



Okanagan Bioregion Institutional Procurement Study

Final Report

Prepared by: Institute for Sustainable Food Systems, Kwantlen Polytechnic University

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Executive Summary

Exploring and determining means to increase the procurement of local foods by government funded institutions is a timely topic to address in Canada. The current institutional supply chains leave much to be desired in terms of supporting the local food economy. However there is interest from many stakeholders in shifting these procurement patterns; institutional employees, food producers and processors, policy makers and members of the public. All of these entities are recognizing the benefits of local food economies and are slowly changing purchasing patterns to favour local by way of consumer demand and policy implementation.

Institutions, public institutions in particular, are in a unique position to spend their budgets where they will be of greatest benefit to their clients/patients/inmates, but also to the community at large. However, significant change will have to be undertaken in order for this to be realized in standard procurement practices. Previous research has looked at what relationships best support local institutional procurement, and successful models for how local procurement initiatives take shape in different institutional settings. This research project builds upon previous work, but offers specific examples of how institutional procurement in the Okanagan bioregion can become more localized, by offering up resources including an analysis of current institutional supply chains, a directory of food-related businesses, and profiles of innovative Okanagan food sector businesses. It also makes policy and trade recommendations applicable not only to this local area, but relevant and necessary for consideration at provincial and national levels.

The Okanagan bioregion is comprised of three Regional Districts: North Okanagan, Central Okanagan, and Okanagan-Similkameen. There is a significant amount of agriculture within the bioregion, ranging from broiler chicken production and dairies to one of the most concentrated tree-fruit growing areas in the country. This agricultural base represents largely untapped potential for local procurement for institutions.

More than 100 interviews were conducted with stakeholders over the course of the project, ranging from procurement managers, account representatives with distributors, tree fruit growers, meat processors and juice makers. Researchers spoke with agrologists, producers' associations and marketing commissions in order to understand the current agricultural context of the area, its strengths and weaknesses, and ultimately what it has to offer in terms of products to institutional buyers.

Secondary information was gathered from Statistics Canada, existing literature, and municipal reports. We created a comprehensive business directory in order to be able to contact a cross section of food related businesses. In depth interviews were conducted with an additional seven businesses.

Four different institutional procurement models were included in the research, ranging from public schools doing autonomous purchasing, to health authorities and correctional centres with highly centralized purchasing structures. From the institutional perspective, we were able to learn the main requirements in terms of products and product criteria, and that many of the procurement decisions are made far above the facility level. This was made clear by the supply chain analysis conducted, which highlighted the role of Group Purchasing Organizations and in some cases Food Service Management companies.

The criteria for institutional procurement provided an overview of the types of certifications and trade agreements regulating institutional purchasing, and in turn how those could impact the potential for furthering institutional procurement of local goods. Over a certain dollar amount, contracts for food procurement must be put out to tender or go through a Request for Proposal (RFP) process. This process has legal stipulations about how submissions may be assessed and precludes prioritized procurement of local products over products from further away.

"It's important to remember that, being primarily funded as public institutions, healthcare facilities should have an accountability for seeking best value for public dollars in the broadest sense."

- Wendy Smith, Nourish Project Summer Newsletter, 2017

Through in-depth analysis of production and processing we assessed the current capacity in the Okanagan bioregion. We found that while there is ample primary agricultural product available for a wide range of foods, there is a shortage of processing facilities within the bioregion. This results in increased shipping costs for producers, and a lack of products that can be procured from within the Okanagan bioregion. Dairy and poultry were both found to be produced in amounts great enough to supply the region, however for dairy there is a lack of processing within the region. Tree fruits are also in good supply, with enough apples to supply an estimated 9 million people per year (the bioregion's population is less than 400,000). One item that is currently less common in the region is eggs, but potential exists for further development of this sector.

The certification requirements, imposed by large scale distributors and institutions, appear to limit the possibility of purchasing locally to only the largest producers, whose businesses are structured to comply with a large-scale distribution system.

Many of the barriers identified within this research could be overcome within the current supply chain; institutions could accept provincially inspected meat products and other products from provincially inspected kitchens in place of exclusively accepting federally inspected products. Institutional purchasing could be decentralized so as to allow more flexibility among different facilities in terms of what they are purchasing. Institutional budgets could be increased for more staff to do in-house processing, thereby eliminating, or greatly reducing, requirements for pre-sliced and pre-chopped vegetables and fruits.

Returning some food service management contracts to public, in-house, food service models, could help to make local food more of a priority. When a food service management company bids on a contract, their budget dictates their margins and the economic benefits local procurement can confer to a community may not be in their financial interest (i.e. buying locally may be less profitable). Alternatively, food service contracts could stipulate the amount of local procurement expected by a company or sector.

Aggregation of products could also help to get more local products into the institutional supply chain. Through structures like producers' co-ops or local food hubs, institutions could maintain a centralized purchasing relationship, rather than working with

individual producers, making local procurement more feasible and less costly in terms of administration and logistics.

Revamping the RFP (request for proposals) process - something that is currently underway with the help of the Nourish Project RFP working group - would also help to integrate requirements about the local procurement of foods.

While an innovation centre in the region could help to bridge some of the gaps facing small and medium scale producers, there are other supports that would also be welcome. These requests for support were enormously diverse and ranged from help finding qualified employees for meat processing work to increasing the number of allowable layers in a non-quota egg production operation.

While there are many ways in which the institutional supply chain could support more local products, the current, centralized model, favouring a single large distributor is not always conducive to purchasing from small and medium scale producers, but rather favours and seeks the lowest price for any given product. There is much work underway on the topic of institutional food procurement, and the time is ripe for policy changes to support the positive actions that institutions and producers are making for the health and economic vitality of their communities.



1. Introduction

In BC, public institutions with food service activities, including healthcare facilities, correctional centres, and post-secondary institutions, represent a significant market opportunity for BC producers and processors. Historically though, institutions such as these utilize procurement channels characterized by large distributors and national contracts, which means that most of the products being procured are not local and could be coming from producers many provinces or even countries away.

The BC Government's "Grow BC, Feed BC, Buy BC" programs aim to strengthen BC's agriculture sector and grow the domestic market for BC agricultural products. In particular, the "Grow BC" mandate aims to help BC producers and processors to expand local food production, while the "Feed BC" mandate aims to increase the use of BC grown and processed foods in hospitals, schools, and other government facilities (BC Government, n.d.).

In late 2017, the BC Ministry of Agriculture tasked Kwantlen Polytechnic University's Institute for Sustainable Food Systems (ISFS) with analyzing the potential for more local food procurement by public institutions of the province, starting with a case study in the Okanagan bioregion ¹, with its active agricultural sector and range of locally produced products.

A related study was simultaneously undertaken by the Ministry of Health, to examine and suggest methods to increase the institutional demand and procurement of local foods in BC (Pers. Comm. 2018). The KPU study focuses on the supply side of the equation, in complement to the Ministry of Health study, and gives only cursory consideration to demand side analysis.

This report outlines the results of the Okanagan bioregion case study research. We begin with an introduction to the bioregional context (both biophysical and institutional). We then present the institutional procurement context that currently exists, and then assess the potential for the local agricultural sector to supply public institutions in the region. We also present an analysis of barriers and opportunities to increasing local procurement and conclude with recommendations to further this goal.

1.1 Why Focus on Institutional Procurement?

Institutional procurement is an important aspect of the food purchasing market, representing millions of dollars spent on food and supplies. Past research highlights three main ways that increasing institutional procurement can positively impact communities, food systems and institutions alike. First, the benefits

Bioregions are generally defined as areas that share similar topography, plant and animal life, and human culture (Harris 2016). The Okanagan bioregion for the purposes of this study is defined as the combined boundaries of the Regional Districts of North Okanagan, Central Okanagan, and Okanagan-Similkameen.

of keeping dollars local and supporting a robust food system. This cannot be understated, since institutional procurement represents significant food dollars and is a potential avenue for expanding local food networks given the right circumstances (Powell and Wittman, 2017; Beckie et al, 2017). Second, enhancing nutrition through using more raw, truly fresh, whole ingredients. This is a topic that is addressed through the Nourish Project, a Canada-wide initiative to get more sustainable and local foods into healthcare facilities to support patients, improve the institutional culture and grow community well-being (Nourish, 2018). Lastly, local procurement of food for institutions can reach a broad audience and help to educate the public about where their food comes from (Nichols, 2017). Institutional food procurement can be used as a tool for education (in the case of universities, colleges and public schools), as well as to bring community closer to the source of their food through increased knowledge and relationship building.

Many of the advantages, potential outcomes, as well as challenges, are detailed in the following section, where previous studies are described, along with some of their approaches. Finally, the discussion of previous research will end with a brief list of research questions left to be answered, directions for this research, as well as broader questions that could benefit from further investigation.

1.2 Previous Research

Close proximity between institutions and foodproducers in regions mean that the necessary relationships could be founded and could support important purchasing patterns relatively quickly and easily. At UBC, research was undertaken to establish whether it would be possible to start serving UBC Farm grown produce in the UBC Hospital (Sine et al, 2014). More recently a Farm to Institution Research Program was set up under the Centre for Sustainable Food Systems Research as a way to "increase both public understanding of and connections to food

systems" (Centre for Sustainable Food Systems, 2018). In Alberta, through the creation of the Flavour Learning Lab, stakeholders were brought together ranging from community members, producers, distributors and institutions (educational and other) to try to strengthen ties and create new purchasing potential (Nichols, 2017). The Alberta case looked at instilling shared values across the supply chain through ongoing engagement with a 'community of practice.' They looked at the procurement needs within the institutions included in the study and measured those against the provincial yields for each of those products to see if the needs could hypothetically be fulfilled by 'local' (provincial) supply (Nichols, 2017). While their study provided some useful groundwork, there was a lack of quantitative data as they were unable to confirm the purchasing records of the largest institution included, Alberta Health Services, which made up the vast majority of the total food budget addressed.

Izumi et al, (2010) looked specifically at farm to school programs and found that the importance of some distributors stood out as essential to the success of those programs. There is an idealized food supply chain that involves only the producer and consumer/ institution, but in her research, Izumi identified the distributors as important collaborators and catalysts, especially for school programs, which in North America often run contrary to the primary production seasons (Izumi et al, 2010). While Izumi et al, looked at the farm to school movement from the perspective of distributors, the authors state that there is still work needed in order to shift the purchasing pattern from one based solely on price to one that values the 'territoriality' of the food (2010). As Powell and Wittman write, one of the Farm to School movement's main purposes is to increase local food sovereignty (Powell and Wittman, 2017).

Just as distributors are widely discussed, other forms of aggregation and distribution also feature prominently in this body of literature. Clark and Inwood write about food hubs as a solution to logistical problems for small and medium sized farms (Clark and Inwood, 2016) while Lynch et al, (2015) described cases where different forms of aggregation, from producer-cooperatives, to food box program aggregators, are working in this capacity to facilitate distribution to communities and institutions in Kentucky and Vermont.

In the United States, it is estimated that farm to school programs spent \$789 million on local foods in one year (Powell and Wittman, 2017). In the Okanagan bioregion context, the institutional purchase lists accessed for this research project were in excess of \$8 million, though exact numbers are difficult to ascertain given the confidential nature of parts of existing contracts.

In a multi-city study in the United States, research tried to measure the economic and health outcomes of procuring more local foods, concluding that results across communities and institutions assessed were positive, but economic outcomes too difficult to estimate in dollar figures based on the abbreviated research timeline (Lynch et al, 2015). The same project looked at commonalities across five distinct institutional procurement projects in different locations. The findings emphasized the importance of building relationships and trust amongst producers, distributors and institutions, as well as highlighting the great benefit of having a champion for local food working to increase local procurement of food (Lynch et al, 2015). Buckley et. al. (2013) also identified relationships as being of utmost importance to the development of regional farm to institution systems. In the same article, they investigate the relative impact of farm to institution initiatives versus producers selling direct to consumers and the resulting education and strengthening of the local food system. The researchers conclude that even in large farmto-institution networks relationships, trust, and communication play important and necessary roles (Buckley et al, 2013).

Many of the previous research projects cited here noted food safety regulations as problematic for producers at some scales to navigate in order to access the institutional market (Lynch et al, 2015; Powell and Wittman, 2017; Sine et al, 2014; Nichols, 2017). Some research specifies alternative routes to certification, or formative relationship building between suppliers and institutional purchasers to alleviate some of these restrictions (Lynch et al, 2015).

In the local context of southern interior British Columbia, there was one recent attempt to assess institutional procurement and identify ways in which more locally procured foods could be integrated. This was completed in the Thompson Nicola Regional District, focusing on institutions in Kamloops (TRUE Consulting, 2012). According to this study, which looked at institutions including the Thompson Rivers University, the Royal Inland Hospital and the Kamloops Correctional Centre, there was not a significant potential for increased procurement of local goods. There were several shortcomings to the research, including very poor survey completion by local producers, and a lack of information made available by the food service management company for the correctional centre (TRUE Consulting, 2012). At the time of the research, Sysco Kelowna, which was interviewed regarding local purchasing and which acted as the main distributor for those institutions, was not inclined to increase their list of local vendors. The needs of institutions for processed foods were also seen as a limiting factor, especially in the cases of the correctional centre and the hospital (TRUE Consulting, 2012). The university was identified as a unique example where local foods could be used as a teaching tool in the culinary arts program and then featured in the fine-dining restaurant (TRUE Consulting, 2012).

In the Canadian context, the Alberta Flavour Learning Lab, along with seven other projects, were identified and tracked over the course of two years by a collaborative project between Food Secure Canada and the McConnell Foundation (Reynolds et al, 2017). The project was recently completed and the results published in 2017. This gives a helpful roadmap in terms of some common barriers to increasing local purchasing, along with solutions implemented by the eight projects included. It was calculated that they spent a combined \$3 million on local products over the course of two years, and that participating projects increased their procurement of local foods to anywhere between 20% and 25% (Reynolds et al, 2017). This demonstrates that great improvement and redirection of purchasing power to more local foods is possible in the Canadian context.

1.3 Research Questions

While the research above provides good groundwork, there are still many questions to ask when looking at a specific region or area. In this report we try to answer the following four questions regarding institutional procurement of regionally produced foods, for the Okanagan bioregion study area:

- 1. What is the food procurement process and what are the particular institutional food demands?
- What is the capacity of the Okanagan bioregion to provide food for its population and its institutions in particular?
- 3. Are there stakeholders in the Okanagan bioregion who are interested and willing to build and work towards increasing local procurement of food for institutions?
- 4. What should be done to encourage and support local producers and processors to participate in the institutional procurement supply chain?

For this research project, we set out to provide an overview of the existing agricultural context in order to see how much local institutional demand could be supplied with locally produced and processed

products. We then did extensive interviews with producers and processors to get an idea not only of the capacity of the region and whether there was room for expansion, but also to establish if there was a will, and need, for producers and processors to expand their markets to potentially include institutions. Concurrently, we analyzed the institutional procurement data that we were able to access in order to establish what the real needs in this sector are. As noted in many of the papers mentioned above, these questions are an important part of the local supply chain if the goal of getting local food into institutions is going to be made a reality.

1.4 Methodology

In order to assess the potential to increase institutional procurement of local foods in the Okanagan bioregion, we needed to evaluate both the demand and supply of food through institutional procurement channels, as well as the procurement process itself. Qualitative research methods were employed using both primary and secondary data sources.

Secondary Data Collection

A large number of public documents were reviewed to gather information on current bioregional production and processing capacity and to compile a local business directory. Data was collected from various sources including, but not limited to, the Statistics Canada CANSIM database, business licensing information from the local governments, Interior Health Authority facility inspection reporting data, Canada Food Inspection Agency food establishment licensed operator list, CanadaGap producer list, farmers' market vendor list, and other producer organizations, such as BC Farm Fresh and BC Organic Farmers.

In addition to public documents, multiple institutions provided us with purchasing data in the form of "velocity reports" from their distributors, outlining the quantities and types of foods sourced ranked by the top-spend items purchased by institutions. It should be noted that for this data, confidentiality restrictions prevented us from accessing pricing or spending information. Therefore we are unable to provide further analyses of the institutional food expenses of local products.

Primary Data Collection

Over 100 interviews were conducted with producers, post-production businesses (such as processors and distributors), institutional purchasing managers and other government officials. Producers and processors provided information to assess production capacity, challenges and types of support needed by

local producers and local businesses. Distributors and institutional purchasing managers provided information regarding the institutional procurement supply chain. We also contacted eight different producers' associations, from the BC Dairy Association to the Vegetable Marketing Commission, in addition to both the Small Scale Food Processors Association and the BC Food Processors Association.

Additionally, in-depth interviews were conducted with seven producers/processors in order to present their business profiles.

The steps of the analysis are shown in <u>Figure 1</u> on the following page.

	Farmer	Post-production business	Purchasing manager	Other governmental officials	Total
Number of people contacted	52	75	7	8	142
Number of people responded	37	58	7	8	110

Table 1: Total number of interviewees

Step 1

Preliminary analysis of velocity reports and interviews with institutional purchasing managers and distributors.



To answer research question 1.

Step 2

Creation of business directory.

Step 3

Selection of five food groups as case studies to represent production potential in the Okanagan bioregion based on institutional demand. Collection of data sources and interviews with producers.



To answer research question 2 and 3.

Step 4

Conducting interviews with producers and processors to identify challenges and barriers in participating in the institutional procurement supply chain, and the supports that they may need from the Ministry of Agriculture.

Step 5

Synthesis of information from steps 1 through 4.



To answer research question 4.

Figure 1: Five steps of the analysis

2. Okanagan Bioregion

Lying between the Columbia and Cascade mountain ranges in South Central British Columbia, the Okanagan bioregion lies at the heart of the Thompson-Okanagan Agricultural Region. The bioregion is almost entirely within the Okanagan Nations Alliance territory, known collectively as the Sylix Nation, with the most north-western portion a part of the Splatsin Band's territory, a member band of the Secwepmc Nation (also known as the Shuswap Nation). Shaped by glacial activity from the Pleistocene epoch, the area is blessed with rich soils, large areas of sand, silt and gravel deposits, along with a topography of smooth hills, lakes, alluvial fans and deltas (Regional District of North Okanagan, 2015). Coupled with hot summers, low humidity, and long frost free periods, the area supports a wide range of agricultural activities

(Climate Action Initiative, 2012). The bioregion is one of the largest producers of fruit and wine in Canada, and, next to the Fraser River Lowlands, is the most important agricultural region in British Columbia, with the majority of BC's fruit trees being grown in this area (Climate Action Initiative, 2012). Also of economic importance, is the production of hay and cattle ranching (Regional District of North Okanagan, 2015). Home to expanses of grassland soils, the North Okanagan District produces forty two percent of the total hay and leads the beef cattle ranching and dairy production in the area (Regional District of North Okanagan, 2015).

The population in the Okanagan bioregion is 366,169 inhabitants, which is expected to increase to 641,176

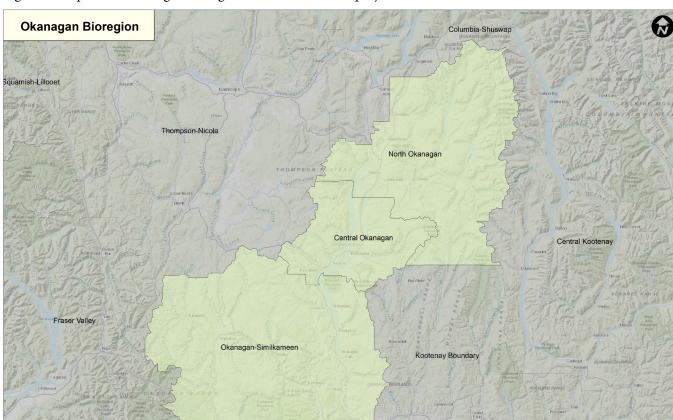
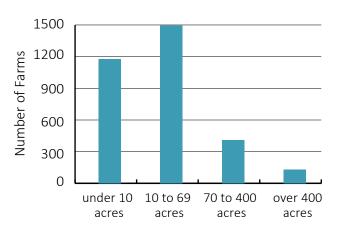


Figure 2: Map of the Okanagan bioregion as defined for this project.

Source: ISFS, 2018

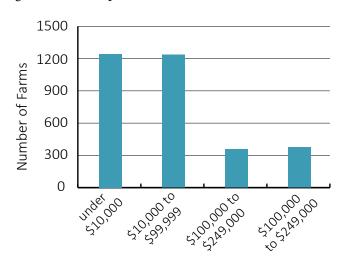
(77%) by 2031 (Statistics Canada, 2018a). Paired with a growing population is an increase in the demand for local food. In 2005, the Regional District of Central Okanagan (RDCO) district recognized the multiple-functional contributions of agriculture to the livability of the region through an update to their Official Community Plans (Regional District of Central Okanagan, 2005). A recent survey conducted by the Regional District of North Okanagan (RDNO) showed that 60% of community respondents would

Figure 3: Total number of farms classified by total farm area.



Source: Statistics Canada, 2018c

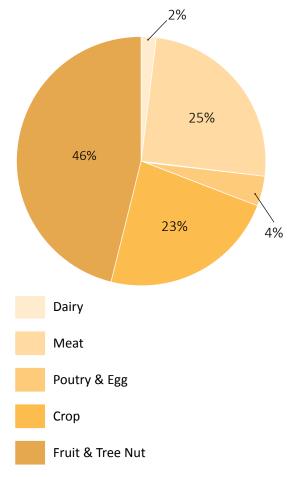
Figure 4: Total number of farms classified by total gross farm receipts.



Source: Statistics Canada, 2018c

willingly pay a premium for locally sourced foods to support local farmers (RDNO, 2015). The same report noted that the North Okanagan Region is currently only 20% food self-sufficient (RDNO, 2015). This, coupled with the community support for purchasing local products, indicates significant potential for the agricultural sector in this bioregion to grow to meet the increasing demand for locally produced food. In response, the districts of this region have worked extensively over the last decade to develop their Agricultural Plans as part of the Regional Growth Strategy, and to help bridge the gap between local farmers and consumers (City of Kelowna, 2017; RDCO, 2005; Regional District of Okanagan-Similkameen, 2011).

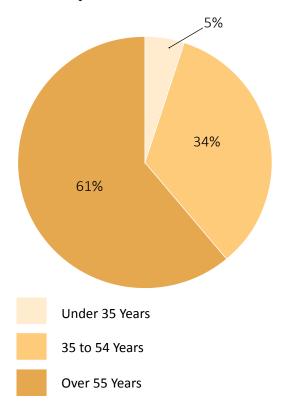
Figure 5: Number of farms classified by farm types (NAICS)



Source: Statistics Canada, 2018c

According to the 2016 Census of Agriculture, there are 3,210 farms in the Okanagan bioregion. Eighty two percent of these farms operated on an area less than 70 acres (Figure 3). About 77% earned less than \$100,000 in total gross farm receipts (Figure 4). Fruit and tree nut farms are dominant in the Okanagan bioregion, with 1,473 farms in total (Figure 5). The next most prominent farm type is livestock, followed closely by crop farms, which would include vegetables and non-tree fruits (ex. berries and melons), root crops, grains, and hay. The smallest proportion of farms are those raising poultry for meat, those keeping laying chickens, and those in dairy production. Fruit and tree nuts grossed more than double any other farm category in the Okanagan and very nearly half of total farm receipts for the Okanagan bioregion. With smaller portions of the total farm receipts comprised of crop, meat and dairy followed by poultry and egg production with the lowest total farm receipts.

Figure 6: Proportion of farms according to the age of farm owner operators

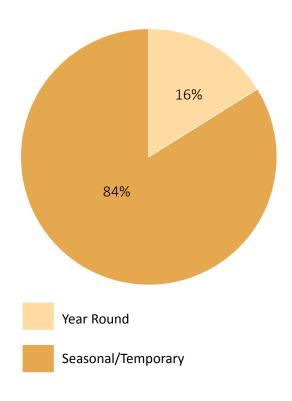


Source: Statistics Canada, 2018c

Farm operators in the bioregion are getting older. Since 2011, the average age of farm operators in the bioregion has increased from 56.9 to 57.7 years. In 2016, 61% of the farm operators in the bioregion consisted of farmers 55 years of age and older (Figure 6). Between 2011 and 2016, the number of farm operators between 35 to 54 years decreased by 28%, while the number of farmers younger than 35 years old increased by only seven percent. The significant rate of increase in the 55 years and over age group is disproportionate to the rate of increase for younger age groups.

In 2016, farms in the Okanagan bioregion hired 12,754 employees. The total number of farm employees hired in the area made up 28% of farm employees hired in the province (Figure 7). Seasonal/temporary employees represent the majority of employees hired.

Figure 7: Proportion of farms according to farm employment type



Source: Statistics Canada, 2018c

Farms in the Okanagan bioregion produce a wide selection of agricultural products. Local product availability in the region is determined by many factors, such as weather, labour costs, and fluctuations in seasonal patterns. As a result, agricultural products, mainly fruits and vegetables, are available for sale at different times of the year. Producers may store their products in cold storage, or controlled atmosphere storage specific to tree fruit crops, to maintain them fresh outside their limited harvest times. This practice extends the availability of perishable crops and fruits. Appendix A illustrates the calendar of the availability of fruits, vegetables and livestock products throughout the year for the Okanagan bioregion.



3. Institutional Procurement in the Okanagan Bioregion

As previously mentioned, In the Okanagan bioregion, there are a range of institutions which provide food services to their clients. These include small, private residential care facilities, colleges, universities, correctional facilities, hospitals and public schools. In order to get an overview of institutional demand for food among these facilities we contacted ten different facilities, including several care homes, the Interior Health Authority (IHA), Okanagan College and UBC Okanagan. From those contacted we received information on food procurement from four different facilities and organizations representing millions of dollars in annual food spending.

3.1 Supply Chain Analysis

The Okanagan bioregion's health facilities, including hospitals and care homes, are largely under the jurisdiction of the Interior Health Authority (IHA). Other notable public institutions in the region include post-secondary institutions such as UBC-Okanagan campus (UBCO) and Okanagan College, as well as the Okanagan Correctional Centre (OCC), located in Oliver. Of course, public schools are also public institutions, and the bioregion includes part of school districts 83 (Okanagan-Shuswap); 22 (Vernon); 23 (Central Okanagan); 67 (Okanagan-Skaha); 53 (Okanagan-Similkameen); and 58 (Nicola-Similkameen).

In this section, we present food procurement supply chains for four types of government institutions in the Okanagan bioregion: IHA, OCC, UBCO, and public schools. We will describe each model individually.

3.1.1 Interior Health Authority (IHA)

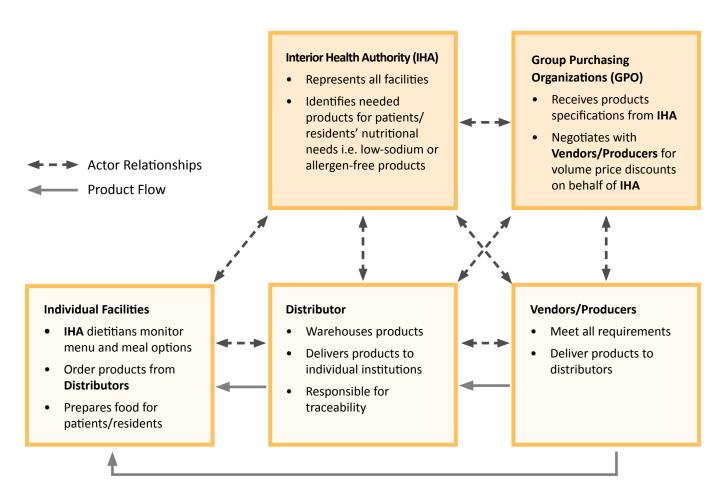
There are five main parties involved in the IHA's food supply chain. Below their roles are described within the specific context of institutional food procurement in the public healthcare sector of BC's southern interior:

- Interior Health Authority (IHA) operates all of the public health care facilities in the Southern Interior region of British Columbia, which includes food procurement.
- Individual facility a health care facility with a kitchen of some kind that serves food to patients or residents. There are also small residential care facilities that rely on receiving prepared meals to be re-thermalized from larger healthcare facilities.
- Group Purchasing Organization (GPO) negotiates prices for supply items, including food, on behalf of its members (such as IHA, Fraser Health and Northern Health) to create greater purchasing power. (As of Dec. 2017, the GPOs who work with IHA are Aramark and HealthPro.)
- **Distributor** houses and distributes products to each individual facility, as well as other parts of the food network (ie restaurants, grocery stores etc). The current distributor is Sysco Kelowna.
- Vendor/Producer/Processor those who sell food products to a distributor. IHA may have some individual contracts with a single vendor, bypassing the distribution system, when it involves large volumes and high cost (ie. bread and dairy products).

Figure 8 illustrates the food supply chain for the Interior Health Authority. Typically, the distributor is responsible for delivering food products to individual facilities. For products that are included in national contracts such as portioned juice, frozen fruit and vegetables, canned fruit, and cereal, the GPOs will search nationally to find the most appropriate vendors

(Koenig, D., Pers. Comm., Feb. 27, 2018). For those products that are "off contract", that is, not included in these contracts (this includes most fresh produce such as meat, eggs and vegetables), the distributor may connect directly with local producers. In some cases, food products may flow directly from producers to facilities. Currently there are a small number of contracts that IHA arranges directly with producers such as bread and milk.

Figure 8: Food Procurement Supply Chain for the Interior Health Authority (IHA)

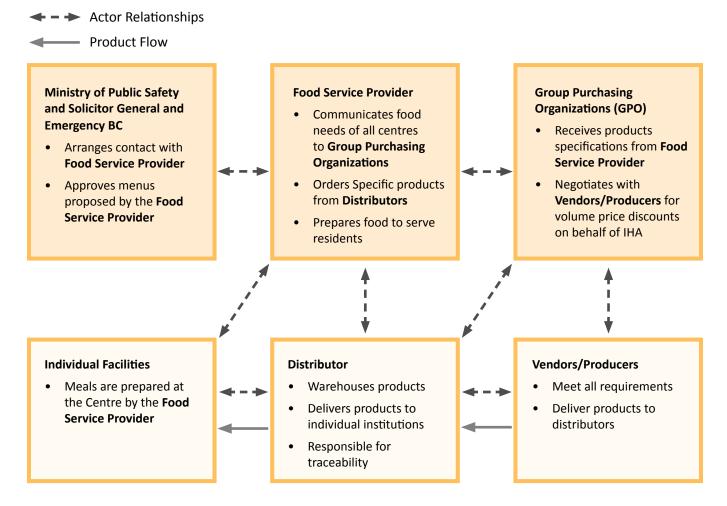


3.1.2 Okanagan Correctional Centre

The supply chain for correctional centres is similar to that of IHA. Just as a hospital is a facility under the umbrella of Interior Health, the OCC is one of 10 correctional centres operating under the provincial jurisdiction of the Ministry of Public Safety & Solicitor General. However, the centres do not prepare meals in-house, therefore a contracted food service provider is an additional actor in the supply chain.

 Food Service Provider - provides prepared meals at the ten individual correctional centres as required by the Ministry of Public Safety & Solicitor General. Currently, this contract is held by Compass Group Canada, who have held the contract since 2009 (TRUE Consulting, 2012). The food service provider has a relationship with a GPO, currently Foodbuy, that negotiates with vendors for pricing of food products. There is a stipulation in the food service contract that the OCC could produce fish, fruit or vegetables on-site for consumption by inmates as long as it was done with the approval of the food service provider, and that the food products meet the quality standards of both the Ministry and the food service provider. Currently there is no such program in place, however the OCC is a relatively new facility, having just opened in 2016. There is significant historical precedent for centres of incarceration to produce their own food. In this example, Figure 9, there is no flow of food products directly from producers to OCC.

