.)

Participants had trouble answering this question, but in general most indicated that the amount of food they produced themselves equated less than 25% of their total diet.

4. Do you plan your meals?	Yes	No
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4.a) Why or why not?

Yes (49): efficiency/time-savings, cost-savings/ease of budgeting, teach children, dietary restrictions/ nutritional planning, food from farmers market available just one day a week, love cooking, helps to eat what's in season, decrease food waste

No (25): lack of time, not organized, not interested

5. Do you cook your own meals?	Yes	No
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5.a) Why or why not?

Yes (70): flavour/taste, food cost, health, control over ingredients, love to cook, prepare large meals to provide left-overs, to involve family in meal times, dietary restrictions

No (4): work provides cheap meal

6. Do you buy food that was grown locally?	Yes	No
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6.a) Why or why not?

Yes (64):freshness, support local economy/local farmers, easier to assess food ingredients/use of potential additives, lower environmental cost, social engagement

No or seldom (10): products not always available, not convenient, high cost, limited options

7. Do you feel you have adequate access to healthy, affordable, and sustainably produced food?	Yes	No
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7.a) Why or why not?

Yes (42): many new options have become available, grow their own, Farmers Markets are great, Mountain Goodness has reasonable prices

No (32):access to local food in the winter is poor, many indicate that healthy foods are available but that they tend to be expensive, sourcing local and affordable, healthy products not convenient, numerous comments about Coopers and Southside having very little options for local and organic(from small-scale suppliers) foods

Appendix 6: Local Effects of Climate Change in the Columbia Valley

Local Effects of Climate Change in the Columbia Valley		
Effect	Impact	Additional Information
Predicted Changes		
More variable temperature	→ Threat - disrupts plant growing cycles	
Higher Average Annual Temperatures	→ Benefit - longer growing season	
More Very Hot Days	→ Threat - Water scarcity and a higher watering requirement	
Longer Warm Spells	→ Threat - Water scarcity and a higher watering requirement	
Increase in Growing Degree Days	→ Benefit	
Longer Growing Season	→ Benefit	
Decrease in Heating-Degree Days	→ N/A	
Decrease in summer precipitation	→ Threat - higher reliance on community water system	
Increase in winter precipitation	→ N/A	
More rain/decreased snow at lower elevations in winter	→ Benefit - reduce snowpack = earlier growing season and less snow press/breakage issues for shrubs/trees	
	→ Threat - less insulation for seeds if cold weather comes, could also cause premature sprouting	
More frequent extreme precipitation events	→ Threat - flooding/landslides = road closures and disruption to food distribution system	
Impacts on Environment		
Changes in Glacial Runoff	→ Threat - lower water available in the summer	

Local Effects of Climate Change in the Columbia Valley		
Effect	Impact	Additional Information
Increase in water temperatures	<ul style="list-style-type: none"> → Threat - loss of fish habitat; creates conditions that favour non-native, invasive fish species → Benefit - increase in certain type of fish habitat → Threat - warmer water fish may reduce water quality 	
Earlier spring peak flows, decrease in late summer flow, and more rapid runoff	<ul style="list-style-type: none"> → Threat - more turbidity = more fish kill → Threat - lower summer flows = negative impacts on fish → Threat - Higher winter flows = negative for fall/winter spawning fish 	
Changes in freeze/thaw cycles	<ul style="list-style-type: none"> → Threat = more weather variability 	
Increase in rain-on-snow and rain-on-frozen ground events	<ul style="list-style-type: none"> → Threat = more flooding, mudslides, slope failure and stream erosion 	
Shifts in timing and scale of flooding	<ul style="list-style-type: none"> → Threats - potential damage to infrastructure around streams 	Negligible in Revelstoke with flood controls already
More frequent and intense droughts	<ul style="list-style-type: none"> → Threat - plant/animal die off potential 	
Changes in disease and pathogens	<ul style="list-style-type: none"> → Threat - to plant/animal and human health → Threat - local isolation if around transportation routes 	
Increase in frequency and severity of wildfires	<ul style="list-style-type: none"> → Threat - wild harvest negatively affected (plants and animals) → Threat - invasive species potential → Threat - landslide, soil erosion, flooding, etc. 	
More landslides and changes in avalanche frequency	<ul style="list-style-type: none"> → Threat - potential isolation with landslides 	increased highway closures affecting supply of imported foods
Risks to biodiversity and increases in pests	<ul style="list-style-type: none"> → Threat - increased pests = potential plant/animal die off 	