Figure 9: Food Procurement Supply Chain for the Okanagan Correctional Centre (OCC)



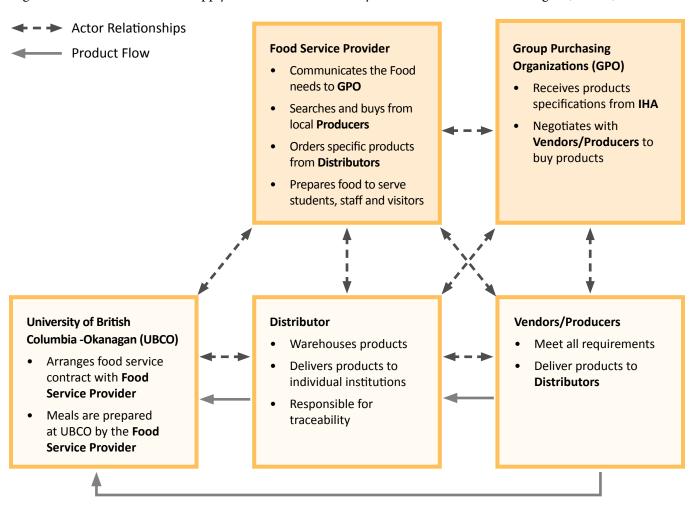
3.1.3 University of British Columbia – Okanagan Campus (UBCO)

UBCO's food procurement model is similar to the above examples, but does have some distinct aspects. UBCO does not have a self-operated food service due to various reasons (Kim, 2013) and currently has a food service contract with Aramark. One distinct purchasing aspect at UBC is the existence of explicit local procurement policies (UBC, 2018). Budgetary flexibility to meet these goals is also important in being able to feature increased amounts of local produce. As many interviewees have mentioned throughout the process of this research, getting local food into a new space or institution often requires a champion. Gordon Robinson, Aramark Executive Chef at UBCO, was mentioned by several at the university as someone

devoted to local food (Stockdale, M., Pers. Comm., 2017). He has built relationships with local farms, even visiting the farms themselves to see what products they offer. While Mr. Robinson is an Aramark employee, working with the food service provider to operate the on-campus kitchen, he has more control over his kitchen and menu than IHA or OCC kitchen staff. This is due to multiple reasons including the lack of specific dietary concerns that IHA has to navigate, as well as the lack of the 'approved menus' criteria that the OCC has to follow.

Despite the apparent increased flexibility afforded to the UBCO kitchen and kitchen staff (which consists entirely of unionized Aramark employees) the procurement of products still needs to follow the same regulatory, food safety standards as the healthcare

Figure 10: Food Procurement Supply Chain for the University of British Columbia - Okanagan (UBCO)



facilities. In addition to CanadaGAP certification, eligible vendors must also carry the minimum amount of liability insurance in order to have their products included on UBCO's menu. While some products may be purchased directly from eligible vendors, for logistical reasons it is still more straightforward to order through Sysco or Gordon Food Services, both of whom will have confirmed the food safety requirements are met before listing a vendor and its products in their catalogues. Larger products will be included in national contracts with prices negotiated through a GPO.

3.1.4 Public Schools

The food supply chain in schools is different from the above three examples. The main reason is that each school operates independently. Currently, no national school food program is present in Canadian schools (CBC news, 2017). Some schools may serve food while some may not, much of which may be determined by the involvement and interest of the Parents Advisory Committee (PAC) or the presence of other organizations, for example Farm to School. Models of food service in schools, therefore, vary widely depending on the availability of kitchen space and the connections that exist within the community. For example, some schools may order "fast" food once per week as an optional meal for students, which may also fundraise for the school.

Other schools may partner directly with local bakeries or farms to procure more foods.

At Oliver Elementary School (Oliver, BC), there has been a Farm to School program since 2008, which includes a salad bar in the school (featuring local products whenever possible), partnerships and field trips to local farms, and curriculum that includes information about food production and the food system. In this model, the students have access to a salad bar for \$3/student, \$2.75 of which goes to the caterer running the program, while the other \$0.25 goes back into funding the program. Through partnerships and sponsorships from businesses in the community, students who may not be able to afford the lunch receive subsidized or free access to the salad bar. The caterer purchases from local producers whenever possible and supplements with ingredients from other suppliers (Oliver Chronicle, 2014). Farm to School is a provincial program in which schools may voluntarily participate.²

Within these different models, there is flexibility in the food procurement system, and the supply chain can be much shorter. For example, a school can arrange to buy fresh produce directly from local producers, then prepare and serve meals to its students and staff, or use the food in food education classes. Figure 11 below shows one example of a possible supply chain which characterizes a Farm to School arrangement.

Figure 11: An Example of Food Procurement Supply Chain at a School

Public Schools Producers Makes arrangements with producers Make arrangements with the school regarding the type and quantity of regarding the type and quantity of products products needed supplied Prepares food to serve students and staff Delivers products to school NOTE: Schools may also have arrangements to work Actor Relationships with **Distributors** or **Food Service Providers** in cases Product Flow where they do not work directly with producers to access food for institutional use.

2 farmtoschoolbc.ca/

3.2 Institutional Demand

The largest public institution in the region is The Interior Health Authority (IHA), which serves approximately 5 million meals per year (Koenig, 2018, Pers. Comm.). IHA's service area includes the entire Okanagan bioregion, as well as portions of the Thompson Nicola and Kootenay-Boundary Regional Districts. It includes some 55 institutions, 21 of which are in the Okanagan bioregion (Koenig, 2018, Pers. Comm.). The study team worked with IHA to obtain and analyze information regarding demand for a variety of food products.

Table 2: Top 25 items purchased by the IHA ranked by spending.

Source: IHA Pers. Comm., 2018; Compass Group Pers. Comm., 2018

<u>Table 2</u> below provides a summary of the toppurchased items procured by IHA, per year, by amount spent.

As seen in the table many of the food items purchased by IHA, including those that represent the highest cost items over the course of the year, have undergone some level of processing. This may just be grating, as is the case with a cheese product listed, or the processing may be more involved for example the cooked, roasted, mashed potatoes. It should also be noted that there are no raw whole fruits or vegetables among the highest cost items, other than bananas, but rather these positions are occupied by proteins (meat, eggs and dairy) with

Rank	Item Description	Unit Size
1	beef round steak	7.5 kg
2	lean beef ground	10 pound
3	potato cooked, mashed, roasted	6 pound
4	chicken breast cooked grilled low sodium	2 kg
5	egg (shell) canada grade "a"	15 dozen
6	yogurt	100 gram
7	cheese cheddar mild lite individual portion	21 gram
8	coffee ground anthos	16 ounce
9	banana fresh	40 pound
10	pork roast cooked sliced	4.8 kg
11	supplement two calorie	235 ml
12	chicken strip reduced sodium	10 kg
13	turkey breast roasted cooked low sodium	1.1 kg
14	juice apple pure	1 litre
15	stew beef - diced grade a	2.5 kg
16	cheese cheddar shredded med	2.5 kg
17	egg liquid whole (carton)	1 kg
18	cheese cheddar	21 gram
19	juice apple no sugar added	114 ml
20	bacon sliced reduced sodium	5 kg
21	turkey breast roast raw	2.2 kg
22	coffee grnd premium decaf	16 ounce
23	chicken thigh grilled healthy	2 kg
24	pork cutlet ground	85 gram
25	salmon pacific loins 3 oz	10 pound

the addition of ground coffee. All of these protein items do require some processing before reaching the market, meat at an abattoir and meat processing plant, eggs at a grading facility and potentially a processed egg facility and dairy (cheese) at a processing facility.

Table 3 presents a list of items and volumes compiled from all institutions in the Okanagan (those institutions that responded to our request for information). This includes the IHA data above, but also the Okanagan Correctional Facility for certain products. The items listed are unprocessed (i.e. they are not cooked or chopped, however the meat will have gone through a processing facility). Many are already produced in the Okanagan bioregion and the production of many could be expanded were there a larger market or more demand. Items that were not of consideration for local production (e.g. bananas) were excluded from the analysis.

Table 3: Institutional Annual Demand for Selected Unprocessed

Source: IHA Pers. Comm., 2018; Compass Group personal Pers. Comm., 2018

3.3 Local Actors and the Institutional Food Procurement Supply Chain

As the supply chain analysis illustrates, different publicly funded institutions currently have various degrees of flexibility in terms of food procurement. UBCO is not bound by the same budgetary constraints as IHA and has the administrative ability, personnel and most importantly, the will, to search for local producers. They can therefore source directly from local producers more easily than IHA and OCC.

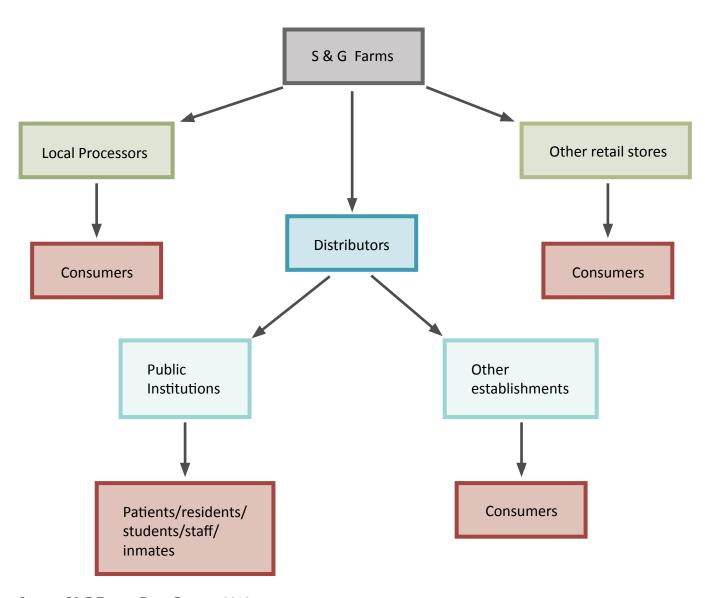
Given the types of food products in high demand by health care facilities and correctional centres (e.g. minimally to highly processed foods in large volumes), it is difficult for local producers and processors to compete for contracts, some of which are arranged at a national scale by GPOs. However, local producers/processors may find that it is still possible to join the supply chain by selling their products through the primary distributor.

Rank	Item Description	Total Weight (kg)
1	beef	55,440
2	chicken	27,020
3	pork	19,944
4	egg	14,141
5	turkey	10,974
6	cucumber	5,902
7	lettuce	5,240
8	tomato	4,472
9	apple	3,758
10	onion	2,713
11	potato	2,005
12	brussel sprout	1,856
13	pear	1,543
14	greenbean	1,193
15	pepper	1,168
16	grape	1,132
17	strawberry	560
18	carrot	544
19	celery	447
20	spinach	317

Currently Sysco Kelowna is the main distributor for IHA, OCC and UBCO. According to Sysco's website, the company states that "all Sysco Broadline³ locations source products from local suppliers" (Sysco, 2018). This is partly in response to customers' increasing demand for local food.

However, there are regulatory requirements regarding food safety (eg. CanadaGAP certification) that need to be met in order to be eligible to be a vendor to a health authority, criteria that is shared by Sysco for all vendors. For many producers, this route of distribution is not viable. Detailed discussion on this topic is presented in the section on gaps and opportunities. For many producers, expanding their operation to individually produce the volumes required by large institutions may not be compatible with their farm capacity or business plans. Aggregation of product

Figure 12: Supply chain diagram example for S&G Farms as a supplier to institutions



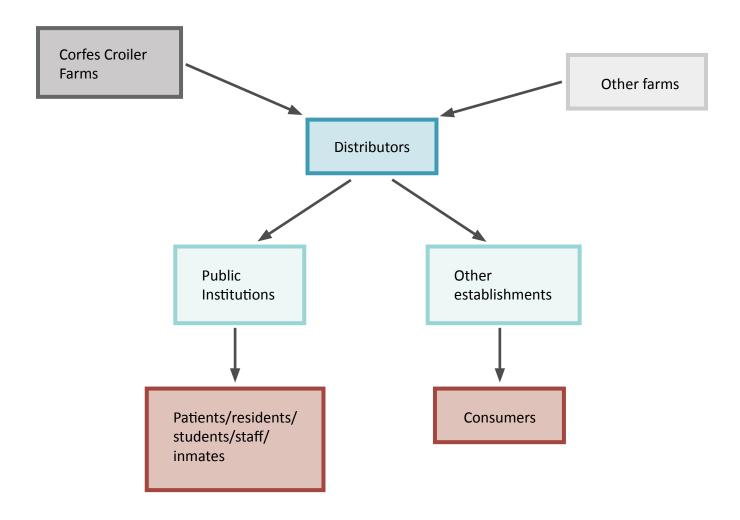
Source: S&G Farms, Pers. Comm., 2018

Buy BC: www2.gov.bc.ca/gov/content/industry/agriculture-seafood/growbc-feedbc-buybc

from numerous producers is one way to circumvent this. Farm to School may represent an easier pathway to suppling locally produced food to institutions. Producers may easily participate, or even help to start, a local Farm to School program. This model presents the possibility for a direct connection between institutions and producers and is more suitable for small or medium scale producers. However, the model also requires school/PAC leaders or volunteers

to be proactive about local food. Figure 12 and Figure 13 illustrate examples of two local producers who currently participate in the institutional food procurement supply chain through Sysco Kelowna.

Figure 13: Supply chain diagram example for Corfes Broiler farm as a supplier to institutions



Source: Corfes Broiler, Pers. Comm., 2018



4. Production and Processing Capacity Assessment

Local/regional post-production capacity is a critical need if institutions are to increase local procurement of food products, as all such products typically require some degree of processing. The same is true with regards to the further growth of many agricultural sectors that require some level of processing before products are sent to market (e.g. meat, eggs and dairy). Gaps in the current post-production sector in the region have been identified through research and interviews, but to our knowledge, no analysis of existing post-production capacity for the Okanagan food system currently exists. Thus this chapter is the first such assessment. It is focused on the purpose of facilitating greater institutional procurement of local food in the Okanagan bioregion.

4.1 Business Directory

In order to get a sense of post-production capacity, it is first necessary to know the number, type, and capacity of processors in the Okanagan bioregion. To this end, we compiled a directory of food processing businesses using data sources outlined in Chapter 2. The directory enabled us to gather information on the processing capacity for raw agricultural products in the region. In addition, this list provides us with information about the types of processing that are not available in the Okanagan or that are not currently meeting the demand of local businesses.

The businesses in this directory are separated into two categories: producers and post-production businesses

(processors). The producers are further divided into farmers and vineyards. Among the processors we kept our categories consistent with those of IHA and, the Ministry of Agriculture (in the case of provincially regulated abattoirs), and we note CFIA-regulated facilities where they exist. We grouped cideries and wineries in with the Beverage Manufacturing category, though they are regulated by the Liquor Control and Licensing Branch and therefore do not appear on the IHA list. Some wineries are included in the Food Manufacturing list, presumably because many have kitchens attached, which would be regulated by IHA. Those cideries and wineries that did not appear on IHA's lists were added under Beverage Manufacturing, so there are no duplicate entries. The below list describes all 15 sub-categories in the directory.

Producer Categories:

- **Farmer:** producing anything contributing to food production
- Vineyard: producing grapes to be used in the production of wines

Post-Production Sector Businesses:

- Commercial Bakery Food Processing: primarily making baked goods or baked good products
- Beverage Manufacturing Food Processing: any beverage including juice, soda, ciders, wines etc
- Meat Processing Food Processing: facilities inspected for meat cutting, but not for slaughter

- Food Manufacturing Food Processing: facilities making goods other than those listed above
- Community Kitchen Food Processing: kitchen operating in accordance with IHA's guidelines
- **Distributor** businesses buying and selling goods and offering greater variety and quantities than individual producers
- Storage and Warehousing businesses engaged in renting space to other businesses, producers or processors for their goods
- Class A Slaughter and Processing: licensed for slaughter and parting or cutting
- **Class B** Slaughter Establishment: licensed for slaughter only (no parting/processing)
- CFIA Beef: slaughter and cut and wrap of beef, able to export and sell product nationally
- CFIA Poultry slaughter and processing of poultry, able to export and sell product nationally
- Home Business Food Processing: businesses who sell direct low-risk items made in homes
- Co-Packer -A business that includes a
 packing facility used to pack products from
 other farms/businesses and/or their own
 products. These include fruit-growing co operatives.

It should be noted that while extensive, the directory is an incomplete list of all producers (farmers). Reasons include confidentiality issues with producers' associations, as well as difficulty accessing farm information. For example, there are approximately 55 dairy producers in the North Okanagan, but their business and contact information were not released for publication by the BC Dairy Association. In many cases, farms may be selling product directly to a distributor or through a distinct avenue of sales such as producers that are part of Okanagan Grown Produce, a regional arm of the Vegetable Marketing Commission. This removes the need for them to have any advertising, including websites, Facebook pages, or voluntary listings in other directories and

resources. Hence these farms are also not necessarily captured in the database. The BC Fruit Growers Association represents over 800 fruit growers, many of whom would be located in the Okanagan bioregion and may be selling directly through a distributor. The same issue as with Okanagan Grown Producer applies in this case.

Another subset of farms that may not have public advertising are homesteads, or people who pay farm taxes on their property, but grow very small quantities for subsistence and limited patrons. Many of these farms operate among friends and family or may have an "honour box" at their farm gate, but no easily identifiable farm information. It is unlikely such operations would engage in any sort of local procurement initiatives. When embarking on this project our objective was to consider those farms operating to generate a meaningful portion of the operator's livelihood and therefore producing a quantity that could fit into more complex food supply chains.

In terms of post-production businesses, the directory should be more or less inclusive of all of the businesses involved in processing. Processing businesses make up the majority of the post-production section of the directory, but there could still be businesses missing from the storage and warehousing categories.

The Okanagan Bioregion Business Directory can be found in <u>Appendix B</u>. <u>Table 4</u> summarizes the number of producers and post-product businesses on this directory.

Statistics Canada's 2016 census identified 3,210 farms in the Okanagan bioregion (Statistics Canada, 2017a). The discrepancy between the number of farms reported by census and the number of farms included in the directory makes it clear that ongoing work will be required to gather a more complete picture of the production and post-production sectors in the Okanagan bioregion.

Table 4: Number of Producers and Post-Production Businesses, by category.

Producers	
Farmer	303
Vineyard	171
Total	474
Post Production Businesses	
Commercial Bakery - Food Processing	49
Beverage Manufacturing – Food Processing	40
Meat Processing – Food Processing	34
Food Manufacturing - Food Processing	162
Community Kitchen – Food Processing	47
Distributor	18
Storage and Warehousing	2
Class A – Slaughter and Processing	4
Class B - Slaughter Establishment	2
CFIA Beef	1
CFIA Poultry	1
Home Business – Food Processing	3
Co-Packer	3
Total	366

The geographic distribution of businesses included in the directory, by Regional District, is summarized in Figure 14. The majority of producers are located in the Regional District of Okanagan-Similkameen, while post-production businesses are concentrated in the Central Okanagan.

4.2 Current Production and Processing Capacity - by Sector

From institutional procurement records, five categories of product were identified for further detailed study in terms of potential for local procurement. The five categories are:

- 1. Minimally Processed Fruits and Vegetables
- 2. Meat: beef, pork, chicken and turkey

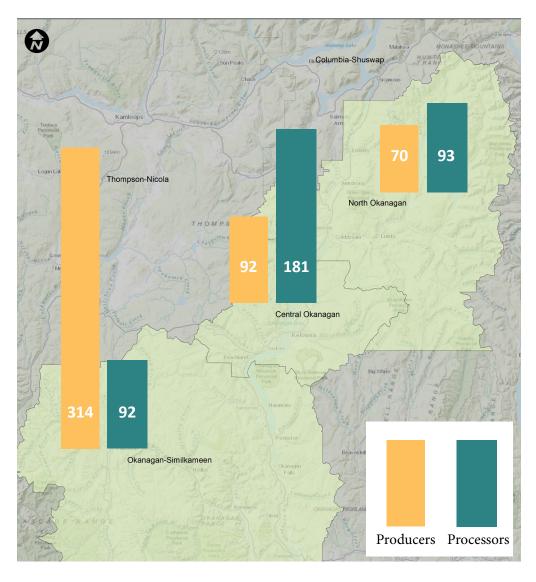
- 3. Egg: whole (in shell) and processed
- 4. Dairy: butter, cheese, milk and yogurt
- 5. Higher level processing (e.g. soup, juice, jam etc.)

For each of these categories, we compiled a regional profile in the provincial and national production and processing context. Specific products have been assumed to have greater potential for institutional procurement due to high demand and an existing regional capacity.

Supply for each of the 5 categories identified through demand analysis was assessed first by using agricultural census data to estimate production. Previous institutional procurement studies (Northlands, 2017) calculated total provincial production and compared this to institutional demand. In our case,

Figure 14: Geographic distribution of producers and post-production businesses in the Okanagan bioregion

Source: ISFS 2018



confidentiality of institutional demand information prevented this kind of analysis. We have instead compared average annual consumption data for the product in question to total production in the region. Simply comparing institutional demand to total production/processing capacity in the region does not account for the additional markets already served by the existing supply (and which would be without supply if the current supply were redirected to institutional markets). Using the Okanagan bioregion's total census population accounts for supply to these other markets. The assumption is that residents in institutional facilities would be captured as part of the area's census population. In addition, based on the aforementioned business directory, we

conducted telephone interviews with producers and processors, and web research to gather information regarding capacity in terms of raw product processed to corroborate census data (i.e. kilograms of beef processed, kilograms of fruit turned into preserves). In total, we spoke with approximately 90 businesses. It is unrealistic to expect to obtain complete information in this manner due to the previously stated uncertainty about the completeness of the directory, but also due to the nature of telephone research (unable to reach all respondents, not all respondents willing to disclose information). Instead, we report anecdotal and qualitative information we were able to compile through our interviews, for each of the five categories.



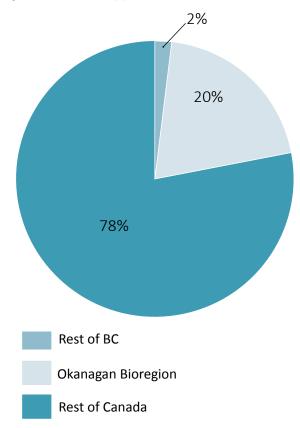
4.2.1 Minimally-Processed Fresh Fruit and Vegetables

In Canada in 2016, vegetable production (both field and greenhouse) accounted for just under 5% of total farm receipts, at just over 3 billion dollars (Statistics Canada, 2017b). In terms of vegetable production, Ontario, Quebec and British Columbia, combined, accounted for 89.9% of total vegetable cultivated area in Canada (Statistics Canada, 2018b). Of the total 2,338,000 metric tonnes of marketed vegetable production in Canada, 73,313 metric tonnes, or just over 3% were produced in BC (Statistics Canada, 2017c). Of the 9,994 farms growing vegetables in Canada, 388 (3.9% of Canadian vegetable farms) were located in the Okanagan (Statistics Canada, 2017d). These numbers do not include the quantities of greenhouse crops grown in either the province or country.

In British Columbia, the BC Vegetable Marketing Commission regulates the marketing of greenhouse crops (tomatoes, peppers, cucumbers), processing vegetable crops, including peas, beans, corn, cole crops (broccoli, Brussels sprouts, cauliflower); strawberries; and storage crops including potatoes, carrots, rutabagas (BC Vegetable Marketing Commission, n.d.).

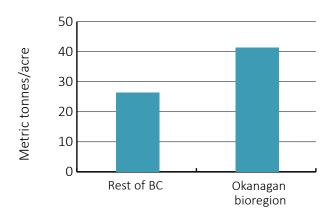
Fruits (tree fruits and small fruits) made up just 2.9% of Canada's farm crop receipts in 2016, at over 1 billion dollars. BC production accounted for 39% of this figure, at \$390,252,000 (Statistics Canada, 2017b). Of 12,340 farms with fruit and nut trees in Canada, 1,637, or 13% of fruit and nut orchards were in the Okanagan (Statistics Canada, 2017e). In terms of acreage, of the 332,812 acres of fruits, berries and nuts in Canada in 2016, 62,679 (18%) are in BC, with

Figure 15: Area in apple cultivation in 2016



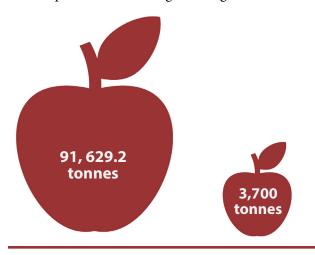
Source: Statistics Canada, 2017e

Figure 16: Apple yield comparison between Okanagan bioregion and BC



Source: : Statistics Canada, 2017g; Pers.Comm. with apple growers

Figure 17: Estimated apple production and consumption in the Okanagan bioregion



Estimated consumption in the Okanagan bioregion

Estimated production in the Okanagan bioregion

Source: Statistics Canada, 2017g, 2018a; AAFC, 2017a

24,307 acres (39% of BC production) in the Okanagan Bioregion (Statistics Canada, 2017e).

Apples were specifically identified as a high volume item by a number of institutions interviewed in the Okanagan bioregion. This product has been highlighted in this paper due to the existing capacity for production and distribution through various distributors and packing houses. In addition, 37 of the 49 farms that are CanadaGAP certified in the Okanagan bioregion are certified for the production and/or packing of apples and in most case are certified for other tree fruits as well. This certification is further discussed below.

Dating back to the turn of the 21st century, apple orchards have been establishing and thriving in the fertile Okanagan Valley. To this day the valley maintains a competitive advantage based on its semi-arid climate, water availability and relatively low pest pressure (BCFGA, 2010). Apples account for one fifth

of the national fruit sales in Canada, with 25.8% of the crop being grown in British Columbia (Statistics Canada, 2017f).

Apples are among the highest volume produced fruit or vegetable in Canada. In 2016 3,835 farms reported growing apples, 1,648 of these, or 43% were located in British Columbia and 46% of BC's apple-growing farms and orchards were located in the Okanagan valley (Statistics Canada, 2017e). The total apples produced in Canada were in excess of 387,000 metric tonnes in 2016 and 20% of Canada's apple acreage was in the three regional districts comprising the Okanagan bioregion (Statistics Canada, 2017e).

According to the 2016 agricultural census, apple production in BC was on average 26.31 metric tonnes per hectare (Statistics Canada, 2017g). In order to corroborate this data we contacted 14 producers, 4 processors and 7 distributors. We were able to get industry information from all processors and 7 of the 14 producers responded. The on-the-ground data varies slightly from the provincial yield data calculated through the agricultural census. Of the five respondents who provided yield data the average yield was calculated to be 41.41 metric tonnes per hectare, much higher than the provincial average offered by 2016 agricultural census data. Apple cultivation is changing rapidly based on evolving techniques including highly intensive planting and pruning.

In Canada in 2016, there were 10.16kg of apples per person available for consumption (AAFC, 2017a). Okanagan apple production in 2016 can be conservatively estimated at approximately 91,629.2 metric tonnes (Statistics Canada, 2017e; Statistics Canada, 2017g). This is enough volume to supply 9,018,622.05 people annually, which far exceeds the region's population of 366,169 (in 2016) (Statistics Canada, 2018a). Given the numbers, it would seem that there would be good potential, from a supply perspective, for institutions to procure fresh apples year-round from within the bioregion.

Processing of Minimally Processed Fruits and Vegetables in the Okanagan

For products such as fresh apples, and other minimally processed fruits and vegetables, post-harvest activities include washing, sorting, and packing. For some producers, these activities occur on-farm, while many fruit growers transport bins of fruit from the orchard to co-operatives and distributors (such as BC Tree Fruits or Cawston Cold Storage), where items are graded, packed, and stored. The majority of orchards in the Okanagan likely still sell fruit through larger distributors and packing houses. In the case of tree fruits, BC Tree Fruits is the largest packing house and distributor, with facilities in Winlaw and Oliver, including packing houses and cold storage, and an affiliated cidery. There are a number of distributors focusing on organic products, including Harkers Organics and Cawston Cold Storage. While we were able to speak with smaller distributors, we unfortunately did not get processing and packaging information from BC Tree Fruits.

Canada GAP (Good Agricultural Practices) certification is a food safety program for businesses that produce and handle fresh fruits and vegetables. Farms with GAP certification have passed an audit of on-farm practices confirming that the operation has a system of processes that prevent contamination of their agricultural products, as well as measures to ensure traceability of all items (CanAgPlus, 2018a).

Many institutions require their suppliers to provide products from farms who are GAP certified. One of the most commonly used distributors, Sysco, requires that all of its vendor-farms have Canada GAP certification prior to joining Sysco as a vendor. In British Columbia, the list of GAP certified farms is dominated by blueberry farms, with 285 of the 422 certified farms certified for blueberry production. In the Okanagan bioregion, 50 producers or packers are GAP certified (CanAgPlus, 2017; Pers. Comm. with producers, 2018).

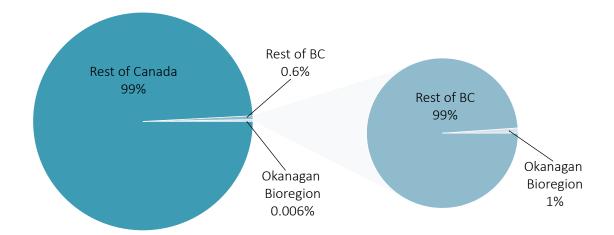
Because institutions are not currently equipped or staffed to undertake meal preparation using whole foods, institutional demand for fruits and vegetables is mainly for minimally-processed products (eg. cut, washed, and packaged lettuce, or frozen fruits). There are essentially no post-production facilities of this type currently existing in the Okanagan bioregion, with most processors of this type located in the Lower Mainland. Examples include Berryhill (blueberries and raspberries), Pacific Coast Fruit Products Ltd (fruit purées), and BC Frozen Foods (frozen vegetables and fruits, many of which are grown close to their facility by contract growers).



4.2.2 Meat

Meat and livestock have among the highest farm receipts in Canada. For total farm receipts, canola is followed by cattle, dairy, wheat, hogs, soybeans, and hens and chickens (Statistics Canada, 2017b). Combined beef, pork and chicken accounted for nearly 14.5 billion dollars in farm sales for 2017 (Statistics Canada, 2017b). Canadian production showed a slight decrease in beef and increases in poultry following changes in demand between 2011 to 2016 (Statistics Canada, 2017h). Pork in Canada has seen steady growth over the past few years, with the majority being destined for export (Statistics Canada, 2015). Nationally, pork is concentrated in Quebec, Ontario and Manitoba, while the Okanagan bioregion produces 1% of BC's pork, which, across the province, adds up to only 0.6% of the national pork production (Statistics Canada, 2017i). Currently BC produces less than 10% of the pork consumed in the province, and the 18 commercial-scale pork farms in BC are concentrated in the lower mainland and on

Figure 18: Number of pigs on census day, 2016



Source: Statistics Canada, 2017i

Vancouver Island, outside of the Okanagan bioregion (BC Pork, 2017).

For beef, the Okanagan bioregion accommodates 8% of British Columbian beef cattle, which, as a province, represents 5% of the national beef herd (Statistics Canada, 2017j). The beef industry in Canada is dominated by the Alberta market with 42% of all beef located there (Statistics Canada, 2016b). The Alberta industry demonstrates increasing consolidation of farms, with smaller and smaller numbers of farms and increasing annual herd sizes (Statistics Canada, 2017k). Saskatchewan has the next highest beef production with 20%, followed by Ontario with 13% (Statistics Canada, 2017j). While the previously cited numbers represent the total number of cows and calves, the amount of beef processed and ready for consumption is difficult to estimate based on these statistics.

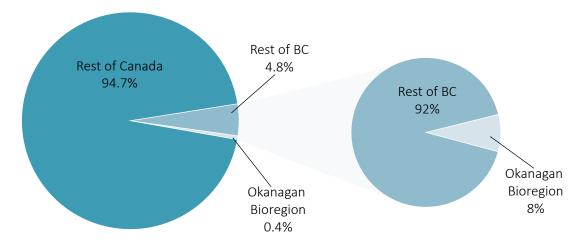
Through conversations with producers and producers' associations we have learned that the beef industry experiences an incredible amount of movement, both between provinces and across the border with the USA. While the domestic movement of livestock is difficult to track with the statistics available, we know

that in 2016, nationally, there were 21,000 calves imported for slaughter along with 9,000 cattle, while 686,000 cattle were exported for slaughter along with 79,000 calves (Statistics Canada, 2017l).

In order to get a more accurate picture of cattle raised to butcher size or age in the Okanagan we took the aggregate number of heifers and steers over one year of age as being the number of animals closest to maturity and slaughter size. In 2016 BC raised only 2.2% of the national number of heifers and steers 1 year and over, while the Okanagan contained 12% of BC's near-mature animals (Statistics Canada, 2017j). Those heifers and steers add up to 7,104 animals, and with an average hanging weight of 389 kilograms per cold dressed animal (after slaughter, without offal) that adds up to 2,763,456 kilograms of beef (Statistics Canada, 2017j; 2017l).

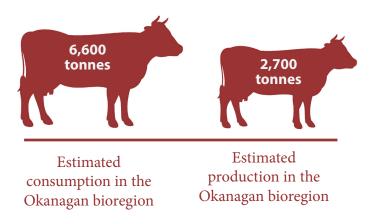
Per capita beef consumption in Canada for 2016 was 18.25 kilograms per person, 10.5 kilograms less than 36 years earlier in 1980 (Agriculture and Agri-Food Canada, 2017b). At that rate of consumption the current population of the Okanagan bioregion would consume an average of 6,591,042 kilograms of beef, far exceeding the amount of available beef produced

Figure 19: Number of cattle and calves on census day, 2016



Source: Statistics Canada, 2017j

Figure 20: Estimated beef production and consumption in the Okanakan bioregion, 2016



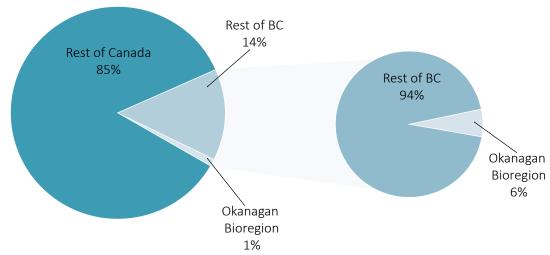
Source: Agriculture and Agri-food Canada, 2017b; Statistics Canada, 2017j; Statistics Canada, 2017j

in the region according to this calculation (Statistics Canada, 2017j). Beef is a complex livestock to track because of its long life (usually 18-21 months to slaughter) and the many different styles of operation involved in production. According to Statistics Canada's 2011 Cattle Industry Overview production primarily takes place on three farm types: cow-calf operations, cow-calf backgrounding operations and feeding operations (Statistics Canada, 2012).

Unlike the other meat industries, broiler poultry is supply-managed in Canada, similar to eggs and dairy. Broiler poultry growers are required to apply for quota for anything over 199 meat birds, with Growers Permits issued on an annual basis for a nominal fee for growers raising 2,000 or fewer broilers per year. While broiler operations are most concentrated in Ontario (33%) and Quebec (27%) BC is still a significant producer and is third in terms of broiler production in Canada (Statistics Canada, 2017m). In BC, an incredible 90% of broilers are found in the Lower Mainland-Southwest region (Statistics Canada, 2017m). Six percent of BC's chicken is produced in the Regional District of the North Okanagan (Statistics Canada, 2017m). Data for the other two regional districts has been suppressed to maintain confidentiality, but that 6% represents nearly 7 million chickens per year.

Assuming an average weight of 2.35 kilograms per bird (number provided by poultry processor) that equates to 16 million kilograms of chicken produced in the Okanagan (Statistics Canada, 2017m). According to the national disappearance rate, the average Canadian consumes 32.5 kilograms of chicken annually, therefore the North Okanagan poultry sector could

Figure 21: Number of broiler chicken in the Okanagan bioregion on census day



Source: Statistics Canada, 2017m

feed 497,261 people (Agriculture and Agri-Food Canada, 2017b). The total population of the three regional districts comprising the Okanagan bioregion was 366,169 in 2016, meaning that there was ample chicken produced within the region for the whole population (Statistics Canada, 2018a). While it is difficult to track the marketing and sales of all of the chicken, there is one federally inspected processing

Figure 22: Estimated broiler production and consumption in the Okanagan bioregion



Estimated consumption in the Okanagan bioregion

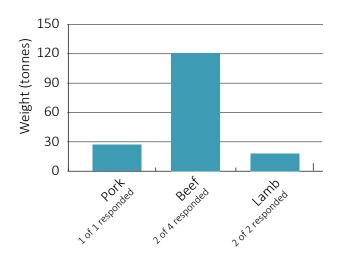
Estimated production in the Okanagan bioregion

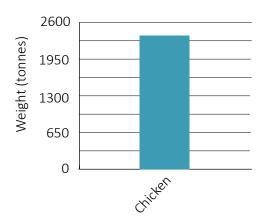
Source: Statistics Canada, 2017m; 2018a;

plant in the Okanagan, Colonial Farms Ltd, which is approved for export to both the USA and Vietnam (CFIA, 2016).

While there is some turkey production in the Okanagan the data is unclear because it was suppressed in the 2016 Agriculture Census to maintain producer confidentiality (Statistics Canada, 2017m). Turkey production, like broiler chickens, are regulated by a quota system of supply management. There were 39,466 turkeys raised in the Thompson Okanagan agricultural district in total in 2016, however there is no way to know how many of these were raised on the 69 farms that reported turkey production within the Okanagan bioregion. In total there were 118 farms that reported in all of the Thompson Okanagan (which includes the Okanagan bioregion's three regional districts as well as Columbia-Shuswap and Thompson-Nicola Regional Districts).

Figure 23: Estimated amount of meat processed at 6 abattoir facilities in the Okanagan bioregion (tonnes)





Source: Pers. Comm. with abattoirs, Dec. 2017 - Jan. 2018.

Meat Processors: Abattoirs and Meat Processing Plants

For meat processing there are several different levels of licensing. For a processing facility that is only cutting and wrapping meat they can be licensed by Interior Health as a Meat Processing – Food Processing plant. In order to be able to slaughter animals (this occurs in registered abattoirs) the licensing process involves either the Ministry of Agriculture, if end-product is going to be sold within the region or province, or the Canadian Food Inspection Agency (CFIA) if it will be sold across provincial borders or exported.

Classification of abattoirs with the BC Ministry of Agriculture include class A, B, D and E. Class A slaughter facilities may cut and wrap the type of meat for which they are licensed (i.e. slice and package pork chops, part up chickens, make sausage etc.) while Class B is limited to slaughter and packaging whole animals (Government of British Columbia, 2018). Class D and E may also cut and wrap meat however they are limited to a maximum 25 animal units and 10 animal units per annum respectively (Government of British Columbia, 2018). An animal unit is equal to 454 kilograms live weight of animal. Class D and E licenses may have limited licensing with regards to

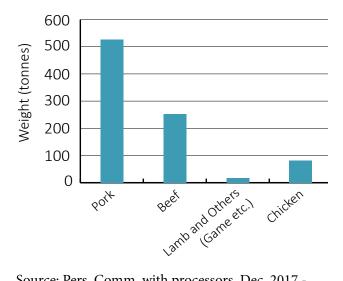
custom processing and therefore there is no online directory listing the slaughter facilities in these categories (Government of British Columbia, 2018). Class A and B abattoirs, as well as federal facilities regulated by the CFIA are provincially represented by the BC Association of Abattoirs (BCAA, 2018).

While Class E and D licenses have to undergo a thorough inspection and licensing process, there is no inspector on site when slaughter is occurring. Sales from facilities with these licenses are limited to the regional district within which the meat is produced. In contrast, Class A and B facilities are not limited in terms of quantity and the end product may be sold anywhere in BC. Class A and B facilities under the Ministry of Agriculture have at least one inspector present on slaughter days who assesses each animal and their offal as they are processed for signs of disease or pathogens. The CFIA inspected facilities also always have at least one inspector onsite for slaughter. Meat products from these facilities may be sold anywhere across Canada and facilities are individually approved for export to select countries (CFIA, 2016).

There are four inspected poultry abattoirs (one federal and three provincially inspected by the Ministry of Agriculture) located in the Okanagan bioregion, with another three provincially inspected plants located just outside the area: two in Falkland and a larger one in Salmon Arm. Between the four plants within the Okanagan bioregion, over ten million chickens are processed each year (CFIA, 2016; Ministry of Agriculture, 2017; Pers. Comm. with operators, 2017).

There are three inspected cattle abattoirs in the Okanagan bioregion. One is provincially inspected Class A slaughter and processing. Another is provincially approved Class B only for slaughter and carcass sides need to be transported for cutting and wrapping. The third one is CFIA inspected for cattle slaughter and processing (CFIA, 2016; Government of British Columbia, 2018). In addition to beef cattle, the Class A slaughter and processing facility is also approved for swine, llama/alpaca, ostrich, goat, rabbit and sheep. There is one other Class A provincially inspected facility approved for sheep, lamb and goat (Government of British Columbia, 2018).

Figure 24: Estimated amount of meat processed in a year by 12 meat processors in the Okanagan bioregion



Source: Pers. Comm. with processors, Dec. 2017 - Jan. 2018.

Along with the Class A, B and CFIA regulated facilities, we identified one Class E licensed facility. This facility was not included on the map as there may be other similar facilities and we cannot be certain that this is an exhaustive list of Class E of facilities. As mentioned above the list of Class D and E facilities is not publicly available.

Apart from one provincially inspected swine abattoir in the neighbouring regional district of Columbia-Shuswap, there is no large swine processor in the interior. Both Johnstons and Britco, the two largest swine processors in the province, are located at the coast, and are provincially and federally inspected respectively. In total, there are nine identified abattoirs in the Okanagan bioregion (four facilities process poultry, four facilities process beef cattle and one facility processes other red meat).

In addition to the nine poultry and red meat abattoirs mentioned above, there were 29 meat processing plants licensed by Interior Health to cut and wrap meat in the Okanagan bioregion, and three other processing plants whose licensing with Interior Health falls under other categories because meat cutting is not their primary service (i.e. they may be food retailers or commercial bakeries, etc.). Therefore, in total there are 41 meat processing facilities including 32 cut and wrap plants and nine abattoirs in the Okanagan Bioregion. Many of these were identified on the Interior Health Authority's Inspection Report Database, while others were identified as retail outlets for Johnstons' pork, located in Chilliwack (Interior Health Authority, 2018; Johnstons, 2017).

Among the meat processing businesses who are licensed for cutting and wrapping but not for slaughter, poultry was commonly described as being locally sourced from within the Okanagan, either from Colonial Farms Ltd or from FarmCrest Foods (located just outside the Okanagan bioregion in Salmon Arm). Processors tended to mention Alberta as being the most common source of beef. Several said

they would like to source red meat locally, but both the lack of red meat abattoirs and the high cost of BC beef kept the supply coming from afar. While there is a federally regulated beef abattoir (Lambert Creek Organic Meats), they appear to sell mostly under their own brand and across the country, as well as internationally. Their plant is approved for export to Japan, the USA, the Ukraine and Hong-Kong (CFIA, 2016).

In order to estimate processing capacity of slaughter and processing facilities in the Okanagan bioregion, we interviewed 6 of the 9 slaughter facilities and 17 of the 32 meat processing plants, but only 12 were able to provide quantitative information on volumes of meat processed. The abattoirs reportedly handled a total of more than 23 million kilograms of meat, mostly comprised of chicken, which dominates the processing industry in the Okanagan bioregion.

Among the 12 meat processors who provided quantitative information on processing there was over 252,646 kilograms of beef cut and wrapped, as well as 525,510 kilograms of pork, and 81,400 kilograms of chicken. In total, nearly one million kilograms of meat moves through meat processing plants in the Okanagan over the course of a year.

It should be noted that the numbers submitted by business owners and butchers were often estimates based on a weekly or monthly purchasing or processing pattern. The chicken totals should be most accurate because almost all chicken abattoirs (except for one small scale facility) responded to our request for information. The totals regarding red meat (pork and beef) should be considered very conservative since 22 of the 39 businesses involved in meat processing in the Okanagan did not provide any quantitative information on processing, including one large abattoir for beef as well as many meat processors who cut and wrap.

In conclusion it would seem that the greatest potential for increasing local supply among the meat proteins is in the chicken sector where production is already high and processing is currently able to meet and exceed local consumer demand.



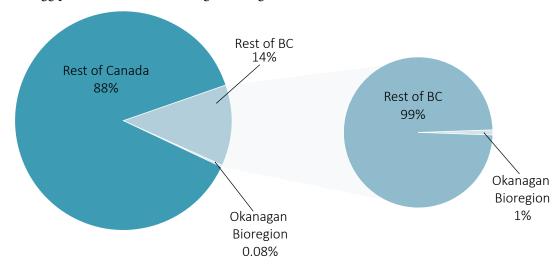
4.2.3 Egg

Egg production in Canada is supply managed with a quota system similar to that of dairy and poultry. In the egg industry holding egg quota is necessary for any producer who has more than 399 chickens on their farm (BC Egg, 2017). Quota is allotted by the Egg Farmers of Canada to provincial marketing commissions, that are then in charge of allotting quota across the province (Farm Products Council of Canada, 2017). The quota gives the farmer the right to have as many chickens as the number of quota that they hold, and to get from them as many eggs as possible. The cost of quota varies. For the March quota exchange of 2018 it was established at \$360/ Unit of Layer Quota (BC Egg, 2018). Typically laying hens are kept for one year before the flock is rotated to get younger birds.

As in the case of meat production in Canada, the larger eastern provinces are dominant in the agricultural egg sector. In 2016 the Maritime provinces contributed a combined 7% of national egg production, while Quebec and Ontario produced 18% and 39% respectively (Statistics Canada, 2017n). Manitoba, Saskatchewan and Alberta provided 11%, 4% and 9% while BC produced 12%, placing it third in terms of national production (Statistics Canada, 2017n). The egg industry in Canada collected over 1 billion dollars in farm receipts in 2016 and accounted for 4% of the total farm receipts for livestock and livestock products (Statistics Canada, 2017b).

In 2016 in BC 80% of egg production was in the Lower Mainland-Southwest Agricultural Region

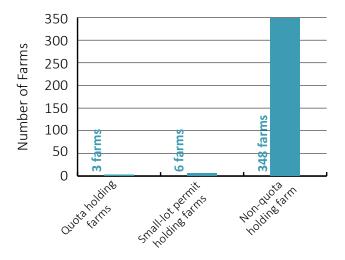
Figure 25: Egg production in the Okanagan bioregion



Source: Statistics Canada, 2017h

and 9% of provincial production was found in the Thompson Okanagan (Statistics Canada, 2017n). The majority of egg production in the Thompson Okanagan region was in the Columbia-Shuswap Regional District, where 67% of eggs were produced, with another 25% produced in the Thompson-Nicola Regional District to the northwest of our study area.

Figure 26: Number of egg producers with and without quota in the Okanagan bioregion



Source: BC Eggs, 2017

The remaining 7% of production was in the Okanagan bioregion, amounting to only 1% of the provincial production (Statistics Canada, 2017b). This seemingly small amount represents 521,646 dozen eggs per year (Statistics Canada, 2017b).

Canada's egg producers maintained an average flock of 22,374 layers in 2016 and are regulated by the Egg Farmers of Canada, the BC arm of which is simply called BC Egg Marketing Board (Agriculture and Agri-Food Canada, 2017c). In BC average flock size is a little bit smaller at 17,000 layers per farm for 2016 (BC Egg, 2017). While there were 357 farms that reported egg production in 2016 in the Okanagan bioregion, there are only three farms that hold quota and six farms that hold small-lot producer permits, allowing them to have up to 399 birds in their flock. All three quota-holding farms are located in the Regional District of the North Okanagan and they produced a combined 292,305 dozen eggs in 2017. Unfortunately no production numbers are collected specifically for the small-lot permit holders so it is unknown how many eggs are produced by these farms. The quota produced eggs are transported to Abbotsford to a CFIA registered shell egg station, Golden Valley Foods, for grading and packaging

Figure 27: Estimated eggs produced and consumed in the Okanagan bioregion





Estimated consumption in the Okanagan bioregion

Estimated production in the Okanagan bioregion

Source: Statistics Canada 2017h; Agriculture and Agri-Food Canada, 2017c

(CFIA, 2018a). It is unknown how many of the eggs produced in the Okanagan bioregion return to the area after being graded and packaged for sale at the Abbotsford facility.

According to BC Egg there are currently no producers under their umbrella who have less than 2,000 bird quota, and only a handful of producers with less than 3,000 bird quota (BC Egg, Pers. Comm., 2018). The main reason cited for the small number of producers operating at these lesser levels of production is that there is insufficient economy of scale at those smaller flock sizes (Pers. Comm. with BC Egg, 2018).

Taking into account the three quota holding farms there are 348 other farms reporting egg production in the Okanagan bioregion that have 99 or fewer chickens on their farm as well as six small lot permit farms. Those 354 farms had a combined production amounting to 229,341 dozen eggs in 2016. Agriculture and Agri-Food Canada (2017c) estimated that a person consumes 19.9 dozen eggs per year. Given the population in the Okanagan bioregion (366,169), the total amount of eggs produced in the bioregion still cannot satisfy the population's egg consumption.

While we do not know the quantity of eggs produced in the Okanagan bioregion that go to the coast for grading and then return to the local area for sale, as stated above, we do know that non-graded eggs are sold direct to consumers. We can assume that most of these would be sold to consumers in the immediate area, within the Okanagan bioregion. Producing an average of 647.9 dozen eggs per year these small producers are still able to feed approximately 11,524 people. In total the Okanagan bioregion's production would be able to supply the demand of 26,213.4 consumers at the 2016 rates of production and consumption (Agriculture and Agri-Food Canada, 2017c). It would be necessary to seek out eggs from neighbouring regions in order to fulfill the demand in this sector.

Figure 28: Estimated production by non-quota holding farms and number of persons provided with eggs in the Okanagan bioregion





Estimated production in the Okanagan bioregion

Number of individuals served

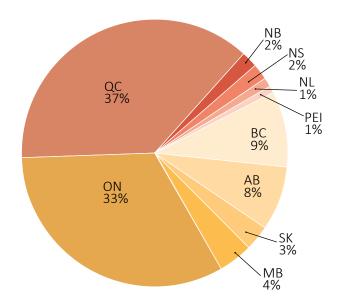
Source: Statistics Canada 2017h; pers. Comm., 2018



4.2.4 Dairy

Demand for milk products has been driven by changing attitudes towards butterfat, previously viewed as harmful, which now has an increasingly nutritious image. The demand for dairy from 1960 to 2005 has changed quite dramatically. Consumption of cheese products has more than doubled from an average of 5.62 kg/year to 12.03 kg/year (Canadian Dairy Commission, 2006). While the consumption of butter is still much lower than it was in the early 1960s, it is still significantly higher than in the 1990s, and yogurt has gone from an almost negligible product 40 years ago to an average consumption of 7.23 kg/year per person (Canadian Dairy Commission, 2006).

Figure 29: Percentage of dairy production by province



Source: BC Milk Marketing Board, 2017

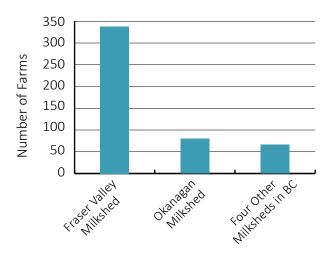
In Canada dairy is a 6 billion dollar industry, with farm receipts that add up to 26% of the total farm receipts for livestock and livestock products (Statistics Canada, 2017b). In comparison the poultry and egg industries make up a combined 14.5% of total livestock and livestock product cash receipts nationally (Statistics Canada, 2017b). Receipts are distributed through the country relative to production, leaving BC with a 9.5% share of the national dairy income (Canadian Dairy Information Centre, 2018a).

Dairy is a supply-managed commodity, with several regulatory branches including the Canadian Dairy Commission, which allots quota between provinces, and the provincial dairy marketing boards, who allot quota within their provinces to different producers. For January to June of 2018 the cost of dairy quota in BC is set at \$38,500 per kilogram of butterfat, or Continuous Daily Quota (CDQ) (Government of Canada, 2018). In BC there is also the BC Dairy Association representing producers, as well as the BC Dairy Council, which represents dairy processors. Dairy producers in BC must hold a dairy license from the Ministry of Agriculture to ensure that they comply with regulatory standards regarding milk storage and transportation.

Dairy production is dominated by Ontario and Quebec, who host a combined total of 70% of the country's dairy production (Canadian Dairy Information Centre, 2018b). In 2017 BC produced 8.7% of national dairy just ahead of Alberta with 8.5% (Canadian Dairy Information Centre, 2018b). In the 2016-2017 dairy year (August 1st 2016 to July 31st 2017) there was production of 761,227,700 litres of milk in British Columbia and 8,755,953,400 litres of milk produced in total in Canada (Canadian Dairy Information Centre, 2018b).

Interestingly the provinces with the highest production; Quebec and Ontario, have, on average, among the fewest animals per farm with 93 and 130 animals per farm respectively (Canadian Dairy

Figure 30: Number of dairy producers in BC in 2017



Source: BC Milk Marketing Board, 2017

Information Centre, 2018c). BC has the highest average number of cows and heifers (298 per farm), indicating farming operations that are much larger, more than twice the size of their eastern counterparts (Canadian Dairy Information Centre, 2018c).

The BC Dairy marketing board tracks regional production according to their 'milksheds.' These six designated areas are historical and related to the milk pick-up routes for transportation to processing facilities. The Fraser Valley is home to 338 dairy producers, while the Regional District of the North Okanagan (RDNO), together with portions of the Columbia-Shuswap Regional District (CSRD) and the Thompson Nicola Regional District (TNRD) contain a combined 80 dairy producing farms (BC Milk Marketing Board, 2017). These areas are included in the milkshed that the BC Milk Marketing Board refers to as the Okanagan. For clarity we will refer to it as the Okanagan milkshed to differentiate from the Okanagan bioregion, as defined by this study. The remaining four milksheds in the province contain a combined 66 dairy producers.

The Okanagan Milkshed had a total Continuous Daily Quota (CDQ) allotment of 12,121 kg per day.

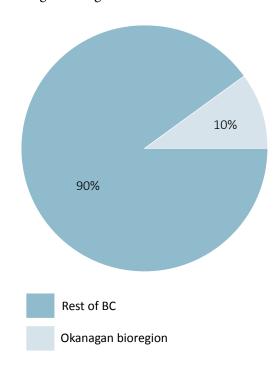
In order to work out the number of litres required for production by each quota holding producer the basic equation used by the milk marketing board is:

(CDQ+butterfat)×100=litre

Butterfat is the valuable part of the milk, therefore producers can produce fewer litres, with higher butterfat and earn the same, or more, than by producing more litres of liquid milk. In 2016-2017 the BC Milk Marketing Board reported an average butterfat of 3.6% (BC Milk Marketing Board, 2017).

According to the Kamloops Okanagan Dairy Association, an association representing producers in the local 'milkshed,' dairy production in the North Okanagan was an estimated 207,000 litres per day, or 75,555,000 litres per year. That means that approximately 10% of the provincial milk was produced in the Okanagan bioregion, all within the Regional District of the North Okanagan.

Figure 31: The amount of milk produced in the Okanagan bioregion



Source: Canadian Dairy Information Centre, 2018b; Kamloops Okanagan Dairy Association, 2018

Dairy Processors

In the 2016-2017 there were 38 licensed dairy processors in BC (BC Milk Marketing Board, 2017). Continuous growth in demand has tested the industry and processors are working at capacity according to the Milk Marketing Board's annual report as well as feedback from local producers. Evidence of the shortage of processing was demonstrated in the 2017 electrical outage in the Fraser Valley. Many of the province's dairy processing facilities were unable to operate and as a result liquid milk was dumped while valuable butterfat was saved for later processing.

BC dairy processors go through different regulations from other food processing plants, which includes mandatory licensing from the BC Centre for Disease Control (BC CDC, 2018). Like other food processing establishments they also have the option of registering with the CFIA, which allows them to sell across provincial and national borders. Currently only two of the Okanagan bioregion cheesemakers are listed with CFIA.

In 2017 a dairy plant in the TNRD, Blackwell Dairy, experienced a devastating fire and is still under reconstruction, limiting the local dairy processing capacity. In the CSRD there are two dairy processing plants; D. Dutchmen Dairy, which produces ice cream, sour cream, yogurt, cheese, butter and liquid milk, as well as Grassroots Dairy, which makes cheese, yogurt and liquid milk.

As far as the Okanagan bioregion is concerned there are six dairy processors (all cheese makers). Five of which work with cow's milk and one who makes goat cheese. These processors would all be considered artisanal, making specialty products in relatively small quantities.

We interviewed local cheesemakers to estimate the amount of processing activities in the Okanagan bioregion. Three of the five cheese makers working with cow's milk provided quantitative information; four of the five provided qualitative information; but we were unable to reach the sixth cheese maker (who makes goat cheese). When asked about challenges they cited barriers in distribution and competition as well as funding for facilities and lab testing. The processors who responded with quantitative information processed approximately 1,127,000 litres of milk per year; a fraction of the nearly 8 billion litres of milk produced annually in this province. This processing represents a drop in the bucket when considering that larger processors may process over a million litres per day (Pers. Comm., Dairy Producer, 2018).

Comparing dairy consumption to processing capacity is exceedingly complicated as raw liquid dairy gets turned into so many different products. At this point it is simplest to note the size of regional processing capacity in relation to the amount of milk produced in the Okanagan bioregion.

Other than several artisanal processors and the nearby presence of some small scale liquid milk processing, there is a notable lack of dairy processing in the region relative to the amount of milk production taking place.



4.2.5 Higher Level Processing

Higher level processing, in the context of this research project, includes a variety of items that are prepared for consumption and include several ingredients and specialized equipment or facilities. These are items that are not solely made with primary agricultural products, but that may incorporate some agricultural products (for example, salad dressing that is made with oil and vinegar from elsewhere, emulsified with fruit

puree made from Okanagan fruit – pasteurized to be made shelf stable). Meat processing, dairy processing and egg grading were covered in those respective sections, while this section will address items such as juice, jams and salad dressings. It will also touch briefly on the 'minimal processing' component of the spectrum in order to give a full overview of what is and what is not available in the Okanagan bioregion.

Institutional demand is high for processed foods and ingredients. For correctional facilities, dehydrated and otherwise processed potatoes have been mentioned as a high demand item, while diced, sliced and grated veggies appear frequently on both IHA and the OCC's purchasing reports alongside prepared egg products. (TRUE Consulting, 2012; Pers. Comm., 2018). While we must acknowledge the importance of these items, after a search for businesses and processing facilities in the Okanagan bioregion, and the interior of British Columbia, it is apparent that this type of processing is not locally available. The majority of the food processors in BC are located in the Lower Mainland.

IHA is uniquely positioned with several commissary kitchens throughout the Okanagan which have the dual roles of preparing and processing certain foods. One is located in Vernon and one in Penticton. Commissary kitchens are utilized to prepare soups and purées (of full meals for residents and patients who are unable to masticate) to many of the facilities that IHA operates. The existence of these commissary kitchens allows IHA to prepare more from scratch, rather than sourcing (purées and soups) from an outside company (Pers. Comm. IHA, 2017). Commissary kitchens represent a model for regionalized food processing for institutions.

The subject of having minimally processed (individual quality frozen berries, fruits and vegetables) arose in a community food forum discussion in Vernon. A small business owner who runs a catering company, explained how the availability of locally produced and processed items would allow her business to support

local producers for more of the year, something that they already strive to do as a small business in the Okanagan. The lack of minimal processing in the Okanagan is frequently cited as a limiting factor.

Despite the lack of some of these basic processing facilities, several types of higher level processing are present in the Okanagan bioregion. Notable companies include SunRype juice, as well as several medium scale processing companies. There are two mobile juicing businesses that operate throughout the Okanagan, offering on-farm juice making for orchardists wanting to add value-added products to their sales line, without having to invest in a facility. Little Creek Dressing, based in Kelowna, makes over 85,000 litres of salad dressing per year, selling around the province and across the country, while Summerland Sweets makes jams and syrups, many out of local fruits. Their products include a sugarfree or low-sugar line of fruit spreads and syrups, which may be appropriate for a healthcare facility or residential care home.

There is also OK Frozen Dough, which makes madeto-bake goods such as breads, buns and pastries. OK Frozen Dough, located in Armstrong, takes advantage of the relative proximity of Rogers' Flour Mill, also in Armstrong, and sources its flours right there. These products are just some of what the Okanagan processing sector offers.

Several of these medium and large scale facilities could fulfill certain needs for institutions if connections were made between businesses and certain challenges (ex. individual portion sizes) were effectively addressed.

In conclusion, based on preliminary investigations, it would seem that, were more higher level processing facilities to locate in the Okanagan they would have access to raw materials from the strong agricultural base and have the potential to meet a substantial portion of regional institutional demand not currently being met by local suppliers.

5. Okanagan Innovators - Business Profiles

In this chapter we selected seven businesses to showcase their stories, the supply chains they participate in and their innovative business practices. These business profiles represent a selection of local businesses that span the geography of the Okanagan bioregion. In selecting interviewees an attempt was made to capture a cross section of agricultural sectors, as well as size of businesses. Some of these businesses already participate in the institutional procurement supply chain, while others do not.

Their experiences serve to shed some light on both the challenges and opportunities faced by local producers and processors in participating in the institutional procurement supply chain, as well as highlighting a few of the emerging and innovative business models in the region. Many of the interviewees' experiences reinforce the challenges and opportunities listed in the paper, which were aggregated from over 90 different conversations.



The selected businesses are:

- Apple Barn (tree fruit producer)
- Corfes's Broiler Farm and Farmstrong Cider Co. (quota chicken grower and beverage manufacturer)
- Enderberry Farms (egg, fruit and vegetable producer)
- Okanagan Food Hub Cooperative (producers and distributor)
- Okanagan Mobile Juicing Inc. (beverage manufacturer/service provider)
- S&G Farms Ltd. (vegetable producer)
- Urban Harvest (distributor)

<u>Figure 32</u> illustrates the locations of these businesses in the Okanagan bioregion.

Figure 32: Location of Selected Innovative Businesses in the Okanagan bioregion.

Source: ISFS, 2018

5.1 The Apple Barn



Region: Okanagan- Similkameen

9

9100 Jones Flat Rd., Summerland, BC, V0H 1Z0



(250) 490-6158



www.facebook.com/ Apple-Barn-266424363308/

Photo source: Summerland Review

Billy Boerboom and his parents emigrated to Canada from Holland in 1976 and started a commercial fruit tree nursery in the fertile Jones Flat area of Summerland. Billy and his wife Shauna now live on the expanded property, where they raised their 3 (now adult) sons. What started as a nursery has had many iterations over the past few decades. It now includes 13 acres of high-density fruit trees, 5,000 sqft of cold storage, a thriving direct market, self-serve retail outlet, and a garden centre, which accounts for about 20% of the business.

"At the end of the day, I want to be remembered as a guy that did something good for people with my work. That's what it's all about."

- Billy Boerboom

On his 13 acres, Billy produces approximately 250,000 lbs (114,000 kgs) of fruit per year, 10 acres of which is apples, with a few acres of pears and cherries. Approximately 40% of his product is currently sold year-round at the popular farm gate "Apple Barn" stand. It is made up of a cold storage room with bulk fruit, a scale, and an honesty box. Other outlets include: two local grocery outlets, fruit peddlers who sell his fruit in Alberta, a raw dog food company, and some contract growing for two cideries.