Appendix 7: Works Reviewed & Cited

Works Reviewed

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Appendix 8: Potential Funding Sources

Potential Funding Sources for Food Security Projects	
Funding Organization	Funding Source Web Link
BC Gaming	https://www.gaming.gov.bc.ca/grants/
BC Hydro Community Champions	https://champions.bchydro.com/
Breakfast Club of Canada	http://www.breakfastclubcanada.org/in-your-area/colombie-britannique/
CBT Commuity Init.	http://www.cbt.org/Funding/?Programs
CBT Environment	http://www.cbt.org/Funding/?Programs
CBT Youth Grant	http://www.cbt.org/Funding/?Programs
Community Food Action Initiative: BC Interior Health	http://www.viha.ca/mho/food/food_security/Community+Food+Action+Initiative.htm
Community Futures Revelstoke	http://revelstokecf.com/
Revelstoke Credit Union	https://www.revku.com/Personal/InOurCommunity/CommunityPrograms/Sponsorship/CommunityGiving/
Eco Action Canada	http://www.ec.gc.ca/ecoaction/
Enterprising Non-Profit (Vancouver)	http://www.socialenterprisecanada.ca/en/communities/bc/nav/grants.html
Enviro Canada Eco Action	https://www.ec.gc.ca/ecoaction/default.asp?lang=En&n=EF4E94E3-1&offset=1&toc=show
Epicure Foudation	http://epicureselections.com/en/company/epicure-foundation/grant-program/
Epicure Foundation	http://www.epicureselections.com/en/company/epicure-foundation/grant-program/
FCC Agrispirit	http://www.fcc-fac.ca/en/AboutUs/Responsibility/agrispiritfund_e.asp
Fiskars: project orange thumb	http://www2.fiskars.com/Community/Project-Orange-Thumb/
Hellmans	http://www.hellmanns.ca/realfoodmovement/detail/115430/real-food-grant-program
J.W. McConnell Family Foundation: Institutional Food Program	http://www.mcconnellfoundation.ca/en/programs/sustainable-food-systems/institutional-food-program
Kootenay Savings Community Foundation	https://www.kscu.com/Personal/InOurCommunity/CommunityPrograms/CommunityFoundation/
New Horizons	http://www.esdc.gc.ca/eng/seniors/funding/index.shtml

Potential Funding Sources for Food Security Projects

Nuffield Farming Scholarships	http://nuffield.ca/scholarships/
Nuffield Canada: farming scholarships	http://nuffield.ca/scholarships/
Project Orange Thumb	http://www2.fiskars.com/Community/Project-Orange-Thumb/
Real Estate Foundation of BC	http://www.realestatefoundation.com/grants/grant_information/grant_application_forms
Revelstoke Community Foundation	http://revelstokecf.com/communityfoundation/
Rick Hansen Foundation	http://www.rickhansen.com/What-We-Do/Quality-of-Life-Program/Apply-for-a-Grant/FAQ
Royal Bank of Canada community grants program	http://www.rbc.com/community-sustainability/apply-for-funding/index.html
Rural BC funding sources (list)	http://www.ruralbc.gov.bc.ca/granttool.html
TD Friends of the Environment	www.fef.td.com/about-us/
Toyota Evergreen	http://www.evergreen.ca/en/funding/grants-available
Union of BC Municipalities Fund	http://www.ubcm.ca/EN/main/funding/renewed-gas-tax-agreement/community-works-fund.html
Vancity community grants program	https://www.vancity.com/
Vancouver Foundation	http://www.vancouverfoundation.ca/grants/funding-guidelines
Vancouver Foundation	http://www.vancouverfoundation.ca/grants
Walmart Evergreen	http://www.evergreen.ca/en/funding/grants-available
Whole Kids Foundation	https://www.wholekidsfoundation.org/schools/programs/6747