Billy started the "Apple Barn" when BC Fruit Packers closed down in Summerland, exposing a market opportunity. The self-serve model came about in response to many requests to set aside fruit for customers to pick up at their convenience. While the honesty box has had some issues with theft in recent years, in general it has proved to be a model that works for Billy. In the late spring, Billy buys Voc, Controlled

Atmosphere fruit from BC Tree Fruits to offer to his customers after his own fruit is no longer in peak condition. In future, he plans to expand sales from his stand, eventually selling up to 70% through this direct retail channel.

While most of Billy's fruit is sold on-site, he does utilize the services of Okanagan Mobile Juicing (See their business profile below) to process approximately 5% of his product. Some of this juice is a custom press for a cidery, on Vancouver Island, while the rest is for his own use.

When asked about his interest in selling to larger distributors, he cited his inability to compete with larger growers and packing houses offering a waxed, stickered product in volume compared to his un-graded, farm-direct fruit. His desire to retain autonomy in all aspects of his business, from production to marketing was also a contributing factor as was his choice to continue to contribute to the local community and economy through his Apple Barn business. Currently, Billy donates over 12,000 lbs of fruit per year to local schools and community

organizations, in part for the marketing, but mostly due to his desire to give back. He employs 3 working mothers in his garden centre, and hires local high school students to help with the cherry harvest. He is also a volunteer firefighter and in 2015 was honoured with Summerland's Volunteer of the Year award. With his focus on community and his variety of connections to the local food network, an institutional procurement model operating at a local scale would be a much better fit with Billy's business and personal goals. The current centralized supply chain, including large-scale distributors, does little to further the goals he upholds. That scale of supply chain is not one he aims to participate in as it lacks the community and personal connections afforded through his direct market and charitable activities.

Billy's belief in constant innovation, his passion for growing, and his community-minded outlook continue to shape the business. He hopes to find a young couple in the future that he can mentor, to share his wisdom and enthusiasm for growing and learning. "At the end of the day, I want to be remembered as a guy that did something good for people with my work, That's what it's all about."

5.2 Corfes Broiler Farm & Farmstrong Cider Company



Photo source: http://farmstrongcider.com

Historical barn with a bright new roof and a harvest from Maw's orchard.

Halee Fried has been in the farming business her entire life. She grew up on a quota egg production farm, and she and her husband Jeff became new entrants with the Chicken Marketing Board in 1989. They started out by applying to the raffle program for quota. After winning the raffle, Halee and Jeff purchased 5,000 bird quota, built their barns, and started their operation with a total of 10,000 bird quota. The young couple started their farm in the Armstrong area, where Halee's parents owned a broiler operation. Halee and Jeff purchased her parents farm when they retired and that is where they farm today.

For Halee, farming is a career that allows a person to be "grounded in the ebb and flow of seasons as well as the ebb and flow of life." Having grown up on a farm Region: North Okanagan

- 3950 Wood Avenue, Armstrong, BC, V0E 1B2
- (250) 546-9732
- http://www.corfescompost.com/
- 4300 Maw Road, Armstrong, British Columbia V0E 1B2
- (250) 309-2609
- http://farmstrongcider.com/

that supported her family, she wanted to provide the same kind of lifestyle to her own children. To Halee, "farms big and small are all trying to feed people."

The broiler operation is the heart of their farming endeavours, but Halee and Jeff have tried numerous other farming businesses over the years. They purchased an 800 acre ranch near McBride that had some infrastructure, but needed a lot of improvements. They worked on the property for several years, eventually getting tired of spending "more time in a truck than a tractor" since McBride is six hours from their home, and farm, in the North Okanagan.

On the home farm they also grow grain and hay, and feed for the approximately 30 beef cattle. They have

For the chicken marketing board quota is actually allotted in kilograms, but then a bird equivalent is assigned per 8 week cycle throughout the year. The target production sizes may vary depending on market demand (ie birds are grown to a smaller average weight near Christmas when the demand for chicken is down and the demand for turkey is up).

also started composting their chicken manure and selling it to organic gardeners and vineyards who value having natural fertilizer for their to gardens, and crops. While this is only a fraction of the total business, it has allowed the Frieds to meet likeminded farmers and food producers throughout the Okanagan valley. Two of their sons are working on expanding the composting business. Three of their four children work full time on the farm, and are an active part of the succession plan.

After 30 years, the Frieds hold 70,000 bird quota, which they have a contract to sell to Colonial Farms, a CFIA inspected poultry processing plant in Armstrong. A contractor who works regularly with Colonial catches



Photo source: http://www.corfescompost.com



Apple harvest. Photo source: http://farmstrongcider.com

the birds and loads them into transport trucks to be taken for processing. Halee and Jeff have worked with different processors over the years. They say the current situation is ideal and avoids problems they have had in the past.

As a federally regulated plant, Colonial a local vendor for Sysco Kelowna, so chicken from Corfes Broiler Farm is likely making its way into the institutional supply chain, though this is difficult to verify.

The processing facility that now houses Colonial has been in Armstrong since the 1970s. At the time, there was a push to decrease the concentration of poultry farms at the coast, in part to reduce the risk of biosecurity events affecting the industry.

Eventually, the Fried family undertook an entirely new endeavour. They purchased an historic apple orchard that has been owned by the Maw family since 1910. Their cidery, The Farmstrong Cider Co. will roll out their first sales in late May, with a tasting room, to open in early June. Halee had the barn renovated and restored, installed cider-making equipment in the lower part and created a tasting room and gathering space in the rest. The first year they hired a local mobile juicer to juice all of the apples, which was then frozen for later use. They aimed to create a unique product, and to get people to come right to the orchard to try it.

Until their own production is up they are using some from their own orchard, while they will be buying the apples with higher tannins necessary for a good cider from other orchards. Challenges have included managing the apple orchard organically and Halee says they will still need to cost out whether it is a viable method when they start producing.

While separate and distinct from the broiler business, Halee sees the cidery as a part of her succession plan, as well as a continuation of her engagement in farming and the agricultural community of the Okanagan.

5.3 Enderberry Farm



Region: North Okanagan

64 Springbend Road, Enderby, BC, V0E 1V3



(250) 804-3822



www.enderberryfarm.ca/

Example of a CSA box contents Photo source: www.enderberryfarm.ca

Emily Jubenvill, her husband Owen, and their cofarmers, Britt and Gavin Wright, moved to their farm property just north of Enderby in 2015. The two couples have ambitious goals for the farm and have jumped right into a variety of enterprises. Emily started a mixed vegetable market garden in 2017, and Gavin and Britt plan to establish tree fruit and berry production in 2018. Berry types will include: strawberries, raspberries and blackberries. The orchard, when complete, will be a mix of apple, pear, plum, cherry, peach, apricot, and nectarine. The products are sold at their farm stand, farmers' markets in Revelstoke and Enderby, and through their community supported agriculture (CSA) program.

The two couples came to purchase land together in the face of prohibitively expensive property prices, moving from Vancouver to the interior to follow their farming dreams. The farm is the coming-together of different farm visions, and will ultimately be two separate registered businesses marketing products under the same brand. Owen and Gavin both work primarily off of the farm, while Britt will be moving towards working full time on the farm this spring as her one-year old enters daycare and her maternity leave ends.

Emily shared some of the farm's developments and direction, on-farm processing and all things eggs in a phone interview.

Enderberry Farm houses a flock of 65-99 chickens, 99 being the maximum allowable amount of layers without applying for a small lot permit or quota from the chicken marketing board. Their flock is made up of a mixture of heritage breeds including morans, easter egers, and americaunas, as well as more typical production breeds like rhode island reds, True North Heritage Hatchery's production red, light sussex, and more recently, isa browns. The heritage breeds are well-loved by customers, as they add a variety of coloured eggs to the mix (see attached photo), however over the last couple years, they have shown themselves to be demonstrably less hardy than the production breeds. Since all birds have access to pasture and outdoors throughout the seasons, the heritage breeds seemed to suffer more from the cold and stop laying eggs sooner. When purchasing replacement hens, they opted for more production varieties, including the isa brown.

When asked specifically about egg production on the farm and how it has gone, Emily said there are definite restrictions on the small-scale egg industry. From previous experience at farmers' markets and working in agriculture, eggs were obviously a popular item among consumers and while they might not turn a big profit, they definitely draw customers to their booth. She commented that eggs from pasture raised chickens in a flock of 99 or less are difficult to make profitable. The economy of scale for infrastructure, inputs and regular labour at this scale of production is not favourable. Emily and her business partners have always viewed the eggs as a draw for customers, but profitability must be taken into account as well. While there has been interest from small retailers and even local cafes in selling and using her eggs, since they are not going through a registered grading station she can only sell direct to customers. Becoming a registered shell egg station is a possibility that has been considered. Unfortunately, the estimated upgrade has costs associated that are prohibitive for a new small business where eggs only represent a portion of their products.

In terms of how to make egg production profitable, Emily posited that a doubling of the allowable number of hens under BC Egg regulations could make a big difference at such a small scale, and that changes to grading facility requirements and where farm fresh eggs can be sold would also help producers. Currently, Emily's business model includes some value-added products made from her produce, largely using seconds or culled produce. Her most popular value-added item is a tomato jam, for which she specifically grew 1,200 lbs of field tomatoes. In order to sell these products direct to consumers, she currently sends samples away for pH testing to ensure that they fall into the low-risk category according to the Centre for Disease Control. She and Owen look forward to pursuing further food safety certifications in order to sell to retail locations as this is a growing part of her business.

At this point in the business development of the market garden and other crops, scaling up to sell to a distributor is simply not feasible. While Emily expressed interest in this possibility, she also said that the relationship building and production volumes are not elements she can focus on right now. If she were to grow an extra 500 heads of lettuce for sale to a larger customer, but that sale fell through, she would not have the sales avenues to sell that volume elsewhere, or the time to develop new relationships on short notice.

Despite the full-time nature of her work on the farm, Emily does still hold a part time job as the regional coordinator for the Young Agrarians, a network of farmers devoted to sharing knowledge and resources and supporting new entrants to agriculture. Having been through the experience of shopping around for land and coming to a less conventional solution cooperating with co-farmers on the sale, she is uniquely qualified to address the needs of new entrants in the region.

5.4 Okanagan Food Hub Cooperative



Okanagan Food hub Co-op logo Photo source: www.OKFOODHUB.com

Part of it is right in the name – the Okanagan Food Hub Cooperative (OFHC) – is largely a producer-run co-op that aims to bring a variety of items produced in the Okanagan together for storage, sale and distribution. While the Co-op was officially, and legally, formed in 2016, they have recently arranged a lease on a location in Kelowna and aim to start sales in May of 2018, dependent on necessary renovations to their future location.

Initially the vision for this co-op came together as an offshoot of the Kelowna Farmers' Market. There were many vendors who saw the need for a sales venue year-round and with regular hours. One of the OFHC founders, Wolf Wesle, took the time to share some thoughts about the founding of the co-op and the hopes for the cooperative's future in the Okanagan food system.

Wesle cited studies of farmers' markets, namely a 2012 study of farmers' markets around BC conducted by UNBC. The study's results emphasized the economic importance of farmers' markets to their communities, but it also highlighted the fact that farmers' markets are

capturing a mere 1%-2% of food dollars being spent in BC communities. Wolf and other Kelowna Farmers' Market vendors tried to imagine how they could successfully help to grow that market share for local producers, and the OFHC was born.

The initial members did an assessment of their needs and decided that they could start with a minimum of 7 founding members to have a complete and operational board of directors.

They formalized the cooperative in order to be able to enter into discussions with authorities for things like business permits, accessing funding opportunities and laying out some policies for their organization. In part due to that formalization, OFHC received a \$30,000 grant from Growing Forward in order to undertake a strategic planning process. They hired Greenchain Consulting, who used available data to develop some directions for the co-op. It was made clear that the original idea of having a full time operational sales space, much like a grocery store, would have too much associated overhead, more than the co-op had at its disposal. As such, the direction of the cooperative shifted more to make use of online technology, namely the web-platform Local Line, which touts itself as an online farmers' market. This format would allow vendors to send their fresh lists - current lists of available product – to a central administrator who would be charged with updating the website and adding inventory. As customers order, they are able to select products from more than one vendor on one website, either picking up or receiving deliveries also in aggregate form. The online format would track inventory as sales were confirmed, alleviating that logistical difficulty for the administrator. Farmers would receive their orders for the week, and pick, produce and process according to the market needs, knowing that everything was sold.

For Wolfthis idea brings to light many more opportunities for local farmers who may be able to access different markets with larger customers, and have their product delivered, alongside the products of other vendors, to locations they would not have accessed as an individual business. Taking products from Kelowna to Big White (the nearby ski resort) was an example Wolf used in our discussion, highlighting the premium quality of the products featured by the cooperative. These products may have particular appeal for 'white tablecloth' clients (ie. fine dining restaurants) for whom marketing local food has become a part of their brand, and a part of the fine-dining market competition.

As far as criteria for producers who are welcome in the OFHC, they want to be inclusive of the whole of the Okanagan, including the Similkameen valley, and from the border to Revelstoke, sourcing first from this region and second from the rest of BC. While their selection may be more limited in the winter, the membership of producers such as cheesemakers, farmers raising chicken and pork, sausage makers and other specialty items like gelato mean that they will always have a variety of items to offer their clientele, in addition to stored fruit and vegetable crops.

There are no particular certifications required, though Wolf did acknowledge that a number of the vendors currently working together are certified organic. Their goal is to have a wide variety of products, which seems readily achievable in this fertile valley. The emphasis, again, is on high-end, premium products that are ethically produced. Two years after starting, there are now 25 producer-members who range from poultry growers to ice cream makers, juice to salsa producers, fruit growers, pork producers, cheesemakers and vegetable growers. Non-producers can also purchase memberships in order to support the initiative, and currently there are approximately 15 non-producer members who have purchased shares in support of the OFHC.

Currently, with the help of a supportive landlord there are imminent plans to have the space renovated with the

necessary additions of a cooler and freezer. Depending on when these renovations are complete they will move into the space and start sales, potentially as early as May of 2018. The producer-members have tentatively agreed on a 20% margin to go to the cooperative to cover operation and administrative costs and need to be able to offer wholesale prices taking this into account. This still allows a much greater margin than what would be offered by most distributors or even large retailers.

Beyond the strategic plan, the OFHC is still in need of a formal business plan, as well as some additional start-up capital to pay an administrator for the online platform. The cooperative would be interested in pursuing HACCP accreditation for packaging produce, as well as exploring the potential to be registered by the CanadaGAP program. Both of those programs could allow access to larger marketplaces, including, potentially, local institutions.

While both suppliers and purchasers benefit from this aggregation of goods in terms of reduced logistics for ordering, invoicing, delivery and/or pick-up, it is still a very significant amount of work to purchase the web platform, access funding for the lease and the initial employees. With a promising season ahead this cooperative will be a business to watch as it starts and grows in the Okanagan.

5.5 Okanagan Mobile Juicing Inc.



The 2017 iteration of the mobile juicing trailer. Photo source: www.mobilejuicing.com

Okanagan Mobile Juicing is run by partners Kristen and Remo Trovato. Their juicing adventure started in 2012 when they purchased a unit, incorporated their business and started offering the service of making apple juice for growers on their own farms. The first year of production was done with a simple unit that involved grinding the fruit into a pomace, or mash, which was then pressed between layers in a pack press. The juice is pasteurized and then packaged first into a bag with a one-way valve, and placed in a cardboard box.

Since that first year, the business has evolved as fruit growing and the beverage-making industry changes in the Okanagan. They began operating at a maximum capacity of 300 litres of juice per hour and processing only apples. They require a minimum of 10 bins (approximately 8,000 lbs) of fruit to move their unit to a new location. Smaller producers are able to bring their fruit to the mobile unit to be processed. They are certified with Pacific Agricultural Certification Society (PACS) – an organic certification body – that has allowed them to process for organic growers and have the final product be sold as certified organic.

In the fall of 2013, Kristen and Remo increased their capacity, purchasing a belt press and a de-stoner. The

Region: North Okanagan



Vernon, BC



www.mobilejuicing.com



www.juicing.systems

belt-press increased their processing capacity to 500 litres per hour. 2014 was the first year they were set up to do cherries, which require a slightly different process. Cherries are first destoned and the pomace is left overnight with added enzymes. The enzymes help to separate the juice from the pomace, which is then siphoned off of the bottom of the holding tanks. The juice then goes through a pasteurization process to be packaged. The purchase of the de-stoner also allowed them to expand to other tree fruits including peaches, plums and apricots. They have even been approached by SunRype to do some custom peach pressing.

In the winter of 2014/2015 the Trovato's sold their first mobile unit and ordered a complete set of new equipment, including a fruit elevator (to take the manual labour out of loading the machine). They also started selling equipment from that manufacturer in North America, continuing to do so and eventually incorporating a second business in 2016. They deal not only in juice-making equipment, but also in dehydrators.

With this burgeoning trend, Okanagan Mobile Juicing found a new niche, processing bulk raw juice for ciders, who need unpasteurized product. Many

cideries, may not have the start-up funds to purchase processing equipment which means their equipment is in high demand. In addition to tree fruits, they have also traveled to other regions to do specialty juices, including blackberry and blueberry juice. For blueberries they offer two products; a straight juice in addition to a 'smoothie' that still includes the pulp.

The last increase to capacity took place after the sale of their second unit in early 2017, when they grew yet again to be able to handle 1200 litres of juice per hour. The minimum fruit volume has remained at 10 bins, however they are now able to process that quantity in about two hours. Their unit is CFIA approved however, th Interior Health Authority regulates their product. As a mobile facility, they have faced challenges navigating CFIA standards regarding source water as well as other building and kitchen requirements that are not compatible with a mobile unit. This technically limits the sale of the products they make for their clients to the province of BC. They inform their clients of the regulations and limitations around where the product can be sold, but it is ultimately the client who own the juice. She knows of clients who export juice to Asia, and domestically Winnipeg and Toronto.

With the completion of the Post Farm Food Safety and Traceability Program they accessed further funding which allowed them to hire a consultant and complete a Hazard Analysis Critical Control Point (HACCP) plan. The HACCP plan was approved for pressing, pasteurization and packaging in the unit in the fall of 2017. Kristen says this would have been prohibitively expensive without financial support.

With mobile juicing, local growers are able to turn a by-product into a value-added product. In the early days of Okanagan Mobile Juicing, Kristen purchased apples to practice running the unit and then went around to retailers setting up a booth and offering samples. Until now, their business model has focused on offering a service and supporting the agricultural

community in the Okanagan, however as demand for cherry juice has increased they have been approached by several individuals interested in purchasing juice wholesale.

While processing and marketing wholesale juice is a promising business opportunity, Kristen and Remo have decided that it does not fit with the scale of their business right now. In order to process the quantities required (which in that case was upwards of 48,000 lbs of fruit), they would need a bricks and mortar operation. Such a location would allow them to receive the necessary CFIA approval for export, as well as making it possible to have variable container sizes, possibly even individual serving sizes. Blueberry producers, and juice wholesalers, have also requested individual serving size containers for their high-end and expensive products.

In addition to being two hard working entrepreneurs, Remo and Kristen have a young family and see the importance of enjoying this time with their children. They see their primary role as working with the agricultural community where they provide a necessary service, while running a profitable business themselves. To Kristen's knowledge there are currently four similar units operating in BC; two in the Okanagan, one in the Kootenays, and one on Vancouver Island. They are meeting the capacity, but Okanagan Mobile Juicing always sees room for growth and development. The next growth opportunity would be wholesale juice production, potentially even supplying local institutions. This would require a more than doubling current capacity, a stationary juicing facility and all associated certifications.

Based on their development over the last six years, these local Okanagan juicers should not be underestimated. Their 2017 production volumes have been 87,600 L of cherry juice and 263,100 L of apple juice. Total raw product processed was 390,000 lbs of cherries, 890,000 lbs of apples as well 210,000 lb of peaches.

5.6 S & G Farms Ltd.



Photo source: http://www.sandgfarm.com

Region: Okanagan- Similkameen



387th Park Rill Road, Oliver, BC, VOH 1T7



(250) 498-7028



www.sandgfarm.com

Founded in 1997, S & G Farms is a family-run farm located in Oliver, BC, with two generations currently active in the business. Inderjit Sandhu and his wife Hervinder Sandhu emigrated from India in 1992 and started their first 25 acre farm in 1995. They started S&G Farms in 1997, and Inderjit now acts as president of the incorporated business. They have a staff of 40 full time employees who join them from March to October, with Inderjit and Hervinder taking care of the business through the rest of the year. Together, they now farm 55 acres of crops and have just integrated greenhouses onto the farm growing a variety of vegetables, primarily focusing on hot-weather crops that grow well in Oliver's arid landscape.

When the farm started just over 30 years ago, they grew only onions and sweet corn, selling direct to consumers at farmers' markets and to smaller retail outlets. The crops have evolved over time to what they found is best suited to growing in their area, as well as where the market demand has been. In 2017 they grew 649 800 lbs (295,363.6 kg) of field tomatoes on 15 acres. Peppers are the next largest crop followed by eggplants, melons, cabbage and zucchini.

Since 2004, their increase in volume of production caused them to shift to marketing their products primarily to large retail outlets that now include Loblaws, BuyLow, Sobeys and IGA, both locally and as far away as Calgary. They are also listed by Sysco Kelowna as a local vendor, in addition to supplying Sysco Victoria. For specific times in the year, they are one of Sysco Kelowna's main suppliers of field tomatoes and peppers, meaning that it is very likely that some of this produce is purchased by institutions in the region.

While they have supplied Sysco for 14 years (since 2004) they became CanadaGAP certified only around ten years ago, as it was not a requirement for Sysco's vendors prior to that time. While Inderjit acknowledged that there are costs associated with the certification, the necessity outweighed the costs, and the process of certification itself was not difficult.

Inderjit cited access to land as being one of the main challenges facing the operation. He would like to expand, however there is simply no arable farm land on the property market in his area. Prior to the temporary foreign worker program coming online with in 2004, finding employees was difficult for S&G farms. The program has fulfilled a need for S&G Farms, with 25 workers coming from Mexico in March and staying to October. In addition to the foreign workers, they have 15 local employees who work with them for the same duration, some joining a little later for the busy harvest season.

Just recently they discussed the possibility of selling processed foods to Sobeys, which would likely require a partnership with a processing facility in the lower mainland, which is currently where the only processing facilities are located in the province for fresh fruit and vegetables. This would potentially be a market destination for seconds, or b-grade vegetables that could then be chopped and frozen for convenient consumer use. While this plan is not imminent, it is a possibility for future consideration. Currently many of their leftover products go to food banks and charities in the local community.

Another opportunity Inderjit sees in terms of his business is season extension through the use of more greenhouses and high tunnels. This year they will be building high tunnels across an additional acre of the farm in order to put it into extended use, which Inderjit expects will allow them to keep harvesting until mid-November.

While S&G farms has not undertaken their own processing, they currently do sell a small amount of product to local processors, including Taste of the Okanagan, who then turns their products into chutneys, salsas and jams.

This hot-crop vegetable farm is one of a kind in the Okanagan in terms of the supply chain and scale represented by it and its customers.

5.7 Urban Harvest Delivery



Photo source: Urban Harvest, 2018

Region: Central Okanagan

806-A Crowley Avenue, Kelowna, BC, V1Y 7G7

(250) 868-2704

www.urbanharvest.ca/

Lisa McIntosh describes her business as a "millennium baby." Started in 2000 as a means to create a livelihood for herself, and her then partner. Urban Harvest is a weekly food box program bringing together both local and imported foods. Boxes are ordered online and then delivered right to the consumers' doors in Rubbermaid totes. In an average week, the business serves over 400 customers, with more coming to purchase direct from their warehouse during their weekly warehouse sale. They have approximately 1200 active customers who use their services.

With a background in community economic development and a strong interest in food security, Lisa saw a market gap when she settled in Kelowna. She attended SFU, completing a degree in Sociology and Anthropology, and had actively worked on food systems projects, including writing a grant that eventually resulted in the founding of the Coquitlam Farmers' Market. She then took on an internship with Community Futures in Kelowna, followed by a job working with youth in Victoria at Life Cycles, a non-

profit society that works to build community and a healthy food system.

Moving back to Kelowna, Lisa was aware of the supports out there for young entrepreneurs. She had seen successful business models in Victoria's Fresh Piks Organics food box program as well as Vancouver's Spud. Spud has since purchased and acquired Fresh Piks. These models offer local foods to a wider variety of customers and provide an outlet for local farmers throughout the year. Lisa went through the Community Futures business development program to come up with a business plan. The main tenets of the business focus on organic produce. Now, Lisa has expanded to carry bread, cheese and coffee, all locally made (or roasted).

In September, when she said local purchases are at their peak, 90% of the money spent goes to BC based producers and processors. The vast majority of these suppliers are located within the Okanagan bioregion, with a few producers located in the Kootenays.

At this point, Lisa's business supports approximately 50 local producers within the Okanagan bioregion throughout the year. On a weekly basis customers have a choice of the standard box (\$35), or family box (\$45), which include 10 and 15 items respectively, and feature (for the month of March) four and five local products respectively, from three different local suppliers. In the more fruitful summer months the box may feature 10-12 local suppliers on a weekly basis, some of whom may be offering more than one item. The standard box is made up of 100% local items from approximately mid-July to mid-December. With a lengthy list of established local vendors, helping those producers grow and flourish is central to her business.

Urban Harvest is recognized as a positive outlet and addition to their existing marketing channels used by local producers. Having an outlet to sell a bulk amounts of a given product, is a welcome addition to additional marketing challenges including farmers markets, and Community Supported Agriculture (CSA) programs.



Photo source: Urban Harvest, 2018

While there is no formal written policy around procurement, Lisa strives to always buy local from the Okanagan first, then from BC, and finally from abroad. Even when considering imported foods, she has limited procurement, favouring first North, and then South America. Lisa herself said that if she has an informal agreement with a local grower to purchase a specific product, for example, spinach, she will always go forward with that purchase before turning to another supplier, even if another supplier is offering a lower price.

Since its inception, Urban Harvest has relied on an online platform that has become more sophisticated over time. Customers can now customize the 'standard box'. One significant change has made customization easier, and she is able to put local products always at the forefront, even if they may be less recognizable. For example, kohlrabi or celeriac may feature in several of the fall and winter boxes.

Employing a total of 13 people, including herself, Lisa says Urban Harvest provides 7-8 full time equivalent jobs. Although there is room for expansion, Lisa is just not interested in the common business model of endless growth. Lisa sees Urban Harvest as "part of a larger food web," and says she is happy to refer people to other food sources in the community. Over the 18 years that Urban Harvest has been operating there have been many competed services have entered the market, but Urban Harvest's customer base has remained relatively stable.

The scale of institutional procurement is out of the scope of Urban Harvest at this point. There are a number of limitations, among them a desire to stay true to their customers, but also a very limited amount of storage and cooler space in their warehouse. While Lisa would love to hear about growth in the sale of locally produced foods, this is not a part of her business plan. She is working to maintain what she has built at its current level, where she feels her business can provide an excellent service and good customer service as well.



6. Barriers & Opportunities

In the Okanagan bioregion, barriers to increasing the procurement of local foods by institutions exist, but so do opportunities. This chapter discusses these gaps and opportunities, based upon information collected in interviews with local producers and processors in the region. Research is also based upon secondary data gathered by the research team throughout the course of this project.

Our efforts to gather information included both random sampling (of those farms included in the directory, as discussed in previous sections) as well as a snowball approach, locating willing participants through previous interviewees. While we did reach out to a total of over 50 producers (10% of our list), 37 were willing to share information with us, varying from production volumes to challenges and opportunities for their particular business or industry. In terms of post-production businesses that include food processing in addition to distributors and storage and warehousing, we contacted 75 businesses and successfully connected with 58. Those 75 businesses represent over 20% of the complete list of postproduction businesses in our directory. Important information was also collected by contacting producer associations, including BC Egg, the BC Chicken Marketing Commission, the BC Dairy Association, the Vegetable Marketing Commission, BC Fruit Growers' Association, BC Cattlemen's Association and other industry experts, including government agrologists specializing in range lands and tree fruits.

Interviews were conducted by telephone and inperson from November 2017 through March 2018. In addition to those businesses, individuals and associations listed above, we also spoke with officials representing institutions in different capacities, from executive chefs and managers of procurement, to the warden of the correctional centres, and local City officials. In total, interviews conducted exceeded one hundred individuals, some of whom we spoke with on numerous occasions.

Some sectors of the Okanagan food system were easier to isolate, and in such cases we attempted to approach all of the actors involved. For example, in terms of meat processing, we accessed the facility inspection reports from Interior Health, as well as the list of BC abattoirs from the Ministry of Agriculture. We also included federally regulated facilities under the jurisdiction of the CFIA. Despite attempts to get complete information, there were business owners who were not inclined to sharing information or did not feel they had time to participate. There were also a few producers from whom we received no response. Because of the differing circumstances from industry to industry, the challenges and opportunities included in this paper are listed loosely by industry, with some spanning multiple agricultural sectors. First, we describe general gaps and barriers in terms of increasing the local procurement of food by institutions. Next, we describe challenges and gaps that exist within specific agricultural production and post-production sectors in the Okanagan bioregion. While many of these can act as barriers to institutional procurement, they may also have broader sector development and economic opportunity implications.

It must be noted that the description of these gaps and barriers takes for granted the current institutional supply chain, which relies on the use of large distributors. While other supply chains are possible, and precedents exist (see Burlington Hospital's partnership with local producer-cooperatives for procurement), this is the dominant form of institutional procurement in the Canadian context and perhaps especially among public institutions (Lynch et al, 2015). Significant regulatory restrictions on local food procurement are imposed by several current trade agreements. We will now provide a brief overview of those restrictions, which impact Canada or BC as a whole, before discussing more barriers specific to the Okanagan and the institutional examples discussed in the previous brief.

6.1 Trade Agreements and Institutional Food Procurement

A combined effort by Food Secure Canada and the McConnell Foundation resulted in an article entitled "Purchasing Power: 10 Lessons on Getting More Local, Sustainable and Delicious Food in Schools, Hospitals and Campuses," which lists many of the barriers and challenges to getting more local food into institutional supply chains (Reynolds et al, 2017). Chief among them is the Canadian Free Trade Agreement (CFTA), which dates from 2017 (previously the Agreement on Internal Trade). In part, the CFTA regulates the thresholds for when requests for proposals (RFPs) are required versus invitations to bid or no contract at all. While internal institutional policies and provincial policies also play a role in the procurement process for both goods and services, the CFTA states that the contract value determines whether the contract requires the issuing of invitations to bid (\$25,000-\$100,000) or a full RFP process (\$100,000 or more) (Reynolds et al, 2017). Once an invitation to bid is made, the bids must be assessed fairly regardless of where the products come from, in accordance with relevant trade agreements. This means that according to the criteria in the RFP (often heavily weighted towards lowest cost) one cannot prioritize a contract with local products over a cheaper option from further away. There are groups actively working to change the standards and how RFPs are written to incorporate local food into the criteria (Nourish, 2017).

In addition to this domestic trade agreement, there are also international trade agreement conditions that can have dramatic effects on institutional food procurement. The World Trade Organization's 'Agreement on Agriculture' ensures that no signatory country may give 'unfair advantage' to their agricultural industry through subsidies or other means (Milne, 2007a). While there are some allowances given in order to encourage environmental stewardship and protection, these limitations to the supports governments can offer do have real implications in regard to the competitive capacity of the regional agricultural industry (Milne, 2007a). This may result in local/regional pricing structures not being able to compete against low cost imports for contracts.

With international trade agreements (the North American Free Trade Agreement - NAFTA and the World Trade Organization (WTO)'s Agreement on Agriculture) in place, local small and medium scale producers will find themselves competing with the prices of the largest, most economically efficient producers from around the world (Milne, 2017b). Trade agreements stipulate that goods must be treated in a 'non-discriminatory way,' meaning that a local bidder on a procurement contract may not be prioritized by virtue of being local. They must be assessed on the same grounds as any other bid or proposal submitted. The Trade Investment and Labour Mobility Agreement (previously the BC-Alberta Trade, Investment and Labour Mobility Agreement, with Saskatchewan as an additional signatory) came into effect in 2010 and has similar conditions to NAFTA and the WTO, specifying that goods must be treated in a non-discriminatory way, whether or not they are local (Milne, 2007b).

These significant regulatory challenges cannot be affected or changed at a regional, or even provincial level in some cases – however, if institutional procurement is carried out in a decentralized way, with smaller contract values and more autonomy for regions or institutions, the regulations may not apply at all.

At this point in time, as noted above, the supply chain to institutions is heavily reliant on the participation of broadline distributors (e.g. Sysco) that offer a range of products to institutions at a low cost. These distributors are often supplying products that are regulated by contract specifications with different GPOs.

6.2 Barriers

From a production perspective, barriers/gaps that impede the provisioning of product to larger distributors that service institutions include::

- Institutional Food Safety Regulations
- Certification Requirements
- Insurance Requirements
- Market Entry
- Volume Requirements
- Logistical Barriers
- Price Point
- Lack of Post-production Facilities
- Other Challenges

6.2.1 Institutional Food Safety Certifications

Institutions require that stringent food safety regulations be met (including CanadaGAP, described below). While their distributor may carry products from an IHA inspected and regulated kitchen, or meat slaughtered and processed in a provincially regulated

facility, according to internal institutional policies, everything destined for large public institutions (i.e. correctional centres and healthcare facilities) must be federally regulated and meet Canadian Food Inspection Agency standards. In the case of meat in particular, this greatly limits what can be procured in the Okanagan bioregion, even from BC sources. For example, there is only one federally regulated plant that processes beef currently operating in BC, which also happens to be located in the north part of the Okanagan bioregion. This facility (Lambert Creek Organic Meats), however, specializes in organic beef, which would be sold at a price-point that would likely be unacceptable for current institutional budgets, except perhaps in exceptional circumstances, or for special events.

6.2.2 Certification Requirements

Currently, large distributors like Sysco require their producers of fruit and vegetables to be certified under the CanadaGAP program, an on-farm food safety monitoring program specifically for fruit and vegetable harvest and packing that ensures there is adequate sanitation for farm workers, and that packing facilities and packaging are up to standard. This is because it is the distributors who are responsible for traceability and potentially are liable in the event of a food safety issue. As mentioned in the detailed description below, going through this accreditation program has regular annual costs associated, in addition to the cost of having an inspector visit the farm. While this may be feasible for some farms, for others it could be a prohibitively expensive process necessary for only a portion of their sales. Stipulations according to CanadaGAP include having a fully enclosed packing house, when many producers may pack in a small three-sided building. Therefore, the GAP certification requirement by IHA and the large distributor effectively alienates many smaller, regional producers from supplying provincial institutions.

There are 422 CanadaGAP certified businesses in BC and 50 in the Okanagan bioregion. These 50 farms

therefore represent the total capacity of the Okanagan bioregion to supply specific institutions ordering through large distributors. <u>Table 5</u> and <u>Figure 33</u> present the list of GAP certified producers and their locations in the Okanagan bioregion. (The numbers in the table correlate with location numbers on the map.) Note that tree fruit producers are overwhelmingly represented on this list. The Regional District of North Okanagan currently does not have any producers with CanadaGAP certification.

6.2.3 Insurance Coverage

In addition to fulfilling specific food safety requirements, vendors to distributors are required to carry a minimum amount of insurance. This minimum may exceed what a farm would normally acquire in terms of farm liability insurance and carry an associated increase in cost to the primary producer.

Table 5: Producers with CanadaGap Certification in the Okanagan Bioregion, 2017.

Source: CanAgPlus, 2017; Pers. comm. with producers, 2018.

No.	Farm Name	No.	Farm Name
1	Tangaro Ventures Ltd.	26	Tony Antunes
2	BC Tree Fruit Cooperative	27	Odyssey Ventures Ltd.
3	Bahia Orchard	28	Gian Dhaliwal
4	De Simone Farms Ltd.	29	Duarte Orchards Ltd.
5	BC Tree Fruits - Packers and Storage	30	SM Produce Ltd.
6	Bonn Orchards	31	Fairview Orchards Ltd.
7	Sperling Vineyards	32	Okanagan Sunshine Fruit Packer Ltd.
8	Ocean Fruit Inc.	33	CFP Consolidated Fruit Packers
9	Ajay Boparai Enterprises Ltd.	34	Sandhu Greenhouses & Nursery Ltd.
10	BK Orchards	35	Lual Orchards Ltd.
11	J&I Relvas Orchards Ltd.	36	Lakhvir Singh Sidhu
12	Laughing Coyotes Orchards Ltd.	37	Best Valley Produce
13	Danninger Orchards	38	Sapinder and Manpreet Tiwana
14	Secrest Organic Produce Ltd.	39	Dawson Farms Ltd.
15	Lasser Produce	40	James & Mary Anna Campbell
16	K Mountain Produce	41	Fernandes Farms Ltd.
17	Lidder Farms	42	Brar Orchards
18	B&J Bengag Farms	43	Rajinder & Ramandeep Brar
19	Direct Organics Plus Ltd.	44	Tony dos Santos
20	George and Charlene McGinn	45	Aujla Brothers Greenhouses Ltd.
21	JNG Living Tree Farm Ltd.	46	Manmohan Singh Gill
22	Lopes Orchard Ltd.	47	Desert Produce
23	Blossom River Organics	48	Kailay Orchard Ltd.
24	S&G Farms Ltd.	49	Okanagan Similkameen Enterprises*
25	Okanagan Harvest	50	Lidhar Farms*

6.2.4 **Market Entry**

Because distributors seek an 'optimal assortment' it may be challenging for a grower producing a common product to get onboard with a distributor. If the distributor already carries a comparable product from a local grower, they will not consider a second producer. Procurement of new products from new producers is driven by the distributors' need, as well as by their clients' demands. Because of varying definitions of local, this means that an Okanagan bioregion potato producer would be in competition with a potato producer from Delta, where far greater volumes of potatoes are grown. Both producers would be considered "local" by both the distributor and many of its clients, and would be included on the list of local vendors accessible to clients. When

a distributor is looking for new vendors, they may issue a personal invitation to a vendor to see if they are interested in joining, or a vendor may approach a distributor with a new product or samples they want to add to the distributor's catalogue.

Volume Requirements 6.2.5

Distributors emphasized the need for consistency in terms of procuring from local sources. This was mentioned both in terms of consistency of product quality, but also consistency in terms of volumes received or available. Since a single distributor may service hundreds of different clients regularly, these products are not all destined for local institutions, nor are they earmarked for particular customers. At certain times of the year, the majority of apples or tomatoes

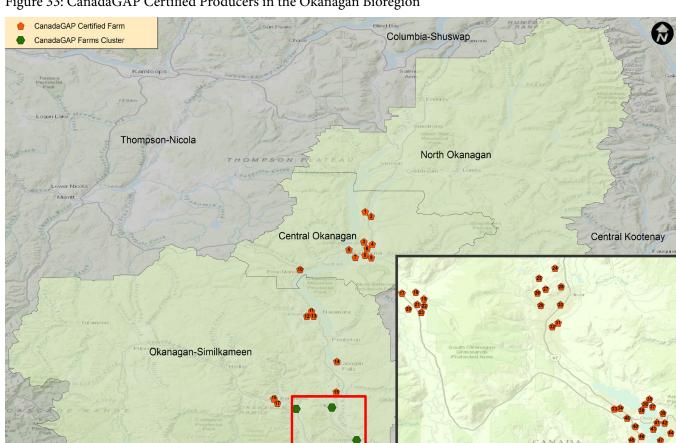


Figure 33: CanadaGAP Certified Producers in the Okanagan Bioregion

Source: CanAgPlus, 2017; Pers. comm. with producers, 2018

may be available primarily from local vendors, but as the season progresses, the distributor will import or seek alternative sources. While the largest distributor in the area, Sysco Kelowna, does provide clients with a list of the local suppliers they work with, it is limited in terms of product availability.

As mentioned above, distributors seek an 'optimal assortment' of goods, meaning that they prioritize procurement of products not already available to their customers through other sources, and will not take on a second vendor for a product they already source locally in sufficient quantity. This approach to procurement ensures that they are a 'one-stop-shop' for their clients, and simplifies their sourcing of product.

6.2.6 Logistical Barriers

Distributors operate out of central locations. In some cases they may arrange pick-ups with a farm, but in most cases the farm may need to arrange transport for a volume of product(s) from their farm to the distributor's warehouse. There may be stipulations around delivery including timing, and the location of the warehouse may be hours from the producers' or potential vendors farms. For example, producers in the Regional District of North Okanagan would need to have the time and transportation options available to drive approximately 2.5 hours round trip to deliver their goods to Sysco's facility in Kelowna.

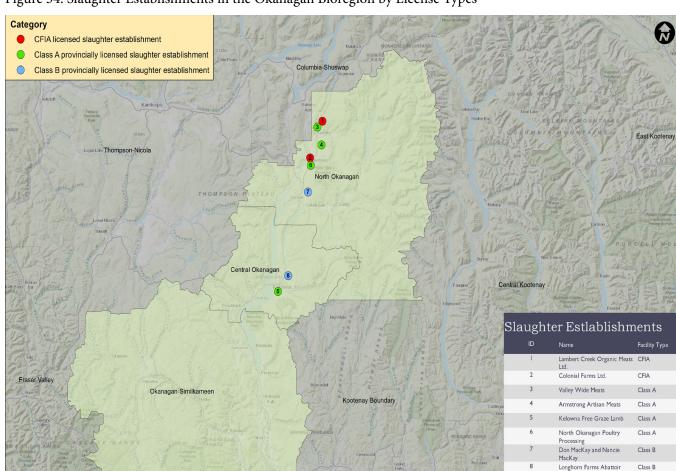


Figure 34: Slaughter Establishments in the Okanagan Bioregion by License Types

Source: CFIA, 2016; IHA, 2017

6.2.7 Price Point

In addition to many of the barriers and challenges listed above, the price point offered by distributors is unappealing/ prohibitive to many small and mediumscale producers. It was perhaps the most commonly mentioned reason in interviews that producers opted for other sales channels over wholesale distributors. The added margins afforded by retail and directmarket channels make it worth the time and effort for many to invest in these sales avenues. When asked whether they would be interested in supplying large distributors or institutions, some businesses were interested in expanding in this direction, while many stated that they are not interested in producing a large enough volume of a single crop to make selling to a distributor worthwhile. These perspectives varied a lot by the size of business and their volume of production. For some larger farms and processors, doing direct marketing is not within their resources. These producers may choose to partner with distributors, who for them fulfill an essential role

It appears that the current system for institutional procurement is predisposed to favor large distributors because of their relatively low costs and purchasing convenience. These distributors in turn may favor larger scale suppliers because of their uniform and consistent supply as well as lower prices. In other words, local/regional producers, many of whom are operating at a small or medium scale, are largely unable to participate in the system.

6.2.8 Lack of Post-Production Facilities

As previously mentioned, institutional clients largely procure product that has undergone some level of processing (e.g. cut lettuce, dehydrated potatoes,

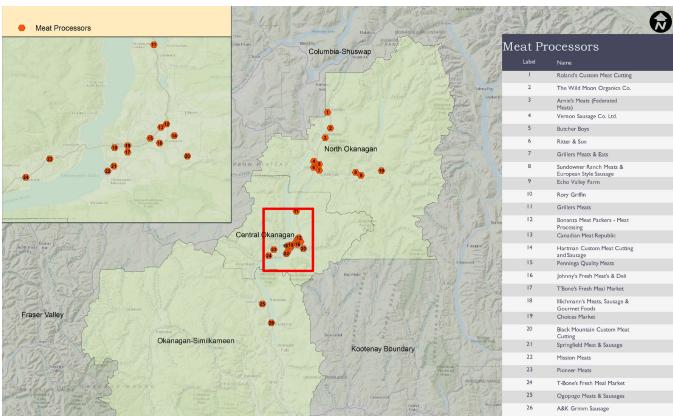


Figure 35: IHA Licensed Meat Processors in the Okanagan Bioregion

Source: IHA, 2018

frozen fruit). In our research, there were no facilities performing this kind of post-production processing of fruits and vegetables in the Okanagan bioregion. With the closest facilities being located in the Lower Mainland, most Okanagan bioregion businesses do not bother to send their product so far or do not have the production volumes to make transport cost-effective. However, some larger cherry orchards and packing houses did mention that they will send cull cherries to be frozen and sold at facilities in the Lower Mainland. Similarly, even though there may be processors located in the region for certain products (e.g. fruit juice), institutions typically demand certain specifications in regard to portion size and packaging (individual serving sizes were often mentioned as necessary items in discussions with institutions) that are not produced by these processors. Other processors stated they were unwilling to produce single-serving packaging (for

small items like salad dressing) because of the ecological impact of additional plastic. In their own searches they were unable to find an eco-friendly alternative. This too represents an important consideration- institutional procurement of foods is currently reliant on single serve packaging. There are clear environmental implications to these requirements and they should be reconsidered.

As well, in certain sectors there are no processing facilities at all in the region, for example: fluid milk dairy, CFIA inspected pork slaughter, and CFIA processed egg station

Federally regulated meat processing is limited to one poultry plant in Armstrong that slaughters and processes only chickens, and one beef slaughter and processing plant (previously mentioned), specializing in organic meat. Only these two facilities can potentially supply beef and poultry to institutions.

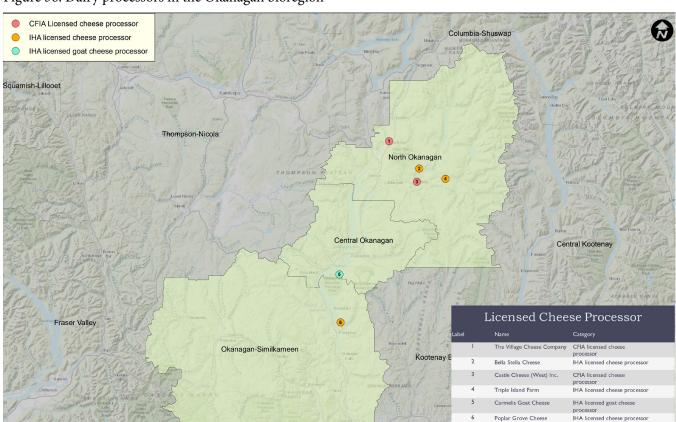


Figure 36: Dairy processors in the Okanagan bioregion

Source: CFIA, 2017; IHA, 2018

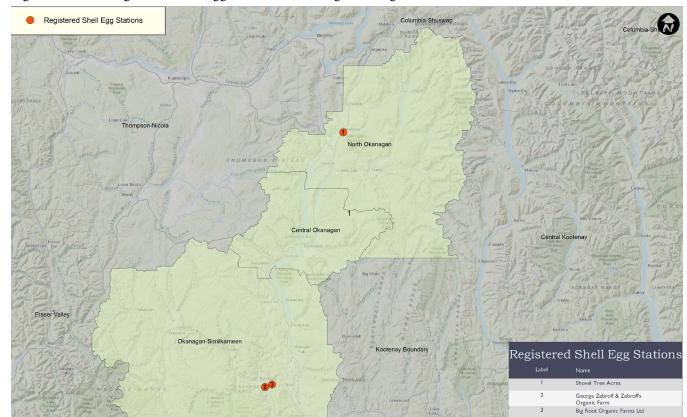


Figure 37: CFIA Registered Shell Egg Stations in Okanagan Bioregion

Source: CFIA, 2017; IHA, 2018

In addition to CFIA registered facilities, there are a number of provincially licensed Class A and B poultry and red meat abattoirs in the Okanagan bioregion. However, these facilities cannot supply to institutions as they must meet provincial standards, and there must always be a meat inspector (employed by the Ministry of Agriculture) onsite when slaughter is underway. The inspector checks each animal for food safety concerns, and the resulting meat and meat products may be sold anywhere in BC. There are four such facilities located in the Regional District of North Okanagan (RDNO), as well as two facilities located in Regional District of Central Okanagan (RDCO). The Regional District of Okanagan Similkameen (RDOS) does not have any slaughter facilities. In addition to slaughter establishments, slaughtered animals can be further processed including cut and wrap and making sausage. Figure 35 (page 70) illustrates the location of IHA licensed meat processors. These facilities however cannot be suppliers to most institutional procurement supply chains because they do not meet the regulatory standards (meat must be slaughtered in a federally inspected facility). As mentioned earlier, there is not a fluid milk processor in the Okanagan bioregion. However, there are two CFIA licensed cheese processors that could potentially be a supplier to institutions. Additionally, there are four other IHA licensed facilities as shown in Figure 36 (page 71).

Figure 37 (page 72) illustrates the location of the three registered shell egg stations (ie egg grading stations) in the Okanagan bioregion. There is no such facility in the RDCO. There are no processed egg stations in the Okanagan bioregion. There is only one egg processing facility, or 'processed egg station' in BC registered with the CFIA, and it is located in Abbotsford. Therefore, any eggs destined to be processed (such as to make liquid egg white) must be transported to Abbotsford. Many

of the eggs sent to the processing facility may have not meet the grade standards for the regular market.

Related to the lack of processors, is the lack of food safety testing facilities in the region. Increased access to lab testing for food products would not only be attractive to new businesses, it would facilitate the entry of existing food processors into the institutional supply chain.

6.2.9 Other Challenges - by Sector

Other challenges that came up frequently in discussion with producers and processors included the low price point of competing products being brought to the region from other provinces in Canada, or from other nations. Price and availability of carcasses was mentioned by many meat processors who said they would prefer to procure meat for their shops and processing facilities from more local sources.

For **fruit growers**, access to markets and the domination of the sector by tree fruit distributors were cited as problematic. In an incredibly competitive industry, relationships with retailers are carefully guarded and assistance to new growers is not always readily available. The large tree fruit distributors, some of which are cooperatives, frequently accept low wholesale prices, without much input from growers, creating cash return unpredictability and financial challenges for producers.

Among **egg producers**, the limitations on allowable flock sizes were listed as a challenge. Producers cited the difficulty in making the economy of scale work with small amounts of chickens who require the same infrastructure and labour as larger flocks. An industry representative referred to the 'common' occurrence of non-quota holding farms exceeding the allowable number of chickens just to make this part of their business feasible.

Meat producers have difficulty accessing slaughter facilities close to their farms, and can sometimes be driving animals for 4 hours or more in order to reach slaughter and processing facilities, resulting in increased costs to producers, and increased stress to animals.

Dairy producers mentioned the lack of local processing facilities. While the current system (which includes a clustering of dairy processing in the Lower Mainland) does work, there can be issues. One example given was the power outage in the Fraser Valley in the autumn of 2017, which resulted in a stall in processing. The most expensive part of the milk (the cream), was skimmed off and saved while much of the liquid milk was dumped. The financial burden of that loss of product was placed on the producers, rather than on the processors.

6.3 Opportunities

Throughout our research, a number of opportunities have emerged that could be explored to further institutional procurement of local foods. These include:

- Aggregation of product
- Optimization of current facilities
- Creation of new facilities
- · Product-specific processing opportunities
- Changing food service models

6.3.1 Aggregation of Product

To address the volume issues faced by small and medium scale producers, avenues for aggregating product could be explored. Examples include food hubs, producer co-ops, or other businesses built around aggregation. Some of these already exist in the area, or are just starting up (e.g. The Okanagan Food Hub Cooperative- see attached business profile). These have the potential not only to act as a middleman while securing greater margins of profit for producers than would otherwise be available through distributors, but they could also take on some of the food safety and certification requirements. In the United States there have been examples where a

Storage and Warehouse Co-Packer Distributor Columbia-Shuswap Food Processing Name North Okanagan New Century Produce Inc Rancho Cooling Rancho Vignola Okanagan Grown Product Ltd VersaCold Logistics Services Okanagan Food Hub De Simone Farms Urban Harvest 11 BC Tree Fruits CFP Consolidated Fruit 13 Okanagan Quaity Wholesale Fraser Valley Canal Seafood Ltd Okanagan-Similkameen 15 Harker's Organics Kootenay Boundary Direct Organics Plus 17 Cawston Cold Storag Sunshine Fruit Ltd. Okanagan Sunshine Fruit Fernandes Farms Ltd.

Figure 38: Other local business related to aggregation

Source: IHA, 2018

producer co-op helps all of its members attain and maintain GAP certification (Lynch, 2015). Figure 38 (page 74) illustrates the names and locations of local businesses related to product aggregation namely storage and warehouse, distributor, and co-packers.

6.3.2 Optimization of Current Facilities

Many processing facilities in the Okanagan bioregion are not operating at full capacity, either because they may only process their own products, or because they lack employees. These businesses may also be but one aspect of an agricultural business, with the operators and owners busy with other work the rest of the week. Through coordination within industries, downtime could be taken advantage of by others looking to process their product. There are also commercial kitchen spaces available for rent that could be used to produce value added products.

Table 6 and Figure 39 (page 75) illustrate the names and locations of existing community kitchens in the Okanagan bioregion. While prototype products would need to undergo further testing and certification (and be produced at large volumes) to be sold through a distributor or to an institution, these kitchens represent a significant resource to the food system community. Through coordination and scheduling, such existing facilities could be better utilized to increase processing capacity in the region.

Mobile juicing is a relatively new and innovative example of a local processing business finding and filling a market niche. While the production volumes are not what would be required by an institution (and the resulting product is a premium product sold at a higher price point), these businesses are fulfilling a need for local orchards, reducing waste, increasing

revenues, and providing some local employment. As one of the owners of Okanagan Mobile Juicing (see attached business profile) states, it is a 'win-win' for everyone involved. This locally produced product is a niche specialty item, sold at fruit stands, farmers' markets and health food stores. While there may be some potential to sell to smaller institutions (e.g. private residential care facilities) both the price point and the lack of single serving quantities mean that it would not be integrated into larger institutional supply chains. An additional barrier is the inability of the mobile juicer to register with the CFIA because of aspects of the mobile nature of their business. See more information in their business profile.

6.3.3 Creation of New Facilities

Eggs are an example of a food commodity with no processing options available in the interior. Even

something as simple as a registered egg grading station willing to grade eggs from different farms would help this sector expand its market opportunities. While volume issues may prevent eggs from small producers from being sold to large retailers, based on regulation there is no restriction between large commercial grading stations and smaller stations. As long as they adhere to shell egg station requirements and are registered with the CFIA, the eggs graded can be sold anywhere. At this point expansion in the processing and grading facilities in the bioregion could potentially catalyze growth in the amount of egg production, without which the volume of production is too low to currently be able to supply the larger institutions in the region.

Similarly, there are no processing facilities for freezing or chopping fruit or vegetables. While this is a niche market, it has been mentioned by some

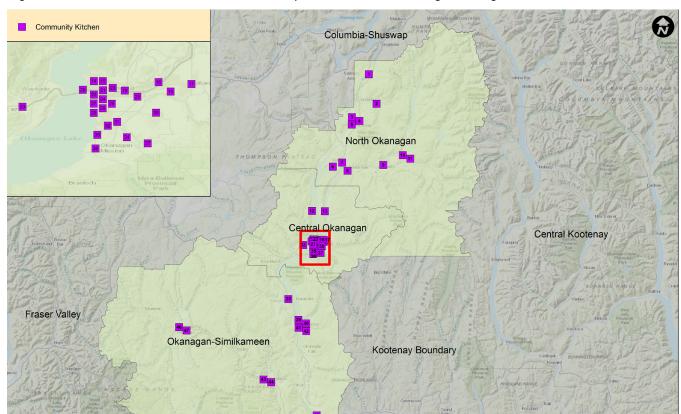


Figure 39: Locations of IHA Licensed Community Kitchens in the Okanagan Bioregion

Source: IHA, 2018

Table 6: List of IHA Licensed Community Kitchens in the Okanagan bioregion.

Source: IHA, 2018

No.	Community Kitchen Name	No.	Community Kitchen Name
1	St. Joseph's Parish Hall	25	Mara Community Hall
2	Winfield Memorial Hall	26	Mabel Lake Hall
3	White Valley Community Centre	27	Lakers Club House
4	Village of Keremeos - Victory Hall	28	Kelowna Seventh-Day Adventist Church
5	Village of Keremeos - Community Kitchen	29	Kelowna Secondary School Kitchen
6	Unitarian Fellowship of Kelowna	30	Kelowna Lawn Bowling Club
6	The Vernon Jazz Club	31	Kelowna Canadian Italian Club
8	The Kelowna Wedgewood	32	Kelowna and District Fish and Game Club
9	The Colonial	33	Karis Support Society
10	SunRidge Community Church		Jane's Farmhouse Kitchen
11	St. Ilija Missionary Parish		Harold Simpson Memorial Youth Centre
12	St. Charles Garnier Catholic Church Hall	36	Grace Mennonite Brethren Church
13	Saj Common Kitchen	37	German Canadian Harmonie Club
14	Rutland Centennial Hall	38	Fresh From The Farm
15	Riverside Community Kitchen	39	First Lutheran Church
16	Riverside Community Hall	40	First Baptist Church
17	Princeton Community Services	41	East Kelowna Community Hall
18	Parkinson Activity Centre	42	Coldstream Women's Institute Hall
19	Our Redeemer Lutheran Church	43	Chabad Okanagan
20	Osoyoos United Church	44	Centennial Hall
21	Okanagan School of the Arts, Shatford Centre		Baba's Country Kitchen
22	Okanagan Mission Community Hall		Armstrong & District Curling Club
23	Mission Creek Alliance Church		Arion Therapeutic Farm
24	Mewata Girl Guide Camp	47	

larger producers in the area as desirable, as well as by restauranteurs who desire to support local and serve local food throughout more of the year. Additionally, if such facilities were available, greater potential to supply institutions could exist within the bioregion.

6.3.4 Product-Specific Processing Opportunities

As previously stated, institutions have product requirements specific to their operations (e.g. 125ml individual serving juices, individually-wrapped cheese portions) that are currently not produced in the region (or possibly even in BC). These gaps present opportunities for new businesses to supply the wholesale/institutional market, and include:

- single serving juices
- single-serving fruit cups
- single-serving applesauce
- individual cheese portions

In addition to these opportunities there now exists a growing toolbox of resources for institutions willing and interested to shift their purchasing patterns, including empirical evidence provided in this paper, and in "Purchasing Power: 10 Lessons on Getting More Local, Sustainable, and Delicious food in Schools, Hospitals and Campuses." (Reynods et al, 2017).

6.3.5 Changing Food Service Models

Returning some food service management contracts to public, in-house, food service models could help to make local food more of a priority. When a food service management company bids on a contract, their budget dictates their margins and the benefits local procurement can produce in a community may not be in their best interest. Alternatively, food service contracts could stipulate the amount of local procurement expected by a company or sector.

6.4 Discussion

As outlined, there are a number of barriers and gaps which currently limit the amount of local food that can be supplied to institutions in the Okanagan bioregion. Many of these gaps are difficult for small and medium scale producers and processors to overcome. It seems the case that the current institutional supply chain (outlined in Chapter 3 and characterized by centralized purchasing, the use of GPO's and large distributors, such as Sysco) is not very conducive to local procurement. If this is the case, the question must be asked: Are there alternate institutional procurement models that are more feasible for local procurement that should be explored in the region? Concomitantly, we can ask the question: How could alternative procurement models shift the economic benefit of institutional food procurement expenditures to local/ regional producers, processors and suppliers?

These are timely questions, as the Nourish project currently being implemented at a national level among health authorities is approaching food procurement in a variety of ways: exploring how to rework Requests for Proposals to include local products, trying to increase the sustainability of the food system, and attempting to increase the nutritional content of food through encouraging more cooking from scratch. While it may seem daunting to attempt change in such large and complex systems, there are precedents. One example is the alternative menu that has been offered at Whitehorse Hospital in the Yukon for over twenty years, where patients may opt for an indigenous diet, featuring all locally-hunted meats. This shows that where there is a will, many of these barriers can be overcome. Another example of an alternate institutional procurement supply chain model is the Farm to School program that exists in many BC schools. Programs such as these may provide models for future institutional supply chain reform in BC.



7. Potential Role of Innovation Centre and Other Supports

Work has been underway for some time regarding the potential of an Okanagan Agriculture Innovation Centre (OAIC). Conversations between stakeholders date back to 2013, and a formal feasibility study was published in June of 2017 (Engage, 2017). Currently, this project is in the business planning stage, with several potential locations identified in and around Summerland, however the objectives of the project have not yet been defined. While the scope of the project and center have not yet been firmly established, some priorities were identified through focus groups and interviews, primarily in the Regional District of Okanagan Similkameen, and mostly targeting tree fruit producers. These priorities range from addressing bio-tech challenges in the fruit sector, to providing a rentable commercial kitchen space for processors looking to scale up.

While some of what has been included in the feasibility study is unique and was not addressed by our respondents (perhaps based on the needs of specialized groups or producers who were not fully represented in our business directory), many of the broad challenges faced by producers and processors reported in the OAIC Feasibility study were corroborated via our study process. This section will largely summarize the main challenges facing agri-businesses in the Okanagan today (informed by interview data), and our estimation of what should be put in place to support primary producers and nascent or potential value added producers, to supply provincial institutions. We will also assess

specifically how the proposed OAIC could contribute to addressing these needs.

For more information specific to the Okanagan Agriculture Innovation Centre being conceptualized for Summerland please refer to these documents and to the official business plan for the Summerland case, forthcoming in the spring of 2018.

Feasibility Study for an Okanagan Agriculture Innovation Centre, 2017

South Okanagan-Similkameen Economic
Development Group, 2016

<u>Investment Attraction Strategy Preliminary</u> <u>Business Plan, 2016</u>

Inquiry regarding the potential role of a food processing innovation centre, as we understood the concept, was conducted from the outset of the Okanagan institutional food procurement supply chain analysis project. The innovation centre question was written into our workplan as the 'role of a food processing innovation centre' and thus questions were targeted primarily at processors.

As we were in contact with many producers and processors across a range of agricultural sectors in the Okanagan, we queried them regarding their perspective on an "innovation centre", and how it could help to support their sector or industry. The questions to producers and processors were raised in a more open-ended way than had been done for

the OAIC feasibility study per above. Rather, we approached this with the information, provided by the Ministry of Agriculture; that there would be up to three innovation centres located in the province of BC, and that they would not necessarily be a 'bricks and mortar' building, but rather could be a bundle of resources, or a combination of the two.

There was no specific geographic association with the questions asked, and no assumptions presented about where in the Okanagan the innovation centre could be located. While the interviews with both producers and processors were very open ended, we did offer some suggestions in terms of the forms, or types of supports that an innovation centre potentially could offer.

The suggestions mentioned, primarily to the processors interviewed, included:

- Food safety support
- Large scale commercial kitchen
- Shared processing/production equipment (e.g. bottling equipment, packaging/labeling equipment)
- Business development support/mentoring for businesses wanting to scale up
- Aggregation and group-buying coordination to reduce costs of supplies

Responses from interviewees are detailed in the following two sections. The first includes comments related directly to the suggestion of an agriculture innovation centre for the Okanagan, and the second includes other supports that were mentioned by both producers and processors when asked how else the Ministry of Agriculture could generally better support local producers and processors to satisfy regional institutional (and other regional markets) demand, or the interviewees' business specifically.

While interviews with food processors and producers during the course of this project exceeded 90 in total, the number of business owners or operators who responded to the question about a food processing innovation centre was lower. This was in part because priority was given to questions about production volumes and capacity, followed by business context and opportunities and challenges. Last, whenever possible, we addressed the role of a "food innovation centre". Not all respondents stayed on the phone long enough to answer questions about the potential role of the innovation centre. Approximately 19 of the 56 processor-interviewees responded to the question regarding the potential role of an innovation centre.

7.1 Okanagan Innovation Centre: Processors' Perspectives

The most common opportunity cited by processing businesses across all sectors was food safety technical support. This arose in conversation both in terms of actual availability and cost of food lab testing, as well as support in terms of navigating food safety certifications. The case of the community food lab facility that is opening in Courtenay with a soft launch in March of 2018 was described in brief to respondents as a new approach to food testing that could alleviate the cost burden for processors and potentially help to level the playing field between small and large processors. Candice Appleby, Executive Director of the Small Scale Food Processors Association, says they anticipate the lab receiving its International Standard Organization (ISO) certification following an audit sometime in the summer (Pers. Comm., March, 2018). Appleby also mentioned the Courtenay location as a potential 'anchor' for lab testing facilities planned around the province.

Processors from the Okanagan bioregion mentioned navigating food safety regulations and accessing licensed facilities for making their products as a major challenge. Additionally, business development services, including assistance or funding with regards to developing business plans, expanding operations or applying for funding or grants were all brought up by various industry sector representatives.

While the idea of a commercial kitchen being included in the innovation centre was presented to all interviewees, there was no positive feedback regarding this suggestion. It should be noted that the processors interviewed were already working out of IHA regulated kitchens and were thus at a scale that was perhaps beyond the support of such a space. Several mentioned that even packaging and labeling equipment would not be utilized by them, as this would require moving product back and forth from their own facility to the centre.

Group purchasing was mentioned by several respondents, though not as often as food safety support and business development services. This suggestion was particularly in reference to purchasing packaging and reducing costs by volume orders. Small businesses favoured this, as even medium scale businesses felt that it was more straight-forward to order these supplies independently. One business cited an existing informal partnership between them and like businesses to buy packaging materials at lower costs.

7.2 Opportunities in the Institutional Supply Chain

Where institutions are concerned there are significant gaps in terms of the amount of processed foods that are locally available. A missing role in the agricultural economy in the Okanagan bioregion is that of a business supplying the service of minimal processing in an approved facility, including chopping, freezing or pureeing fresh foods. These needs have not only been highlighted through the analysis of the purchasing patterns of various local institutions, but also have been raised in conversation by local business owners who want access to local foods through more of the year. These various roles could be potentially either fulfilled or supported by an agriculture innovation centre, or related resources.

7.3 Other Supports Needed

While not necessarily available through an innovation centre, or applicable to the innovation centre question, many producers and some processors, had other notable challenges that they felt could be addressed by the Ministry of Agriculture.

Help accessing qualified employees was one such challenge. Especially in the meat processing industry, there were several business owners who mentioned that a lack of qualified and willing applicants to job postings made their businesses unsustainable and limited their potential for expansion. Business operators felt this could be addressed in several ways, primarily by creating a visa-issuing category for qualified professionals targeting specifically Europeantrained meat cutters and butchers. Secondly, better support of meat cutting post-secondary programs could be offered, and programs could be expanded or specialized (e.g. emphasis on sausage-making and curing) to fulfill the sector's needs.

As far as vegetable and fruit growers were concerned, facilitating the process of applying to the Canada GAP certification program would assist their businesses in remaining competitive.

Meat producers also mentioned the restrictions to on-farm slaughter greatly reduce the potential of small and medium scale livestock producers to remain competitive. One Class E licensed producer said he would be able to sell more meat if he was able to do more on-farm processing. Another meat processor mentioned similar issues, citing that there was demand for on-farm slaughter in the area, but no registered mobile facility to fulfill the role.

Distribution challenges for small business owners were commonly cited as local distributors required a higher margin than many businesses could consider economically feasible, while direct marketing requires time and resources that eat into the production and

processing capacity of the business. Some businesses have proactively started to address these challenges through innovative collaboration (e.g. the Okanagan Food Hub Cooperative). Other businesses have identified this as a market opportunity and emerged to help aggregate and market local products to a broader audience. In the Okanagan bioregion both Farmbound, in Vernon, and Urban Harvest, in Kelowna, are taking on this function.

Increasing marketing opportunities for primary producers through businesses or services that aggregate and distribute fresh produce cost effectively for producers is necessary for the regional food system to supply regional institutions or other regional markets expanding farmers' markets. The mandate of Buy BC appears to align with this need, but project specifics have not yet been rolled out . Previously the Ministry of Agriculture's Buy Local Program partially addressed this limiting factor, issuing funding to eligible applicants looking to expand their marketing and branding .

Price competition with imported products or products from other provinces came up often in conversation. For producers and processors it is both a matter of trade regulations allowing free flow of items from areas that may have a pricing advantage, as well as products that may be of a lesser quality. Educating consumers about the importance of supporting the local economy will be one way to address these issues. Business development support, as mentioned above with reference to the innovation centre, could also help make businesses more efficient and lower production costs.

7.4 Conclusion

Innovative businesses are already supporting and helping the Okanagan food processing and production sectors, but more would be possible with better supports for specific challenges these businesses face. When asked about the role of a food processing innovation centre in their region, producers and processors gave a variety of responses, but largely referenced the list of suggested, or possible, roles an innovation centre could play.

Based on the information gathered over the course of this research, one building will not optimally fulfill the needs of the agricultural community, unless it houses a wide range of facilities and resources. Some of the necessary supports required by the agricultural producers and processors may be better supplied remotely, such as assistance in business development and navigation of food safety certifications. Both of these services could be provided either by computer or by phone at a more cost-effective rate than doing so in-person. As the Summerland centre is currently being discussed, it would serve only a portion of the agriculture community, specifically the tree fruit industry in the Regional District of Okanagan-Similkameen, while it may neglect the needs mentioned by most of our interview respondents.



8. Conclusion

Institutional procurement practices represent a significant potential market for local agricultural producers and processors in the Okanagan bioregion, albeit with some challenges to access. While local food networks and institutional food supply chains intersect, they currently operate on different planes under current procurement processes and protocols. The institutional procurement supply chain is characterized by large suppliers, GPO's, and national contracts in search of the lowest prices regardless of the local economy in which they exist and operate. While local producers and processors may be supplying a portion of what goes into local institutions, the relationship is not direct and is dictated by regulatory measures ranging from national and international trade agreements to on-farm food safety certifications. These barriers to the entry of more local foods into institutions are largely a result of the scale at which institutional procurement is occurring.

In contrast, Farm to School programs already embody the most simplistic, and at a basic level, the most connected, institutional supply chain. These programs frequently rely on volunteer activity by devoted parents and members of the community and as such vary from one case to another. Schools with active farm-to-school programs do tend to make use of the educational opportunity of their proximity to farms to not only procure food from them, but also to learn more about how food is grown and harvested. This causes face-to-face interaction between the institutional consumers and the producers of their

food. While these programs may not directly inform or guide institutional procurement reform they do illustrate that institutional procurement requires conviction and investment. It will not happen, without committed champions working from all parts of the supply chain.

While there currently exist several restrictions on institutional food procurement, there is also the potential for more local food to be purchased. Some gaps that were identified included minimal processing for foods, as well as smaller serving sizes for juices already produced in the Okanagan bioregion. These are business opportunities. With the current institutional supply chain (much of which revolves around broadline distributors and group purchasing organizations), fresh fruits and vegetables are generally not included in large contracts, so if a distributor carries more local foods, an institution has a greater chance of procuring local product. In the Okanagan bioregion, market potentials would need to be identified for products that are not currently being purchased locally, and then appropriate growers would need to meet the certifications and standards of a distributor. For a willing and interested grower, these are doable, though competitive, conditions since prices will often be competing with the global marketplace.

There is also the possibility of institutions decentralizing their ordering from one broadline distributor and creating partnerships with either existing businesses, or cooperatives, or those to come. Example of this could be a partnership with a producer's cooperative (such as the Okanagan Food Hub Cooperative, starting up in Kelowna) or approaching Farmbound, a food box business in Vernon, who already works with dozens of local suppliers.

With increased support, some of the barriers to entering the institutional supply chain and the inadequacy of post-production capacity in the region could be overcome. In the Okanagan bioregion, an innovation centre has the potential to assist producers and processors to reach local institutional markets. As producers and processors mentioned, such a centre could provide lab testing and food safety support for end-products, as well as assistance in navigating business expansion opportunities. From the needs identified through this research, an innovation centre could also potentially help producers achieve GAP certification, which is one barrier to entry for producers of fresh fruits and vegetables.

There are already many examples of innovative agricultural and food processing businesses in the Okanagan bioregion (such as producer co-ops, mobile juicers, and innovative direct-market models). With the proper support and supportive policy environment, these and other businesses like them could make meaningful contributions to institutional procurement in the region, and the buying power of BC institutions could in turn support regional producers, producers and suppliers.

To make significant advancement in the area of local procurement however, policy change and targeted investment and support is necessary. While it may be a long-term goal, pursuing opportunities to restructure current institutional supply chains along the lines of farm to school programs (utilizing smaller-scale, more decentralized, local/bioregional scale procurement) may offer great potential to capture some of the institutional market and realize the associated benefits to the local economy. Provisions could be made in

trade agreements that allow Request for Proposals or contract bids to prioritize local suppliers over national or international suppliers of similar goods. For large institutions with many campuses, kitchens, or cafeterias, purchasing could be decentralized to allow for more flexibility and decision-making at the facility-level regarding what the kitchen orders, and from where. Regulations could be adapted to allow for more of a range of products to be purchased and used in kitchens. For example, where currently only meat from federally inspected facilities is permitted in many institutional kitchens, provincially inspected plants could also be permitted to sell into this supply chain.

Allowances for increased institutional spending on local food may also need to be made, with the understanding that this increased spending would confer additional benefits to local communities through the economic multiplier effect (whereby spending stays in the local economy).

In sum, there are currently opportunities for Okanagan bioregion agricultural producers and processors to access the significant institutional market, but this must be facilitated through calculated, strategic support and policy change at both the provincial and federal levels of government. With adequate support and bold vision for change, significant advances to institutional procurement in the Okanagan bioregion are possible, for the benefit of producers, institutions and the communities at large.

References

- Agriculture and Agri-Food Canada. (2017a).

 Statistical Overview of the Canadian Fruit
 Industry 2016. Retrieved from http://www5.
 agr.gc.ca/eng/industry-markets-and-trade/
 market-information-by-sector/horticulture/
 horticulture-sector-reports/statisticaloverview-of-the-canadian-fruit-industry2016/?id=1499785006783#a4.1 on February 21,
 2018.
- Agriculture and Agri-Food Canada. (2017b).

 Protein Disappearance and Demand by
 Species. Retrieved from: http://www.agr.gc.ca/
 eng/industry-markets-and-trade/marketinformation-by-sector/red-meat-and-livestock/
 red-meat-and-livestock-market-information/
 protein-disappearance-and-demand-byspecies/?id=1415860000022 on February 15,
 2018.
- Agriculture and Agri-Food Canada. (2017c).

 Canada's Table and Processed Egg Industry.

 http://www.agr.gc.ca/eng/industry-markets-and-trade/market-information-by-sector/poultry-and-eggs/poultry-and-egg-market-information/table-and-processed-eggs/?id=1384971854396

 Retrieved on February 14, 2018.
- BC Association of Abattoirs. (2018). Retrieved from bcabattoirs.org/about/ on February 21, 2018.
- BC Centre for Disease Control. (2016). Guideline for the Sale of Foods at Temporary Food Markets. Retrieved from http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20 Forms/Guidelines%20and%20Manuals/EH/FPS/Food/Guidelines%20-%20Sale%20of%20 Foods%20at%20Temporary%20Food%20 Markets_current.pdf on February 22, 2018.
- BC Centre for Disease Control. (2018). Dairy Plants. Retrieved from http://www.bccdc.ca/health-info/food-your-health/dairy/dairy-plants on February 21, 2018.
- BC Egg. (2017). BC Egg Farmers. http://www.bcegg.com/farm-to-table/bc-egg-producers Retrieved on February 14, 2018.

- BC Frozen Foods Ltd. (n.d.) Retrieved from http://bcfrozenfoods.com/ on February 22, 2018.
- BC Fruit Growers Assocation (BCFGA). (2010). Industry Profile. Retrieved from http://www.bcfga.com/172/industry/ on February 6, 2018.
- BC Government. (n.d.). Grow BC, Feed BC, Buy BC. Retrieved from www2.gov.bc.ca/gov/content/industry/agriculture-seafood/growbc-feedbc-buybc on March 12, 2018.
- BC Milk Marketing Board. (2017). Annual Report for the 2016/2017 Dairy Year; twenty-eighth annual. Retrieved from: bcmilkmarketing. worldsecuresystems.com/publications/annual-reports on February 19, 2018.
- BC Pork. (2017). Retrieved from http://www.bcpork. ca/ on February 9, 2018.
- BC Vegetable Marketing Commission. (n.d.). The BC Vegetable Marketing Association (Website). Retrieved from http://www.bcveg.com/ on February 21, 2018.
- Beckie, M. and L. Hedberg and J. Radies. (2017). Creating a Local Food Procurement Community of Practice: The Alberta Flavour Learning Lab. Unpublished document.
- Buckley, J. D.S.Conner, C. Matts and M.W. Hamm. (2013). Social Relationships and Farm-to-Institution Initiatives: Complexity and Scale in Local Food Systems. Journal of Hunger & Environmental Nutrition 8.4: 397-412.
- CBC News. (2017). Why Canada Could Benefit from a National School Food Program. Published on Sep. 5, 2017. Retrieved from http://www.cbc.ca/news/health/school-food-1.4275520 on March 4th, 2018.
- Canadian Dairy Commission. (2006). The Canadian Dairy Commission: A 40-Year Retrospective. Retrieved from: http://www.cdc-ccl.gc.ca/CDC/userfiles/file/CDC's%2040th%20Anniverary%20 Book.pdf on February 19, 2018.

- Canadian Dairy Information Centre. (2018a). Farming Revenue and Expenses. Retrieved from: http://www.dairyinfo.gc.ca/index_e.php?s1=dff-fcil&s2=farm-ferme&s3=rev-dep on February 19, 2018.
- Canadian Dairy Information Centre. (2018b). Milk Production at the Farm by Province. Retrieved from: http://aimis-simia-cdic-ccil.agr.gc.ca/rp/index-eng.cfm?action=rR&pdctc=&r=234 on February 19, 2018.
- Canadian Dairy Information Centre. (2018c). Number of Farms, Dairy Cows and Heifers. Retrieved from: http://www.dairyinfo.gc.ca/ index_e.php?s1=dff-fcil&s2=farm-ferme&s3=nb on February 19, 2018.
- CanAgPlus. (2017). GAP Certified Companies List. Retrieved from www.canadagap.ca/certification/certified-companies/cgap-certified-companies-list/ on December 7, 2017.
- CanAgPlus. (2018a). Overview of Canada GAP. Canada GAP (Website). Retrieved from www. canadagap.ca/ on February 20, 2018.
- Centre for Sustainable Food Systems at UBC Farm. (2018). Retrieved from http://ubcfarm. ubc.ca/2017/06/29/farm-to-institution-exploring-food-literacy-education-and-public-procurement-in-british-columbia-and-beyond/?login on March 14, 2018.
- CFIA. (2016). Federally Registered Meat Establishments and their Licensed Operators. Retrieved from http://www. inspection.gc.ca/food/meat-and-poultryproducts/registered-establishments/ eng/1374560511959/1374560512678 on February 13, 2018.
- CFIA (2017). CFIA Registered Dairy Establishments. Retrieved from http://www.milkingredients. ca/userfiles/file/National%20Registered%20 Dairy%20Establishments%20List%20-March%20 23%202_2.pdf on February 13, 2018.
- CFIA. (2018a). Registered Shell Egg Stations. http://www.inspection.gc.ca/food/eggs-and-egg-products/registered-stations/shell-egg-stations/eng/1391029540171/1391029591047#a2Retrieved on February 15, 2018

- CFIA. (2018b). Registered Processed Egg Stations. http://www.inspection.gc.ca/food/eggs-andegg-products/registered-stations/processed-eggstations/eng/1391028565728/1391028597904 Retrieved on February 15, 2018
- City of Kelowna. (2017). City of Kelowna Agriculture Plan. Retrieved from www.kelowna.ca/sites/files/1/docs/related/draft_2017_agriculture_plan_0.pdf on March 19, 2018.
- Clark, Jill, and Shoshanah Inwood. (2016). Scaling-Up Regional Fruit and Vegetable Distribution: Potential for Adaptive Change in the Food System. Agriculture and Human Values 33.3: 503-19.
- Climate Action Initiative. (2012). Okanagan Region Snapshot Report: Wine Grape and Tree Fruit Production. British Columbia Agriculture & Food Climate Action Initiative. Retrieved from www.bcagclimateaction.ca/wp/wp-content/media/AdaptROseries-Okanagan.pdf on March 19, 2018.
- Engage. (2017). Feasibility Study for an Okanagan Agriculture Innovation Centre. Engage Business and People Solutions. Retrieved from http://www.summerland.ca/docs/default-source/default-document-library/okanagan-agriculture-innovation-centre-feasibility-study.pdf?sfvrsn=0 on March 13, 2018.
- Engage and Thurst Marketing. (2016). Investment Attraction Strategy; Preliminary Business Plan. Prepared for SOSEDS. Retrieved from http://www.summerland.ca/docs/default-source/default-document-library/investment-attraction-strategy-preliminary-business-plan.pdf?sfvrsn=0 on March 13, 2018.
- Esqueda, Arden. (2012). The Role of Small and Medium Farms in Modern Agriculture. Ottawa: Agriculture and Agri-Food Canada.
- Farm Products Council of Canada. (2017). Egg Farmers of Canada. Retrieved from: http://www.fpcc-cpac.gc.ca/index. php/en-GB/thesupplymanagement/ thenationalagencies/2014-08-13-15-51-37 Retrieved on February 20, 2018

- Farm to School. (2016). Homegrown Success:
 Students in Oliver Leaning to Love Local.
 Retrieved from farmtoschool.phabc.org/wp-content/uploads/sites/3/2016/06/Stories_From_the_Field_OliverElementary_final.pdf on March 5th, 2018.
- Golden Valley Foods. (2018). Golden Valley: Striving for Excellence Since 1950. www.goldenvalley. com/history.php Retrieved on February 19, 2018
- Government of British Columbia. (n.d.). Grow BC, Feed BC, Buy BC. Retrieved from: www2.gov. bc.ca/gov/content/industry/agriculture-seafood/growbc-feedbc-buybc on March 19, 2018.
- Government of British Columbia. (2018). Meat Inspection & Licensing. Retrieved from: www2. gov.bc.ca/gov/content/industry/agriculture-seafood/food-safety/meat-inspection-licensing on February 20, 2018.
- Government of Canada. (2018). Milk Quota Exchange. Retrieved from: http://www.dairyinfo.gc.ca/pdf/quota18_e.pdf on February 21, 2018.
- Harris, G., Nixon, D., Newman, L., & Mullinix, K. (2016). Delineating the Southwest British Columbia bioregion for food system design and planning: A practical approach. Journal of Agriculture, Food Systems, and Community Development 1-16.
- Interior Health Authority. (2018). Inspection Reports. Retrieved from www.interiorhealth. ca/YourEnvironment/InspectionReports/Pages/ default.aspx on February 13, 2018.
- Izumi, Betty, D. Wright, and Michael Hamm. (2010). Farm to School Programs: Exploring the Role of Regionally-Based Food Distributors in Alternative Agrifood Networks. Agriculture and Human Values 27.3: 335-50.
- Johnstons. (2017). Retailers. Retrieved from http://www.johnstons.ca/retailers/ on February 13, 2018.

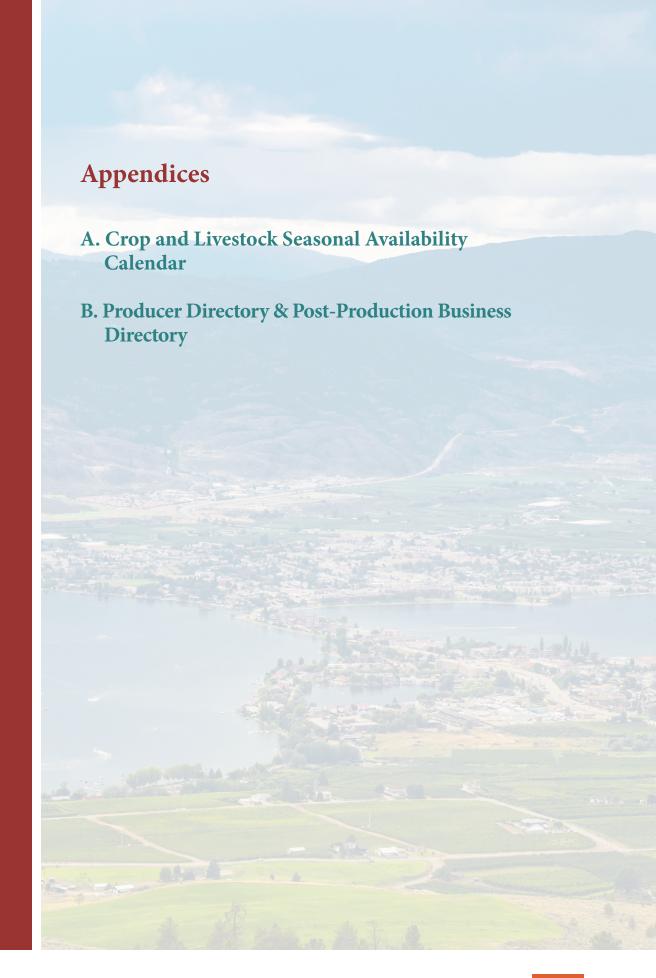
- Kim, R. (2013). Executive Report: October 2013. Retrieved from www.ubcsuo.ca/sites/default/files/2013-14-executive-minutes-reports-financial_coordinator_-_october_2013.pdf on March 5th, 2018.
- Lynch, J., Meter, K., Robles-Schrader, G., Goldenberg, M.P., Bassler, E., Chusid, S., & Jansen Austin, C. (2015). Exploring Economic and Health Impacts of Local Food Procurement. Chicago, IL: Illinois Public Health Institute.
- Milne, Kendra. (2007a). Trade Restrictions on Local Food Production and Distribution. The Environmental Law Centre Society.
- Milne, Kendra. (2007b). Legal Barriers to Increased Local Food Production and Distribution. The Environmental Law Centre Society.
- Nichols Applied Management Inc. (2017). The Economic Impact of Local Food Procurement by Institutions. Northlands.
- Northlands. (2017). The Economic Impact of Local Food Procurement by Institutions. Retrieved from d3n8a8pro7vhmx.cloudfront. net/albertaflavour/pages/86/attachments/ original/1503629069/Final_Economic_Impact_ Report_-_June_19_2017.pdf?1503629069E on December 5 2017.
- Nourish. (2018). The Nourish Program. Retrieved from www.nourishhealthcare.ca/about-nourish/ on March 15, 2018.
- Okanagan Grown Produce Ltd. (n.d.). website Retrieved from http://www.okanagangrown. com/ on February 22, 2018.
- Oliver Chronicle. (2014). Farm to School Program Praised. Retrieved from http://www. oliverchronicle.com/farm-to-school-programpraised/ on March 21, 2018
- Powell, L.J. and H Wittman. (2017). Farm to school in British Columbia: mobilizing food literacy for food sovereignty. Agriculture and Human Values.

- Regional District of Central Okanagan. (2005).
 Agricultural Plan. TRUE Consulting and Integra Community Planning Services. Retrieved from www.regionaldistrict.com/media/19873/Final%20Ag%20Plan%20June%202005%20text. pdf on March 19, 2018.
- Regional District of North Okanagan. (2015.) RDNO Agricultural Plan Background Report. Upland Consulting. Retrieved from http://www.rdno.ca/docs/Agricultural_Plan_Background_Report.pdf on March 18, 2018.
- Regional District of Okanagan-Similkameen. (2011). Agricultural Plan: Electoral Area A & the Town of Osoyoos. Retrieved from http://www.rdosmaps.bc.ca/min_bylaws/planning/projects/agria_plan/Link_AgriculturalPlan_RDOS_amp_OsoyoosFINALDOCUMENT_Dec2011.pdf on March 19, 2018.
- Reynolds, J and B. Hunter. (2017). Purchasing Power: 10 Lessons on Getting More Local, Sustainable, and Delicious food in Schools, Hospitals and Campuses. Food Secure Canada.
- Sine, E., S. Saddler, E. Picardo, A. Sousa, A. Wong, N. Paolella and H. Pipher. (2014) LFS 450: Final Project Report for the Farm-to-Healthcare Project. Land and Foo Systems 450 at UBC.
- Smith, W. (2017). Nourish Newsletter: Healthcare Food Purchasing Going Beyond Local to Talk About Sustainability Retrieved from www. nourishhealthcare.ca/blog/2017/6/16/nourishnewsletter-1-healthcare-food-purchasing-going-beyond-local-to-talk-about-sustainability on March 20, 2018.
- South Okanagan-Similkameen Economic
 Development Group (SOSEDS). Foreign Direct
 Investment Strategy. Retrieved from http://www.
 summerland.ca/docs/default-source/defaultdocument-library/soseds-final-report---fdi-st
 rategy9add9a5cf68d6e33909cff00007e7f94.
 pdf?sfvrsn=0 on March 13, 2018.
- Statistics Canada. (2012). Cattle Industry Overview. Retrieved from http://www.statcan.gc.ca/pub/23-012-x/2010002/part-partie1-eng.htm on February 15, 2018.

- Statistics Canada. (2015). The changing face of the Canadian hog industry. Catalogue no. 96-325-X. Retrieved from: http://www.statcan.gc.ca/pub/96-325-x/2014001/article/14027-eng.htm February 9, 2018.
- Statistics Canada. (2017a). Table 004-0203 Census of Agriculture, land use, every 5 years. Retrieved on Nov. 20, 2017.
- Statistics Canada. (2017b). Table 002-0001 Farm cash receipts, annual (dollars). Retrieved on February 9, 2018.
- Statistics Canada. (2017c). Table 001-0013 Area, production and farm gate value of vegetables, annual, CANSIM (database). Retrieved on February 6, 2018.
- Statistics Canada. (2017d). Table 004-0215 Census of Agriculture, vegetables (excluding greenhouse vegetables), every 5 years, 2011 to 2016. Retrieved on February 15, 2018.
- Statistics Canada. (2017e). Table 004-0214 Census of Agriculture, fruits, berries and nuts, every 5 years. Retrieved on February 6, 2018.
- Statistics Canada. (2017f). Fruit and vegetable production, 2016. Retrieved on February 6, 2018.
- Statistics Canada. (2017g). Table 001-0009 Area, production and farm gate value of fresh and processed fruits, by province, annual. Retrieved on February 6, 2018.
- Statistics Canada. (2017h). Production efficiency and prices drive trends in livestock. Catalogue no. 95-640-X. Retrieved from http://www.statcan. gc.ca/pub/95-640-x/2016001/article/14812-eng. htm on February 8, 2017.
- Statistics Canada. (2017i). Table 004-0223 Census of Agriculture, pigs on census day, every 5 years (number). Retrieved on February 8th, 2018.
- Statistics Canada. (2017j). Table 004-0221 Census of Agriculture, cattle and calves on census day, every 5 years (number). Retrieved on February 8th, 2018.

- Statistics Canada. (2017k). Alberta has the most beef cattle in Canada and the second largest total farm area. Catalogue no. 95-640-X. Retrieved from http://www.statcan.gc.ca/pub/95-640-x/2016001/article/14808-eng.htm on February 8, 2018.
- Statistics Canada. (2017l). Table 003-0026 Cattle and calves, farm and meat production, annual (head unless otherwise noted). Retrieved on February 15, 2018.
- Statistics Canada. (2017m). Table 004-0225 Census of Agriculture, poultry inventory on census day, every 5 years (number). Retrieved on February 8th, 2018.
- Statistics Canada. (2017n). Table 004-0227 Census of Agriculture, egg production in the year prior to the census, every 5 years (number). Retrieved on February 14, 2018.
- Statistics Canada (2018a). Table 051-0062 Estimates of population by census division, sex and age group for July 1, based on the Standard Geographical Classification (SGC) 2011, annual (persons). Retrieved on February 21, 2018.
- Statistics Canada (2018b). Fruit And Vegetable Production – 2017, release in The Daily. Retrieved on February 19, 2018.
- Statistics Canada (2018c). Total farm area distribution, total number of farm, total gross farm receipts, total farm employment, Okanagan bioregion 2016. Custom data of Census of Agriculture.
- Sysco. (2018). Local Sourcing. Retrieved from http://sustainability.sysco.com/supplying-food-responsibly/sourcing-food-responsibly/local-sourcing.php on March 19, 2018.
- TRUE Consulting. (2012). The Thompson Shuswap Food Connections Project. Retrieved from http://www.sibacs.com/wp-content/ uploads/2009/02/Thompson-Shuswap-Food-Connections.-Sept.-2012.pdf on February 22, 2018.

- UBC. (2018). Sustainable Food Initiatives: Purchasing. Retrieved from sustain.ubc.ca/ campus-initiatives/food/sustainable-foodinitiatives on March 9, 2018.
- Yukon Hospitals. (2017). Nutrition and Food Services. Retrieved from yukonhospitals.ca/ whitehorse-general-hospital/programs-andservices/nutrition-and-food-services on March 6th, 2018.



Appendix A. Crop and Livestock Seasonal Availability Calendar

CROP	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
Fruits						
Apples	•	•	•		•	
Apricots	-				-	
Blackberries						
Blueberries						
Cantaloupe						
Cherries						
Grapes						
Kiwis						
Nectarines						
Peaches						
				•		
Pears						
Plums						
Strawberries						
Watermelon						
Greenhouse Vegetables						
Greenhouse Tomatoes						
Greenhouse Cucumbers						
Greenhouse Lettuce						
Greenhouse Peppers						
Vegetables						
Asparagus						
Beans						
Beets						
Broccoli						
Brussels Sprouts						
Cabbage						
Carrots						
Cauliflower						
Celery						
Corn						
Cucumbers						
Lettuce						
Mushrooms						
Onions and Shallots					•	0
Parsnips					•	
Peas						
Peppers						
Potatoes	•		•			
Pumpkins and Squash						
Radishes						
Rutabagas						
Spinach						
Squash						
Swiss Chard						
Tomatoes (Field)						
Turnips	•	•	•			
Zucchini						
Grains						
Meat and Dairy						
Dairy Produce						
Eggs						
Beef and Veal						
Mutton and Lamb						
Chicken and Stewing Hens						
Turkey						
Pork						
Ostrich						
Pheasant						
riieasdiil						

CROP	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Fruits						
Apples					•	•
Apricots					, and the second se	
Blackberries			1			
Blueberries						
Cantaloupe						
Cherries						
Grapes						
Kiwis						
Nectarines						
Peaches						
Pears						
Plums						
Strawberries						
Watermelon						
Greenhouse Vegetables						
Greenhouse Tomatoes						
Greenhouse Cucumbers						
Greenhouse Lettuce						
Greenhouse Peppers						
Vegetables						
Asparagus						
Beans						
Beets						
Broccoli						
Brussels Sprouts						
Cabbage						
Carrots						
Cauliflower						
Celery						
Corn						
Cucumbers						
Lettuce						
Mushrooms						
Onions and Shallots						
Parsnips						
Peas						
Peppers						
Potatoes					•	•
Pumpkins and Squash						
Radishes						
Rutabagas						
Spinach						
Squash						•
Swiss Chard						
Tomatoes (Field)						
Turnips						•
Zucchini						
Grains						
Meat and Dairy						
Dairy Produce						
Eggs						
Beef and Veal						
Mutton and Lamb						
Chicken and Stewing Hens						
Turkey						
Pork						
Ostrich						
Pheasant						
Cources		1	1			

Sources:

 $BC\ Farmer's\ Market\ Association.\ What's\ in\ Season.\ Okanagan.\ http://www.bcfarmersmarket.org\ Retrieved\ Nov\ 13\ , 2017$

 $Farm \ Forl\ City \ Folk\ Okanagan\ Seasonal\ Availability\ Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart\%202012.pdf\ Retrieved\ Nov\ 13\ , 2017\ Availability\ Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.ca/PDFs_\&_Docs/OK\%20Seasonal\%20Chart.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolk.\ http://www.farmfolkcityfolkcityfolk.\ http://www.farmfolkcityfolkcit$

 $BC\ Ministry\ of\ Agriculture.\ Farm\ Practices.\ Grain.\ Order\ No.\ 870.218-15.\ May\ 2014.\ Retrieved\ Nov\ 13\ , 2017$

BC Tree Fruits . http://www.bctree.com Retrieved Nov 14, 2017

Found Locally. https://www.foundlocally.com/Okanagan/Travel/Attr-FruitSeasons.htm Retrieved Nov 14, 2017

Appendix B. Producer & Post Production Business Directory

Producers

Producer Designations							
Farmer	producing anything contributing to food production (ie feed for livestock)						
Vineyard	producing grapes to be used in the production of wines						

Producers	
Farmer	303
Vineyard	171
Total	474

Producers Distribution	
Regional District of North Okanagan	70
Regional District of Central Okanagan	90
Regional District of Okanagan-Similkameen	314
Total	474

Post Production Businesses

Post Production Business	Post Production Business Designations							
Commercial Bakery – Food Processing	primarily making baked goods or baked good products							
Beverage Manufacturing - Food Processing	any beverage including juice, soda, ciders, wines etc							
Meat Processing – Food Processing	facilities inspected for meat cutting, but not for slaughter							
Food Manufacturing – Food Processing	facilities making goods other than those listed above							
Community Kitchen – Food Processing	kitchen operating in accordance with IHA's guidelines							
Distributor	businesses buying and selling goods and offering greater variety and quantities than individual producers							
Storage and Warehousing	businesses engaged in renting space to other businesses, producers or processors for their goods							
Class A – Slaughter and Processing	licensed for slaughter and parting or cutting							
Class B - Slaughter Es- tablishment	licensed for slaughter only (no parting/processing)							
CFIA Beef	slaughter and cut and wrap of beef, able to export and sell product nationally							
CFIA Poultry	slaughter and processing of poultry, able to export and sell product nationally							
Home Business – Food Processing	businesses who sell direct low-risk items made in homes							
Co-Packer	a business that includes a packing facility used to pack products from other farms/businesses and/ or their own products. These include fruit-growing co-operatives.							

Post Production Businesses	
Commercial Bakery – Food Processing	49
Beverage Manufacturing – Food Processing	40
Meat Processing – Food Processing	34
Food Manufacturing – Food Processing	162
Community Kitchen – Food Processing	47
Distributor	18
Storage and Warehousing	2
Class A – Slaughter and Processing	4
Class B - Slaughter Establishment	2
CFIA Beef	1
CFIA Poultry	1
Home Business – Food Processing	3
Co-Packer	3
Total	366

Post Production Distribution					
Regional District of North Okanagan	93				
Regional District of Central Okanagan	181				
Regional District of Okanagan-Similkameen	92				
Total	366				

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
1	2 Dogs Orchards	Farmer	Dried cherries	Summerland	250-494-8808	2dogsorchard@telus.net	NA
2	A and J Bhathal Orchard	Farmer	Produce	Cawston	250-499 -2071	NA	NA
3	A&L Gardens	Farmer	Produce	Cawston	250-499-5492	artandlina@nethop.net	NA
4	Abbott Acres	Farmer	Produce	Keremeos	250-499 -2301	abbott6@telus.net	NA
5	Ajay Boparai Enterprises Ltd Tarsem Boparai	Farmer	Tree Fruit	Kelowna	250-712-2246	NA	NA
6	Amazia Farm	Farmer	Sheep, Veggies	Oliver	250-689-1446	amaziafarm@gmail.com	www.amaziafarm.com
7	Ambercott Acres	Farmer	Tree Fruit	Cawston	250-499-7097	ambercottacres@telus.net	NA
8	Apple Flats Orchard & Stables Inc.	Farmer	Tree Fruit	Lake Country	250-869-9661	oldfriendscanada@gmail. com	www.oldfriendscanada.org
9	Arlo's Honey Farm	Farmer	Honey	Kelowna	250-764-2883	info@arloshoneyfarm.com	www.arloshoneyfarm.com/
10	Armstrong Apiaries	Farmer	Honey	Armstrong	250-308-8219	jamesmacdonald@telus.net	www.facebook.com/ armstronghoney/
11	Armstrong Asparagus Farm	Farmer	Produce	Armstrong	250-546-9301	AsparagusFarm@gmail.com	www.armstrongasparagus.com
12	Arthur Farm	Farmer	Produce	Cawston	250-499-0676	NA	NA
13	Asam Orchards	Farmer	Produce	Vernon	250-308-2351	NA	www.facebook.com/Asam- Ochards-1431042763599322/
14	ASG Produce	Farmer	Produce	Armstrong	250-308-0014	dkrsta@telus.net	www.asgfreshproduce.ca
15	Ashton Creek Ranch	Farmer	Eggs	Enderby	250-308-8659	ajbawtree@telus.net	NA
16	Ashton Oaisis Farm	Farmer	Eggs / Produce	Enderby	250-838-2655	NA	www.ashtonoasisfarm.canic.ws/ contact_us
17	Athena Farm Holdings Ltd.	Farmer	Produce (Vegetables)	Cawston	250-938-0869	athenaorganicfarm@gmail. com	NA
18	Aujla Bros Greenhouses Ltd.	Farmer	Produce	Osoyoos	250-495-4333	na	NA
19	Aulakh, Balwinder & Daljit	Farmer	Produce	Osoyoos	250-495-5011	NA	NA
20	Avenue M	Farmer	Sprouts	Kelowna	250-859-4002	info@avenuem.ca	www.avenuem.ca/
21	B & C Horrocks Orchards	Farmer	Tree Fruit	Cawston	250-499-5959	bryanhorrocks@hotmail.com	NA
22	B & J Organic Orchard	Farmer	Tree Fruit	Cawston	250-499-2071	NA	NA
23	B&J Bengag Farms	Farmer	Tree Fruit	Cawston	250-499-6554	NA	NA
24	B.J.'s Greenhouse	Farmer	Produce	Vernon	250-542-7179	NA	NA
25	Back Achers	Farmer	Produce	Cawston	NA	kaylanmadeira@gmail.com	NA
26	Bahia Orchard	Farmer	Tree Fruit	Kelowna	NA	NA	NA
27	Baird Orchards	Farmer	Tree Fruit	Lake Country	250-766 -4150	g-baird@shaw.ca	NA

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
28	Barker Orchards	Farmer	Tree Fruit	Cawston	250-499-2095	barkerdh.dave@gmail.com	NA
29	BC Tree Fruit Cooperative - Packers & Storage	Farmer	Tree Fruits	Kelowna	250.470.4200	info@bctree.com	www.bctree.com/
30	BC Tree Fruits Cooperative	Farmer	Tree Fruit	Winfield	250-470-4200	info@bctree.com	www.bctree.com/
31	Bellmann Specialty Produce	Farmer	Vegetables	Armstrong	250-546-8815	info@bellmannspecialtypro- duce.com	www.bellmannspecialtyproduce.
32	Belly Achers	Farmer	Garlic	Cawston	250-599-9088	tanyaparker508@gmail.com	NA
33	Benchland/Todd Orchard	Farmer	Tree Fruit	Keremeos	250-499-2305	aptodd@telus.net	NA
34	Best Valley Produce	Farmer	Tree Fruit	Osoyoos	NA	NA	NA
35	Big Root Organic Farms Ltd.	Farmer	Egg Producer/ Grader(?)	Cawston	250-499-6250	shakpot@hotmail.com	NA
36	Bite Me Organics	Farmer	Tree Fruit	Kelowna	250-717-6393/ 250-717-0016	bitemeorganics@shaw.ca	www.bitemeorganics.com/
37	Bjordal, Ola & Gillian	Farmer	Tree Fruit	Penticton	604-312-8310	chezlupa@gmail.com	NA
38	BK Orchards	Farmer	Tree Fruit	Peachland	250-767-3128	NA	NA
39	Blackbird Organics	Farmer	Poultry, Produce	Cawston	250-499-9044	blackbirdorganics@gmail. com	www.blackbirdorganics.ca/
40	Blossom River Organics	Farmer	Tree Fruit	Cawston	250-499-5630	southernfruit@live.ca	NA
41	Blush Lane Organic Orchard	Farmer	Tree Fruit	Keremeos	403-681-3663	NA	www.blushlane.com/our- locations/organic-orchard/
42	Bonn Orchards	Farmer	Tree Fruit	Kelowna	NA	NA	NA
43	Bonny Bell Farm	Farmer	Produce	Cawston	250-499-5340	colin.bell@alongsidecorp.com	NA
44	Brainy Bee Okanagan Honey	Farmer	Honey	Kelowna	250-317-7132	NA	www.brainybee.ca/about/
45	Brar Orchards	Farmer	Tree Fruit	Cawston	250-495-6604	NA	NA
46	Brookside Orchards	Farmer	Apples	Vernon	250-260-6690	dwayne@cedarsolutions.ca	NA
47	Brymac Farms	Farmer	Tree Fruit	Lake Country	Brymac Farms	leslie.bryantmaclean@interi- orhealth.ca	NA
48	Camp Hill Organic Farm	Farmer	Tree Fruit	Naramata	250-496-5616	johnsons@vip.net	NA
49	Carcajou Fruit	Farmer	Cherries	Summerland	250-494-5112	carcajoufruit@gmail.com	www.carcajoufruit.com/
50	Carmelis	Farmer	Goat Dairy, Cheesemaker	Kelowna	250-764-9033	info@carmelisgoatchees.com	www.carmelisgoatcheese.com/
51	CC Orchards	Farmer	Tree Fruit	Naramata	250-486-5113	NA	www.ccorchards.com
52	Cedarstein Farms	Farmer	Meat, Produce, Nuts, Hay	Lumby	250-547-6253	hlang@junction.net	www.cedarstein.wordpress.com/ contact/
53	Chahal Farm	Farmer	Tree Fruit	Cawston	250-499-1296	chahal590@hotmail.com	NA
54	Chilco Orchard	Farmer	Produce	Keremeos	250-499-5035	duncanbaynes@hotmail.com	NA
55	Claremont Ranch Organics	Farmer	Tree Fruit	Lake Country	250-766-4311	claremontranch@gmail.com	www.facebook.com/ Claremont-Ranch- Organics-101694613244596/

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
56	Coldstream Creek Road Orchard	Farmer	Apples, Juice	Coldstream	250-542-0373	flenns@shaw.ca	NA
57	Coral Beach Farms	Farmer	Cherries	Lake Country	250-766-5393	HR@coralbeach.ca	www.coralbeach.ca/
58	Corbishley Hill Estates Ltd.	Farmer	Produce	Penticton	NA	georgeandqi@gmail.com	NA
59	Crazy Dog Farm	Farmer	Produce, Eggs	Cawston	250-499-7233	ncaulfield@nethop.net	NA
60	Crooked Sky Farm	Farmer	Produce (Vegetables)	Enderby	250-540-3744	crookedskyfarm@gmail.com	www.crookedskyfarms.com/
61	Crosby Organics	Farmer	Tree Fruit	Kelowna	780-812-1008	crosbyorganics@gmail.com	NA
62	Crossroad Farm	Farmer	Eggs / Poultry	Armstrong	250-306-7972	NA	www.facebook.com/Crossroad- Farm-748838418504006/
63	Crystal Hills Farm	Farmer	Herbs, Flowers, Grapes	Kelowna	250-860 -0334	asazwan@hotmail.com	www.crystalhills.com/our- company/
64	Curlew Organics	Farmer	Tree Fruits, Ground Crops	Cawston	NA	shirleemoses@gmail.com	NA
65	Curly Willow Farm	Farmer	Veggies, Berries	Grindrod	250-838-6751	NA	NA
66	Danninger Orchards/NATFOR Consulting & Developments	Farmer	Cherries	Okanagan Falls	NA	danninger-orchards@telus. net	NA
67	Davison Orchards	Farmer	Tree Fruit, Juice, Value Added (baking etc)	Vernon	250-549-3266	info@davisonorchards.ca	www.davisonorchards.ca/
68	Dawson Farms Ltd.	Farmer	Aples	Osoyoos	250-495-6207	NA	NA
69	De Simone Farms	Farmer	Juice	Kelowna	250-765-7615	jessie@desimonefarms.com	www.desimonefarms.com
70	Desert Produce	Farmer	Cherries	Osoyoos	250-495-0490	paul@desertproduce.ca	www.desertproduce.ca/
71	Destiny Lane Farm	Farmer	Carrots, Hay	Cawston	250-499 - 2987	destiny@nethop.net	NA
72	Dew Fresh Honey	Farmer	Organic Honey	Osoyoos	250-485-2924	dewfreshhoney@gmail.com	NA
73	Dhaliwal, Baljit	Farmer	Produce (Apples)	Cawston	250-499-2292	bjbj644@gmail.com	NA
74	Dhaliwal, Randhir Kaur	Farmer	Produce (Apples, Other tree fruits)	Keremeos	250-499-5102	rk_dhaliwal@hotmail.com	NA
75	Dickinson Farmily Farm	Farmer	Apples/ Cherries	Summerland	250-494-0300	info@dickinsonfamilyfarm.	www.dickinsonfamilyfarm.com/
76	Dominion Cider Co	Farmer	Apples/Cider	Summerland	778-516-8006	info@dominioncider.com	www.dominioncider.com/#farm
77	Double Cross Cidery	Farmer	Wine Grapes	Kelowna	250-863-8011	info@function-junction.ca	www.function-junction.ca
78	Duarte Orchards Ltd.	Farmer	Cherries	Oliver	250-498-3516	duarterick@telus.net	NA
79	Dumplingdale Oeko Farm	Farmer	Apples	Vernon	250-499-5417	NA	NA
80	Eagle Rock Berry Farm	Farmer	Veggies/Berries	Armstrong	250-546-3381	NA	NA

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
81	Eagle Valley Farm	Farmer	Tree Fruit	Cawston	250-499-7217	bergen347@hotmail.com	NA
82	Eastwood Organic Farm	Farmer	Tree Fruit, Veggies, Juice	Kelowna	250-862-2687	jimwoodis(a)hotmail.com	www.facebook.com/ eastwoodorganics/
83	Edible Gardens	Farmer	Sprouts/Greens	Enderby	250-463-2086	ediblegardens13@gmail.com	www.facebook.com/ EdibleGardensBC/
84	Elam's Organics Inc.	Farmer	Tree Fruit	Cawston	250-499-2327	treewills@gmail.com	www.elamsorganics.com/
85	Empire Orchards Ltd.	Farmer	Tree Fruit	Keremeos	250-499-2784	ttorgerson@live.ca	NA
86	Enderberry Farm	Farmer	Veggies/ Berries/Tree Fruit	Enderby	250-804-3316	gavin1@gmail.com	www.enderberryfarm.ca/
87	Espeut-Post Orchards	Farmer	Tree Fruit	Summerland	250-328-9466	info@eporchards.ca	www.eporchards.ca
88	Factors Farms Ltd.	Farmer	Veggies	Armstrong	250-317-3490	jclarke@factorsgroup.com	NA
89	Fairview Orchards Ltd.	Farmer	Peaches	Oliver	250-498-8881	NA	NA
90	Falcon Ridge Farms	Farmer	Produce/Eggs/ Teas	Kelowna	250-212-0755	marlyswolfe@me.com	www.falconridgfarms.ca
91	Farmersdotter Organics	Farmer	Veggies/Tree Fruit	Cawston	250-263-1943	farmersdotterorganics@ gmail.com	www.farmersdotter.wordpress.
92	Faustino Estate Cidery	Farmer	Cidery	Osoyoos	250.495.7035	arelvas@telus.net	www.faustinoestatecidery.com
93	Fieldstone Organics	Farmer	Grain	Armstrong	250.546.4558	info@fieldstoneorganics.ca	www.fieldstoneorganics.ca/
94	Fine Point Farms	Farmer	Veggies	Oliver	250-485-8875	NA	www.facebook.com/ finepointfarm/
95	Firefly Farm	Farmer	Veggies	Kelowna	250-860-2110	fireflyfarmbc@gmail.com	www.fireflyfarmbc.com/
96	Food of the Sun	Farmer	Veggies/Berries	Cawston	250-506-0031	jrfarm@nethop.net	www.foodofthesun.ca
97	Forbes Farm	Farmer	Veggies	Oliver	250-498-4264	gordforbes(a)cablerocket.	www.facebook.com/Forbes- Farm-121331387947497/
98	Forrest Nelson	Farmer	Veggies	Cawston	250-499-5757	forrestn@nethop.net	NA
99	Fresh Valley Farms	Farmer	Meat	Armstrong	250-540-7500	See: www.freshvalleyfarms. ca/contact	www.freshvalleyfarms.ca/
100	Friends Farm	Farmer	NA	Penticton	250-495-3536	NA	NA
101	Gambell Farms	Farmer	Produce	Lake Country	250-766-3131	pengam @ telus.net	www.buylocalbc.org/farms/83- central-okanagan/559-gambell- farms
1-2	Garnet Valley Growers	Farmer	Apples	NA	250-494-9720	NA	NA
103	Garnett Hollow Organic Farm	Farmer	Veggies	Summerland	250-488-7615	ttumbach@gmail.com	NA
104	Gatzke Orchards	Farmer	Tree Fruits	Oyama	250-548-3444	gatzkeorchard@gmail.com	www.gatzkeorchard.com/
105	George and Charlene McGinn	Farmer	Tree Fruit	Cawston	NA	charlenemary2004@yahoo.	NA
106	George Zebroff & Zebroff's Organic Farm	Farmer	Eggs	Cawston	250-499-5374	zebroffs@nethop.net	www.bcorganicfarmers.com/ farms/zebroffs/index.html

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
107	Gian Dhaliwal	Farmer	Tree Fruit	Oliver	250-495-4325	NA	NA
108	Gill, Amandeep	Farmer	Tree Fruit	Keremeos	204-960-6174	amandeepgill1441@gmail.	NA
109	Golden West Farms	Farmer	Tree Fruit	Summerland	250-494-1150	gwn@consultant	NA
110	Good 'N' Plenty Farm	Farmer	Veggies	Armstrong	250-546-6862/ 250-558-7493	certified5@hotmail.com	www.goodnplentyproduce.com/
111	Grandview Melons	Farmer	Veggies/Fruits	NA	NA	NA	NA
112	Grassy Gnome Acres	Farmer	Pork/Poultry/ Lamb	Coldstream	250-542-2379	grassygnomeacres@gmail. com	www.facebook.com/ grassygnomeacres/
113	Graziano Orchards	Farmer	Tree Fruit	Kelowna	250-860-2644	See: www.grazianofamily- orchards.com/contact-us.php	www.grazianofamilyorchards. com/contact.php
114	Grazing Hill Farms	Farmer	Grains	Enderby	250-803-8459	ssyme@kostructural.com	www.facebook.com/ grazinghillfarms/
115	Green Acres Organic Orchard	Farmer	Tree Fruit/Egg	Kelowna	250-764-4399	green-acres@shaw.ca	www.organicfarmfood.org/view/green-acres-organic-orcha
116	Green City Acres	Farmer	Veggies	Kelowna	NA	See: http://www.greenci- tyacres.com/contact-us/	www.greencityacres.com/
117	Green Croft Gardens	Farmer	Veggies	Grindrod	250-838-6581	greencroftgardens@mybcdc. ca	www.greencroftgardens.com/
118	Green Hills Farm	Farmer	Veggies/Fruits	Summerland	250-494-8496	NA	www.greenpagesdirectory. net/directory/view/greenhills- organic-farm
119	Grewal Farm (Satpal)	Farmer	Tree Fruit	Penticton	250-492-7008	satsohan.grewal@gmail.com	www.myfarmpal.com/local- organic/grewal-farm-satpal/
120	Grewal Organic Orchard	Farmer	Tree Fruit	Cawston	250-499-2047	jazzbul@gmail.com	www.myfarmpal.com/local- organic/grewal-organic- orchard/
121	Grewal, Gurkamal	Farmer	Tree Fruit/ Wine Grapes	Penticton	250-492-7886	NA	NA
122	Grown Here Farms	Farmer	Veggies	Cawston	604-260-4986	See: http://www.grownhere- farms.ca/contact-us/	www.grownherefarms.ca/ about-us/
123	H & I Farms	Farmer	Fruit/Grapes	Oliver	250-498-0434	iversen1@telus.net	NA
124	Hao-Mai Berry Farm	Farmer	Berries	Vernon	250-549-5054	hoamaiberryfarm@hotmail. com	NA
125	Happy Valley Organics	Farmer	Veggies/ Flowers	Summerland	250-869-1002	ann.jackson@yahoo.ca	www.happyvalleyorganics.org/
126	Harker's Organics	Farmer	Veggies/Fruits	Cawston	250-499-2751	hfr@nethop.net	www.harkersorganics.com/
127	Hartwood North Farm	Farmer	Veggies/Fruits/ Flowers/Herbs	Armstrong	250-546-2701	warmstrongtaylor@gmail. com	www.hartwoodnorthfarm.com/
128	Harvey's Orchards	Farmer	Fruits/Veggies	Cawston	250-499-7188	walterharvey33@gmail.com	www.similkameencountry.org/ harveys-orchards-snowy-mtn- organics/
129	Heart Achers Farm	Farmer	Tree Fruits	Cawston	250-499-2882	heartachers@nethop.net	www.buylocalbc.org/ farms/84-south-okanagan- similkameen/574-heart-achers
130	Hen Cackle Inn	Farmer	Chickens, Sheep, Eggs	Spallumcheen	NA	NA	www.bigrocksheepstation.com/
131	Herb Garden	Farmer	Fruits/Herbs	Oliver	250-498-9920	bcherbgarden @ gmail.com	www.buylocalbc.org/ farms/84-south-okanagan- similkameen/570-the-herb- garden

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
132	Hill View Acres	Farmer	Veggies	Cawston	250-499-4004	starr_sherrett@hotmail.com	NA
133	Hillview Heritage Farm	Farmer	Tree Fruits/ Berries	Vernon	NA	dd0616@telus.net	NA
134	Hoisington Organic Farms	Farmer	Veggies/Meat/ Eggs	Spallumcheen	250-550-8933	hoisingtonorganicfarms@ gmail.com	www.hoisingtonorganicfarms.
135	Hold It Orchards	Farmer	Tree Fruits/ Juice	Winfield	250-878-8698	sfochler@hotmail.ca	www.facebook.com/ HoldItOrchards/
136	Honest Food	Farmer	Veggies/Tree Fruits	Cawston	250-499-5381	byz5@telus.net	www.facebook.com/ HonestFoodFarm/
137	Hundal Orchards	Farmer	Tree Fruits	Cawston	250-499-0118	hundalsukh@hotmail.com	NA
138	Hutley Acres	Farmer	Нау	Armstrong	250-307-8765	hutleyacres@gmail.com	NA
139	IDZ Holdings Ltd.	Farmer	Wine grapes/ Tree Fruits/ Berries	Kelowna	250-862-2650	anne@eidse.com	NA
140	J & R Orchards	Farmer	Tree Fruits	Cawston	250-493-3904	manjigill@hotmail.com	www.myfarmpal.com/local-or- ganic/j-r-orchards/
141	J&I Relvas Orchards Ltd.	Farmer	Tree Fruits	Oliver	NA	NA	NA
142	James & MaryAnna Campbell	Farmer	Tree Fruits	Osoyoos	250-495-7104	NA	NA
143	Jind Fruit Co Inc	Farmer	Cherries, Peaches	Osoyoos	250-495-2100	NA	na
144	JM Sandher Orchards Ltd	Farmer	Apples	Vernon	NA	jmsandher@hotmail.com	NA
145	JMJ Biodynamic Orchards	Farmer	Tree Fruits	Oliver	NA	jillrothe@eastlink.ca	www.bcorganicfarmers.com/ farms/jmj/index.html
146	JNG Living Tree Farm Ltd.	Farmer	Tree Fruits	Cawston	250-499 -2396	jngdhaliwal@nethop.net	www.myfarmpal.com/local- organic/j-g-farm-jng-living- tree-farm-ltd/
147	Joe Rich Farms	Farmer	Tree Fruits	Coldstream	250-863-4431	NA	met.marketplacebc.ca/business- profile/583/joe-rich-farms
148	Jong's Vegetable Garden	Farmer	Veggies	Armstrong	250-546-2414	joanjong@hotmail.ca	NA
149	Juicy Gardens	Farmer	Garlic	Penticton	NA	robbiewolfe@shaw.ca	NA
150	K Mountain Produce	Farmer	Produce	Keremeos	NA	NA	NA
151	K&R Orchard	Farmer	Tree Fruits	Vernon	250-308-2499	NA	www.buylocalbc.org/farms/82- north-okanagan/635-k-r- orchards
152	K.M. Orchards	Farmer	Tree Fruits	Coldstream	250-545-4824	NA	NA
153	Kadatz Farm	Farmer	Tree Fruits	Kermeos	250-499-2909	djkadatz@nethop.net	NA
154	Kailay Orchard Ltd.	Farmer	Tree Fruits	Osoyoos	250-689-1614	jaswant@kailayorchards.com	www.kailayorchards.com/home/
155	Kaleden Acres	Farmer	Produce	Kaleden	NA	ascure@shaw.ca	NA
156	Kempf	Farmer	Cherries	Kelowna	250-765-1797	info@kempforchards.com	hwww.kempforchards.com/
157	Khunkhun Farm Ltd	Farmer	Produce	Vernon	NA	NA	NA
158	Klippers Organic Acres	Farmer	Produce	Cawston	250-499-2049	hello@klippersorganics.com	www.klippersorganics.com

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
159	La Vista del Canon	Farmer	Veggies	Summerland	250-404-0234	NA	www.facebook.com/ vistadelcanyonfarm/
160	Lakhvir Singh Sidhu	Farmer	Tree Fruits	Osoyoos	NA	NA	NA
161	LaRiviere Farm	Farmer	Veggies/Berries	Coldstream	250-542-7242	lariv@shaw.ca	www.facebook.com/ larivierefarm/
162	Learmouth Farm	Farmer	Veggies/Hay/ Grain	Coldstream	416-455-0637	NA	NA
163	Liber Farms	Farmer	Tree Fruit/ Wine Grapes	Cawston	250-499-5305	mike@libergroupinc.com	www.liberfarm.com/
164	Lidder Farms	Farmer	Tree Fruits	Keremeos	250-499-5656	NA	NA
165	Lidhar Farms	Farmer	Tree Fruits	Cawston	NA	NA	NA
166	Lina's Garden	Farmer	Veggies/Fruits	Cawston	250-499-5492	art@linasgarden.ca	www.linasgarden.ca/
167	Little Creek Garden	Farmer	Veggies	Kelowna	250-769-3932	dez.littlecreekgardens@ gmail.com	NA
168	Lopes Orchard Ltd.	Farmer	Tree Fruits	Cawston	" 250-499-2484"	NA	NA
169	Lual Orchards Ltd.	Farmer	Tree Fruits	Osoyoos	250-495-3362	NA	www.lual.ca/
170	Mabel Lake Farms	Farmer	Berries	Enderby	250-838-6248	NA	www.mabellakefarms.com/
171	Mackenzie Farm	Farmer	Veggies	Okanagan Falls	250-497-7939	grantandmaria@hotmail.com	NA
172	Madalea Farms	Farmer	Blueberries	Grindrod	250-517-7454	sereneleafarms@gmail.com	www. madaleagrowersblueberryfarm. com/contact/
173	Makedon Organics	Farmer	Veggies	Cawston	250-506-0130	ivica@yahoo.com	www.facebook.com/ makedonorganics1/
174	Makepeace Organic Farms Ltd.	Farmer	Tree Fruits	Cawston	250-499-2201	wcwmakepeace@gmail.com	www.buylocalbc.org/ farms/84-south-okanagan- similkameen/575-makepeace- organic-farms
175	Manan, Saravjit	Farmer	Tree Fruits	Cawston	604-807-2210	parmconcreteltd@hotmail.	NA
176	Manmohan Singh Gill	Farmer	Tree Fruits	Osoyoos	250-495-6896	NA	NA
177	Mara Valley Produce	Farmer	Veggies	Grindrod	250-938-8525	mark.uher87@gmail.com	www.facebook.com/ pg/maravalleyproduce/ about/?ref=page_internal
178	Mariposa Organic Farm	Farmer	Veggies	Cawston	250-499-5379	mariposaorganicfarm@ nethop.net	NA
179	Matheson Creek Farm	Farmer	Tree Fruits/ Veggies	Okanagan Falls	250-497-8989	mathesoncreekfarm@gmail. com	www.mathesoncreekfarm.ca/ our-farm.html
180	Medley Organics	Farmer	Veggies	Summerland	250-689-0848	jerome@medleyorganics.ca	NA
181	Moonstone Ferments	Farmer	Veggies	Kelowna	250-860-3693	NA	NA
182	Morning Dove Gardens	Farmer	Veggies	Kelowna	778-215-4232	matthew@morningdove.ca	www.morningdove.ca/contact/
183	Moss and Mirth Farm	Farmer	Veggies	Armstrong	250-309-2106	aubreysanjenko@hotmail. com	NA
184	Mountain Grove Orchards	Farmer	Tree Fruits	Penticton	250-492-6308	mgrove@hotmail.com	www.mountaingroveorchard. wordpress.com/

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
185	Mountain Springs Farm	Farmer	Veggies/Berries	KALeden	250-497-8209	jmaeff(a)skysurfer.ca	www.mountainspringscenter. com
186	Muckabout Orchards Ltd.	Farmer	Tree Fruits	Cawston	250-499-5398	jandrmennell@nethop.net	NA
187	Naramata Seed Company	Farmer	Seed Producer	Naramata	NA	naramataseedco@gmail.com	www.naramataseedco.com/ contact.html
188	Narind Farm	Farmer	Tree Fruits	Cawston	250-499-5343	narindfarm@hotmail.com	www.organicfarmfood.org/view/ narind-farm
189	Nazaroff Farms	Farmer	Tree Fruits/ Grapes	Oliver	250-498-3503	tnazaroff@persona.ca	www.myfarmpal.com/local- organic/nazaroff-farms/
190	Nelson Fruit Works	Farmer	Tree Fruits	Cawston	250-499-2460	phyllis.nelson7@gmail.com	NA
191	New Fasham	Farmer	Tree Fruits/ Veggies	Keremeos	604-679-7319	carolefitsell@hotmail.com	www.myfarmpal.com/local- organic/new-fasham/
192	New Growth	Farmer	Tree Fruits	Keremeos	250-506-0120	bjbj644@gmail.com	NA
193	Northern Lights Orchard	Farmer	Tree Fruits/ Tomatoes	Naramata	250-496-5156	simonsen@vip.net	www.organicfarmfood.org/view/ northern-lights-orchard
194	Nova's Arc	Farmer	Cherries	Penticton	778-476-1022	ryan@foodforesters.ca	NA
195	Ocean Fruit Inc.	Farmer	Tree Fruits	Kelowna	" 1-800-710- 5870"	NA	NA
196	Odyssey Ventures Ltd.	Farmer	Veggies	Oliver	250-498-6868	NA	www.babyplants.com
197	Okanagan Harvest	Farmer	Tree Fruits	Oliver	250-498-4669	okanaganharvest@gmail.com	www.okanaganharvest.com/ contact
198	Okanagan Harvest	Farmer	Cherries	Oliver	250-498-4669	okanaganharvest@gmail.com	www.okanaganharvest.com
199	Okanagan Hatchery	Farmer	Poultry Hatchery	Armstrong	250-546-9223		
200	Okanagan Lavender	Farmer	Lavender	Oliver	250-764-7795	info@okanaganlavender.com	www.okanaganlavender.com
201	Okanagan Similkameen Enterprises	Farmer	Tree Fruits	Cawston	NA	NA	NA
202	Okanagan Sunshine Fruit Packer Ltd.	Farmer	Tree Fruits	Oliver	250-498-9641	NA	NA
203	Old Meadows Organic Farm	Farmer	Veggies/Tree Fruits/Melons/ Berries	Kelowna	250-764-0931	oldmeadowsorganics@gmail.	www.oldmeadowsorganics.com
204	Old Tower Farm	Farmer	Berries/ Tree Fruits/ Rootstock	Keremeos	250-499-5654	alainp@telus.net	www.oldtowerfarm.com
205	Olga Klingspohn	Farmer	Produce/ Prepared Foods	NA	NA	NA	NA
206	Once Upon a Vines	Farmer	Melons/Squash	Armstrong	250-308-7728	amanda.vines@live.com	www.facebook.com/ onceuponavines/
207	Open View Orchard	Farmer	Tree Fruits	Penticton	604-346-7011	luciasantos65@gmail.com	www.facebook.com/ OpenViewOrchard/?ref=py_c
208	Orchard Corners Organics	Farmer	Produce (Apples, Blueberries)	Kelowna	250-765-8114	NA	NA

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
209	Orchard Hill Farm	Farmer	Veggies/Eggs/ Nuts	Kelowna	250-859-3276	NA	www.orchardhillrv.com
210	O'Reilly's Farm	Farmer	Tree Fruits	Oliver	250-498-6044	oreilly@vip.net	www.oreillyfarmstay.ca/
211	Organic Only	Farmer	Veggies/Tree Fruits/Nuts	Cawston	250-499-0539	emilie.thoueille@gmail.com	NA
212	Out on a Limb Acres	Farmer	Tree Fruits/ Garlic	Cawston	778-898-2733	amandaturner915@hotmail.	NA
213	Oxbow Flats Farm	Farmer	Veggies	Oliver	250-498-7510	NA	www.facebook.com/ oxbowflatsfarm/
214	Paynelea Organic Farms	Farmer	Grains/Herbs/ Hay	Armstrong	250-546-2195	payneteam@xplornet.com	www.myfarmpal.com/local- organic/paynelea-organic- farms/
215	Peaches and Dream Farm	Farmer	Tree Fruits/ Veggies	Osoyoos	250-495-5465	peterpmildner@gmail.com	www.myfarmpal.com/local- organic/peaches-and-dream- farm/
216	Peters Orchard	Farmer	Tree Fruits	Keremeos	250-499-2218	NA	NA
217	Pilgrim's Produce	Farmer	Veggies/ Berries/Tree Fruits	Armstrong	250-546-3669	pilgrimsproduce(a)shaw.ca	www.pilgrimsproduce.com
218	Planet Bee Farm	Farmer	Honey	Venon	250-542-8088	www.planetbee.com/con- tact-us/	
219	Ponderosa Egg Farm	Farmer	Eggs	Lake Country	250-300-3464.	NA	NA
220	Prana Farms	Farmer	Tree Fruits/ Berries	Osoyoos	250-498-7372	pranafarm@gmail.com	www.facebook.com/ pranafarmosoyoos/
221	Quail Hollow Farm	Farmer	Tree Fruits	Kelowna	250-764-2321	cm.braun@hotmail.com	NA
222	Quail's Farm	Farmer	Produce/Egg	Vernon	250-549-6768	NA	NA
223	Rajeshvari Commandeur	Farmer	Tree Fruits	Naramata	250-496-5496	rgcommandeur@hotmail.	NA
224	Rajinder & Ramandeep Brar	Farmer	Tree Fruits	Osoyoos	NA	NA	NA
225	Rasa Creek Farm	Farmer	Hay/Garlic	Lumby	250-547-2077	admin@rasacreekfarm.com	www.rasacreekfarm.com/
226	Rieger Farms	Farmer	Eggs	Armstrong	250-546-6059	info@riegerfarms.com	www.riegerfarms.com/
227	Ringo-En Orchards	Farmer	Tree Fruits/ Veggies/Berries	Vernon	250-545-1610	tomsouchi@gmail.com	www.ringo-enorchards.com/
228	Riverside Orchard	Farmer	Pears	Keremeos	250-499-0013	karenbidniak@telus.net	NA
229	Rivery Valley Orchards Ltd.	Farmer	Tree Fruits	Cawston	250-499-2292	rivervalleyorchards2016@ gmail.com	NA
230	Robert Fugger	Farmer	Veggies	Kelowna	250-765-9256	bob.fugger@yahoo.ca	NA
231	Roots & Greens Farm	Farmer	Veggies	Grindrod	250-838-7487	rootsandgreens2003@gmail.	www.urbanharvest.ca/suppliers/ roots/
232	Rosebank Farms	Farmer	Chicken/Turkey	Armstrong	250-546 2712	info@rosebankfarms.ca	www.rosebankfarms.ca/
233	Roseridge Orchards	Farmer	Produce (Apples, Other tree fruits)	Kelowna	250-860-4651	germhogue@shaw.ca	www.roseridgeorchards.com
234	Royal King Organic Orchard	Farmer	Apples	Cawston	250-499-2074	rupee22@gmail.com	www.myfarmpal.com/local- organic/royal-king-organic- orchard/
235	Rupee's Organic Orchard	Farmer	Tree Fruits	Cawston	250-499-2074	rupee22@gmail.com	NA

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
236	S.M. Produce Ltd.	Farmer	Tree Fruits	Oliver	NA	NA	NA
237	Sage Greenhouses	Farmer	Veggies	Oliver	250-498-6000	sagegh@telus.net	NA
238	Sally Mennell's Orchard	Farmer	Tree Fruits	Cawston	250-499-2638	wandsmennell@nethop.net	NA
239	Sandhu Greenhouses & Nursery Ltd.	Farmer	Veggies	Osoyoos	250-495-2676	info@sandhugreenhouses.	www.sandhugreenhouses.com/
240	Sapinder and Manpreet Tiwana	Farmer	Tree Fruits	Osoyoos	NA	NA	NA
241	Secrest Organic Produce Ltd.	Farmer	Tree Fruites/ Veggies	Okanagan Falls	250-809-7715	terry@secrestorganicpro- duce.com	www.covertfarms.ca/seacrest- organics/
242	Shovel Tree Acres	Farmer	Eggs		250-546-8597	NA	NA
243	Sidhu, Jaswinder Singh	Farmer	Tree Fruits	Cawston	250-899-0449	bhunder1979@gmail.com	NA
244	Silver Lake Estate Farm	Farmer	Tree Fruits	Naramata	250 496 4371	silverlakeestatebc@gmail. com	www.organicfarmfood.org/view/silver-lake-estate-farm
245	Similkameen Apiaries	Farmer	Tree Fruits/ Veggies	Cawston	NA	blairtarves@gmail.com	NA
246	Snowy Mountain Orchards	Farmer	Tree Fruits/ Veggies	Cawston	NA	snowymtnfarm@gmail.com	NA
247	Sperling Vineyards	Farmer	Produce	Kelowna	778-478-0260	info@sperlingvineyards.com	www.sperlingvineyards.com/
248	Sproule & Sons Farm	Farmer	Tree Fruits	Lake Country	250-548-3387	sproule(a)sproulesredbarn.	www.sproulesredbarn.com
249	Starvation Flats Farm	Farmer	Berries/ Veggies/ Flowers/Fruit	Keremeos	250-499-2876	tbcaswell@nethop.net	www.myfarmpal.com/local- organic/starvation-flats-farm/
250	Stawn's Honey	Farmer	Honey	Vernon	250-308-1565	NA	www.facebook.com/ stawnshoney/
251	Stearns, Robert & Katherine	Farmer	Fruit	Kelowna	250-765-4141	NA	NA
252	Stepney Hills Farm	Farmer	Eggs/Veggies/ Berries	Armstrong	250-546-9838	shfarmers@gmail.com	NA
253	Steve Crockett- Kim Crockett	Farmer	Tree Fruits	Keremeos	250-499-6340	stevecrockett65@gmail.com	NA
254	Stoney Paradise	Farmer	Veggies/Fruits	Kelowna	250-764-8828	milan.d@telus.net	NA
255	Sukhdev Lasser - Lasser Produce	Farmer	Tree Fruits	Keremeos	250-499-5781	NA	NA
256	Sumaq Valley Alpacas	Farmer	Yarn	Kelowna	250-861-5561	NA	www.alpacasbc.com/cms/
257	Summer Farm	Farmer	Tree Fruits/ Eggs/Veggies/ Baked Goods	Coldstream	250-309-5675/ 250-540-4888	samrana.a@live.com	www.summerfarm.ca/
258	Summerhill	Farmer	Grapes/ Veggies/ Flowers/Fruits/ Berries	Kelowna	NA	gabecipes@gmail.com	NA
259	Sun Valley farm	Farmer	Tree Fruits	Keremeos	250-499-5855	debbielwilkinson@hotmail. com	www.sfam.ca/sun-valley-farm/
260	Suncather Farm Ltd.	Farmer	Veggies	Kelowna	250-869-0016	suncatcherfarm@shaw.ca	www.myfarmpal.com/local- organic/suncatcher-farm-ltd/

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
261	Sundance Organic Farms	Farmer	Tree Fruits/ Veggies	Cawston	250-499-2584	sundanceorgfarms@nethop.	NA
262	Sun-Joan Farm	Farmer	Hay/Garlic	Keremeos	250-499-0044	shl3297@gmail.com	www.myfarmpal.com/local- organic/sun-joan-farm/
263	Sunreal Organics	Farmer	Tree Fruits/ Veggies	Kelowna	250-763-2664	isaacpotash@gmail.com	www.myfarmpal.com/local- organic/sunreal-organics/
264	Sunshine Farm	Farmer	Veggies/ Flowers/ Herbs/Hops/ Fruits/Grains	Kelowna	250-448-1826	sunshinefarm@mail.com	NA
265	Sunshine Harvest	Farmer	Tree Fruits/ Wine Grapes	Keremeos	250-499-2670	sharvest@telus.net	NA
266	Sunshine Orchards	Farmer	Tree Fruits	Lake Country	250-307-9060	NA	NA
267	Sure Crop Feeds Inc.	Farmer	Livestock Feed	Grindrod	250-838-6855	dpringle@surecropfeeds.com	NA
268	Tangaro Ventures Ltd.	Farmer	Tree Fruits	Lake Country	250-766-4949	tangaro@orchard.ca	www.facebook.com/ tangaroventures/
269	Taylor Farms	Farmer	Tree Fruits	Cawston	250-499 -2858	dan(a)nffccs.ca	NA
270	The Herb Garden	Farmer	Tree Frutis/ Wine Grapes/ Veggies	Oliver	250-495-7422	bcherbgarden@gmail.com	NA
271	The Homestead Organic Farm	Farmer	Hay/Veggies/ Fruits	Peachland	250-767-9231	jjhomestead@telus.net	NA
272	The Vinegar Works	Farmer	Grapes/Vinegar	Cawston	778-739-9873	Thevinegarworks@the- garden.ca	www.thegarden.ca/ vinegarworks/contactus.html
272	Tom Wilkinson Farm	Farmer	Tree Fruits	Naramata	250-496-4252	stwil@shaw.ca	NA
274	Tony Antunes	Farmer	Tree Fruits	Oliver	250-498-4671	NA	NA
275	Tony dos Santos	Farmer	Tree Fruits	Osoyoos	250-495-7942.	NA	NA
276	Tree to Me Agricultural Products	Farmer	Tree Fruits/ Veggies/Herbs	Keremeos	604-513-5201	jwurz@iem.ca www.tree- tome.ca	www.treetome.ca/
277	Triple F Farms	Farmer	Tree Fruits/ Veggies	Oliver	250-498-3623	st2664@outlook.com	NA
278	True North Heritage Hatchery	Farmer	Heritage chickens	Armstrong	250-546-0106	orders@truenorthfarm.ca	www.truenorthfarm.ca/
279	Twin Oaks Organic Farm and Orchard	Farmer	Tree Fruits	Kelowna	250-764-6228	kchammann@gmail.com	NA
280	Twisted Hills Cider	Farmer	Cider	Cawston	250-488-4256	cider@twistedhills.ca	www.twistedhills.ca
281	Unearthed Fine Veggies and Herbs	Farmer	Vegies	Kelowna	250-767-6636	infor@unearthedfarm.com	www.unearthedfarm.com
282	Vale Farms	Farmer	beef	Lumby	250-547-2382	valefarms@telus.net	www.valefarms.com
283	VegPro	Farmer	mixed green	Coldstream	na	na	www.vegpro.com
284	Ven'Amour Organic Farms	Farmer	Tree Fruits/ Wine Grapes/ Berries	Cawston	250-499-2649	venamour@nethop.net	NA
285	Vialo Orchard	Farmer	Tree Fruits	Cawston	250-499-2320	vialoorchard@gmail.com	NA

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
286	Vismaad Farm	Farmer	Tree Fruits	Cawston	250-499-5343	NA	NA
287	Walnut Grove Garlic Farms	Farmer	Garlic	Cawston	NA	al.matovich@gmail.com	NA
288	West Enderby Farm	Farmer	Veggies	Enderby	250-838-0965	elaine-s@telus.net	NA
289	What the Fungus	Farmer	Mushrooms	Summerland	250-809-9217	bcallow@WTFmushrooms.	www.wtfmushrooms.ca/
290	Wild Flight Farms	Farmer	Veggies	Mara	250-838-7447	hermann(a)wildflightfarm.ca	www.wildflightfarm.ca/contact- us.html
291	Wilfred Mennell's Orchard	Farmer	Tree Fruits	Cawston	250-499-2638	wandsmennell@nethop.net	NA
292	Willowtree Farm	Farmer	Produce	Armstrong	250-469-1656	alandebclarke@gmail.com	NA
293	Wise Earth Farm	Farmer	Veggies	Kelowna	250-869-6539	wiseearthfarm@gmail.com	www.wiseearthfarm.com/
294	Worrenberg Farms Ltd.	Farmer	Tree Fruits/ Apple Juice	Keremeos	250-499-7091	mmkeller@telus.net	NA
295	Wyndhaven Farm	Farmer	Tree Fruits	Keremeos	250-499-2593	wyndhaven@telus.net	NA
296	Your Local Farmacy	Farmer	Veggies/Fruits	Lumby	250-547-2400	yourlocalfarmacy@outlook.	www.yourlocalfarmacy.ca/
297	Zebroff's Organic Farm	Farmer	Tree Fruits	Cawston	250-499-5374	zebroffs@nethop.net	www.bcorganicfarmers.com/ farms/zebroffs/index.html
298	Zelaney Farms	Farmer	Veggies	Coldstream	250-549-2436	info@zelaneyfarms.ca	www.zelaneyfarms.ca
299	Left Fields	Farmer	Hops	Sorrento	250-675-4122	hops@leftfields.ca	www.crannogales.com/pages/ farm-and-hops
300	Paynter's Fruit Market	Farmer	Tree Fruits	Westbank	250-768-7313	info@payntersfruitmarket.ca	www.payntersfruitmarket.ca/ index.html
301	Sun City Cherries	Farmer	Cherries/honey	Kelowna	250-764-1872	NA	www.facebook.com/ pg/suncitycherries/ about/?ref=page_internal
302	8th Generation Vineyard	Vineyard	Wine Grapes	Summerland	250-494-1783	info@8thgeneration.com	www.8thgeneration.com
303	Adega on 45th Estate Winery	Vineyard	Wine Grapes	Osoyoos	250.495.6243	info@AdegaOn45.com	www.adegaon45.com
304	Anarchist Mountain Farmer	Vineyard	Wine Grapes	Osoyoos	250-460-2099	NA	www.anarchistFarmer.com/ index.html
305	Ancient Hill Estate Winery	Vineyard	Wine Grapes	Kelowna	250-491-2766	info@ancienthillwinery.com	www.ancienthillwinery.com
306	Antares Farmers	Vineyard	Wine Grapes	Oliver	250-498 -2767	ronf@persona.ca	NA
307	Bartier Bros. Winery	Vineyard	Wine Grapes	Oliver	250-809-5808	wine@bartierbros.com	www.bartierbros.com
308	BC Wine Studio	Vineyard	Wine Grapes	Okanagan Falls	604-862-3420	mark@artisangroup.ca / steve@hawksvineyard.ca	www.bcwinestudio.ca
309	Beaumont Estate Farmers	Vineyard	Wine Grapes	Kelowna	250-769-1222	info@beaumontwinery.com	www.beaumontwinery.com/ contact-us/
310	Bella Wines	Vineyard	Wine Grapes	Naramata	778-996-1829	jay@bellawines.ca	www.bellawines.ca
311	Bench 1775 Winery	Vineyard	Wine Grapes	Penticton	250-490-4965	winery@bench1775.com	www.bench1775.com/
312	Black Dog Cellars	Vineyard	Wine Grapes	Okanagan Falls	615-498-3369	Mhaney@blackdogcellar- swine.com	www.blackdogcellars.ca

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
313	Black Hills Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-0666	info@blackhillswinery.com	www.blackhillswinery.com/
314	Black Widow Winery	Vineyard	Wine Grapes	PENTICTON	250 487-2347	info@blackwidowwinery.com	www.blackwidowwinery.com/
315	Blasted Church	Vineyard	Wine Grapes	Okanagan Falls	250-497-1125	intrigued@blastedchurch.	www.blastedchurch.com/
316	Blue Mountain Vineyard and Cellars	Vineyard	Wine Grapes	Okanagan Falls	250-497-8244	bluemountain@bluemountainwinery.com	www.bluemountainwinery.com
318	Blue Sky Estate Winery	Vineyard	Wine Grapes	Osoyoos	250.495.1777	info@blueskywinery.ca	www.blueskywinery.ca/
319	Bordertown Vineyards	Vineyard	Wine Grapes	Osoyoos	250.498.9976	info@bordertownwinery.com	www.bordertownwinery.com
320	Burrowing Owl Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-0620	info@burrowingowlwine.ca	www.burrowingowlwine.ca
321	C.C. Jentsch Cellars	Vineyard	Wine Grapes	Oliver	778.439.2091	info@ccjentschcellars.com	www.ccjentschcellars.com
322	Calona Vineyards	Vineyard	Wine Grapes	Kelowna	250-979-4211	requestinfo@calonavine- yards.ca	www.calonavineyards.ca
323	Camelot Vineyards	Vineyard	Wine Grapes	Kelowna	250-862-8873	info@camelotvineyards.ca	www.camelotvineyards.ca
324	Cana Vines Winery	Vineyard	Wine Grapes	Oliver	778-439-3340	info@canavineswinery.com	www.canavineswinery.com
325	Cassini Cellars	Vineyard	Wine Grapes	Oliver	250-485-4370	info@cassini.ca	www.cassini.ca
326	Castoro De Oro Estate Winery	Vineyard	Wine Grapes	Oliver	250-495-4991	NA	www.castorodeoro.com
327	Cathpair Farmer	Vineyard	Wine Grapes	Kelowna	778-753 3397	cathpair@gmail.com	NA
328	Cedarcreek Estate Winery	Vineyard	Wine Grapes	Kelowna	778-738-1020	info@cedarcreek.bc.ca	www.cedarcreek.bc.ca
329	Checkmate Artisanal Winery	Vineyard	Wine Grapes	Oliver	250.707.2299	info@checkmatewinery.com	www.checkmatewinery.com
330	Church & State Wines	Vineyard	Wine Grapes	Oliver	250-498-2700	sales@churchandstatewines.	www.churchandstatewines.com
331	Clos du Soleil Winery	Vineyard	Wine Grapes	Keremeos	250 485-2513	mmauz@closdusoleil.ca	www.closdusoleil.ca
332	Corcelettes Estate Winery	Vineyard	Wine Grapes	Keremeos	250.499.5595	Info@CorcelettesWine.ca	www.corceletteswine.ca/
333	Cottrill Farmer	Vineyard	Wine Grapes/ Table Grapes	Keremeos	250-499 - 5568	cottrill@nethop.net	NA
334	Covert Farms	Vineyard	Wine grapes / Alfalfa	Oliver	250-498 - 2731	gene@covertfarms.ca	www.covertfarms.ca
335	Crescent Hill Winery	Vineyard	Wine Grapes	Okanagan Falls	250-492-7842	sales@crescenthillwinery.	www.crescenthillwinery.com/
336	Crowsnest Vineyards	Vineyard	Wine Grapes	Cawston	250.499.5129	info@crowsnestvineyards.	www.crowsnestvineyards.com
337	Culmina Family Estate Winery	Vineyard	Wine Grapes	Oliver	250.498.0789	info@culmina.ca	www.culmina.ca
338	D&M Djordjevich Farmers	Vineyard	Wine Grapes	Kelowna	250-764-8828	NA	www.soilmate.com/farms/d-m-djordjevich-Farmers
339	D'Angelo Estate Winery	Vineyard	Wine Grapes	Penticton	250-493-1364	info@dangelowinery.com	www.dangelowinery.com/

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340	Daydreamer Wines	Vineyard	Wine Grapes	Naramata	778-514-0026	daydreamerwines@shaw.ca	www.daydreamerwines.ca/
341	Deep Roots Winery	Vineyard	Wine Grapes	Naramata	250-460-2390	winemaker@deeprootswin- ery.com	www.deeprootswinery.com
342	Desert Hills Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-6664	info@deserthills.ca	www.deserthills.ca
343	Dirty Laundry Vineyard	Vineyard	Wine Grapes	Summerland	250-494-8815	themadam@dirtylaundry.ca	www.dirtylaundry.ca
344	Eau Vivre Winery & Vineyards	Vineyard	Wine Grapes	Cawston	250.499.2655	postmaster@eauvivrewinery. ca	www.eauvivrewinery.ca
345	Edge of the Earth Farmer	Vineyard	Wine Grapes	Armstrong	250-546-2164	edgeearth@telus.net	www.edgeearth.ca/
346	Elephant Island Winery	Vineyard	Wine Grapes	Naramata	250-496-5522	info@elephantislandwine.	www.elephantislandwine.com/
347	Estate Thurn Winery, Craft Distillery & Vinegar Brewery	Vineyard	Wine Grapes	Summerland	250-809-2077	info@bodega1117.com	www.bodega1117.com
348	Evolve Cellars	Vineyard	Wine Grapes	Summerland	778-516-7728	info@evolvecellars.com	www. evolvecellars.com
349	Fairview Cellars	Vineyard	Wine Grapes	Oliver	250.498.2211	beggert@uniserve.com	www.fairviewcellars.ca/ fairviewcellars.ca/Welcome.html
350	Forbidden Fruit Winery	Vineyard	Wine Grapes/ Tree Fruit	Cawston	250-499-2649	forbiddenfruit@nethop.net	www.forbiddenfruitwines.com/
351	Forgotten Hill Wine Co.	Vineyard	Wine Grapes	Naramata	250-496-5600	info@forgottenhill.com	www.forgottenhillwineco.com
352	Foxtrot Vineyards	Vineyard	Wine Grapes	Naramata	250-496-5082	info@foxtrotwine.com	www.foxtrotwine.com
353	Frequency Wine & Sound	Vineyard	Wine Grapes	Kelowna	250-764-5450	info.frequencywinery@gmail.	www.frequencywinery.ca
354	Gehringer Brothers Estate Winery	Vineyard	Wine Grapes	Oliver	250.498.3537	gbwines@me.com	www.gehringerwines.ca
355	Ghost Pine Vines	Vineyard	Wine Grapes	Peachland	778-479-7463	ghostpine22@gmail.com	NA
356	Giant Head Estate Winery	Vineyard	Wine Grapes	Summerland	250-460-0749	jglavina@giantheadwinery. com	www.giantheadwinery.com
357	Gold Hill Winery	Vineyard	Wine Grapes	Oliver	250-495-8152	info@goldhillwinery.com	www.goldhillwinery.com
358	Heaven's Gate Estate Winery	Vineyard	Wine Grapes	Summerland	778-516-5505	NA	www.heavensgatewinery.ca
359	Heckmann Farmers	Vineyard	Wine Grapes	Summerland	250-494-0943	alfred.heckmann@gmail.com	www.organicfarmfood.org/view/ heckmann-vineyards
360	Hester Creek Estate Winery	Vineyard	Tree Fruits	Oliver	250-498-4435	info@hestercreek.com	www.hestercreek.com
361	Hidden Chapel Winery	Vineyard	Wine Grapes	Oliver	250-490-6000	hiddenchapel@gmail.com	www.hiddenchapelwinery.com
362	Hillside Estate Winery	Vineyard	Wine Grapes	PENTICTON	250-493-6274	NA	www.hillsidewinery.ca/
363	House of Rose Winery	Vineyard	Wine Grapes	Kelowna	250-765-0802	info@houseofrose.ca	www.houseofrose.ca
364	Howling Bluiff Estate Winery	Vineyard	Wine Grapes	Penticton	250.490.3640	media@howlingbluff.ca	www.howlingbluff.ca/
365	Hugging Tree Winery	Vineyard	Wine Grapes	Cawston	250.499.2201	info@huggingtreewinery.com	www.huggingtreewinery.com

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
366	Inniskillin Okanagan Vineyards	Vineyard	Wine Grapes	Oliver	250-498-4500	consumer.help@cbrands.com	www.inniskillin.com
367	Intersection Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-4054	info@xwine.ca	www.xwine.ca
368	Jackson - Triggs Okanagan Estate	Vineyard	Wine Grapes	Oliver	250-498-4500	OkanaganEstate@jackson- triggswinery.com	www.jacksontriggswinery.com
369	Joie Farms	Vineyard	Wine Grapes	Naramata	250-496-0092	Heidi@joiefarm.com	www.JoieFarm.com
370	Kalala Organic Farmers Ltd	Vineyard	Wine Grapes	Kelowna	250-768-9700	karnail@kalala.ca	www.kalala.ca/
371	Kalala Organic Farmers Ltd	Vineyard	Wine Grapes	Oliver	250-768-9700	karnail@kalala.ca	www.kalala.ca/
372	Kettle Valley Winery	Vineyard	Wine Grapes	Naramata	250-496-5898	info@kettlevalleywinery.com	www.kettlevalleywinery.com
373	Kisment Estate Winery	Vineyard	Wine Grapes	Oliver	250-408-9800	NA	www.kismetestatewinery.com
374	Kitsch Wines	Vineyard	Wine Grapes	Kelowna	778-821-1955	info@kitschwines.ca	www.kitschwines.ca
375	Kozier Organic Farmer	Vineyard	Wine grapes	Penticton	250-486-1024	kozierFarmer@outlook.com	NA
376	Kraze Legz Vineyard and Winery	Vineyard	Wine Grapes	Okanagan Falls	250-497-6957	info@krazelegz.com	www.krazelegz.com
377	La Casa Bianca Winery	Vineyard	Wine Grapes	Oliver	250-689-2790	linda@lacasabianca.ca	www.lacasabianca.ca/
378	LA FRENZ WINERY	Vineyard	Wine Grapes	Penticton	250-492-6690	info@lafrenzwinery.com	www.lafrenzwinery.com/
379	Lake Breeze Vineyards	Vineyard	Wine Grapes	Naramata	250-496-5659	info@lakebreeze.ca	www.lakebreeze.ca
380	Lang Vineyards	Vineyard	Wine Grapes	Naramata	778-514-5598	customerservice@langvine- yards.ca	www.langvineyards.ca
381	Lariana Cellars	Vineyard	Wine Grapes	Osoyoos	250.498.9259	wine@larianacellars.com	www.larianacellars.com
382	LaStella Winery	Vineyard	Wine Grapes	Osoyoos	250.495.8180	info@lastella.ca	www.lastella.ca
383	Laughing Stock Vineyards Ltd.	Vineyard	Wine Grapes	Penticton	250.493.8466	info@laughingstock.ca	www.laughingstock.ca
384	Le Vieux Pin Winery	Vineyard	Wine Grapes	Oliver	250-498-8388	info@levieuxpin.ca	www.levieuxpin.ca
385	Ledlin Family Vineyoard Ltd	Vineyard	Wine Grapes	Penticton	250-328-8923	ledlinfamilyvineyards@gmail.	www.ledlinfamilyvineyards.ca/ wines.html
386	Liber Farm & Winery	Vineyard	Wine Grapes	Cawston	250.499.5305	info@liberfarm.com	www.liberfarm.com/
387	Lilypondacres	Vineyard	Wine Grapes	Okanagan Falls	250-497-8694	lilypondharbeck@gmail.com	www.organicfarmfood.org/view/ lilypondacres
388	Liquidity Wines	Vineyard	Wine Grapes	Okanagan Falls	778-515-5500	info@liquiditywines.com	www.liquiditywines.com
389	Little Farm Winery Ltd.	Vineyard	Wine grapes	Cawston	250-499-8891	info@littlefarmwinery.ca	www.littlefarmwinery.ca
390	Lunessence Winery & Vineyard	Vineyard	Wine Grapes	Summerland	778-516-3131	info@lunessencewinery.com	www.lunessencewinery.com

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391	Marichel Vineyard & Winery	Vineyard	Wine Grapes	Naramata	250-496-4133	info@marichel.ca	www.marichel.ca
392	Martin's Lane Winery	Vineyard	Wine Grapes	Kelowna	250-707-2263	NA	www.martinlanewinery.com/
393	Maverick Vineyards	Vineyard	Wine Grapes	Oliver	778-437-3133	info@maverickwine.ca	www.maverickwine.ca
394	Meadow Vista Honey Wines	Vineyard	Wine Grapes	Kelowna	250-862-2337	hello@meadowvista.ca	www.meadowvista.ca
395	Meyer Family Vineyards	Vineyard	Wine Grapes	Okanagan Falls	250-497-8553	wineshop@mfvwines.com	www.MFVwines.com
396	Misconduct Wine Co.	Vineyard	Wine Grapes	Penticton	1-800-851- 0903	info@misconductwineco.com	misconductwineco.com/
397	Mission Hill Family Estate	Vineyard	Wine Grapes	Oliver	250-485-8274	lwambold@sebastianfarms.	www.missionhillwinery.com/
398	Mocojo Winery	Vineyard	Wine Grapes	Naramata	778-931-0265	info@mocojowines.com	www.mocojowines.com
399	Monster Vineyard	Vineyard	Wine Grapes	Penticton	250-493-9463	wine@monstervineyards.com	www.monstervineyards.ca/
400	Montakarn Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-7709	info@montakarn.ca	www.montakarn.ca
401	Moon Curser Vineyards	Vineyard	Wine Grapes	Osoyoos	250.495.5161	gold@mooncurser.com	www.mooncurser.com
402	Moraine Estate Winery	Vineyard	Wine Grapes	Penticton	778 4767688	info@morainewinery.com	www.morainewinery.com/
403	Nagging Doubt Winery	Vineyard	Wine Grapes	Kelowna	250-764-0610	info@naggingdoubt.com	www.naggingdoubt.com
404	Nichol Vineyard	Vineyard	Wine Grapes	Naramata	250-496-5962	info@nicholvineyard.com	www.nicholvineyard.com
405	Nighthawk	Vineyard	Wine Grapes	Okanagan Falls	250-497-8874	info@nighthawkvineyards.	www.nighthawkvineyards.com
406	Nk'Mip	Vineyard	Wine Grapes	Osoyoos	250.495.2985	info@nkmipcellars.com	www.nkmipcellars.com
407	Noble Ridge	Vineyard	Wine Grapes	Okanagan Falls	250-497-7945	nrwineshop@nobleridge.com	www.nobleridge.com
408	Okanagan Crush Pad Winery	Vineyard	Wine Grapes	Summerland	250-494-4445	duncan@okanagancrushpad.	www.okanagancrushpad.com
409	Okanagan Properties Ltd.	Vineyard	Wine Grapes	Kelowna	250-768-1973	joe@lavigne.ca	NA
410	Okanagan Villa Estate Winery	Vineyard	Wine Grapes	Kelowna	778-478-4153	NA	www.okanaganvilla.com/
411	Oliver Twist Estate Winery	Vineyard	Wine Grapes	Oliver	250-485-0227	info@olivertwistwinery.com	www.olivertwistwinery.com
412	Origin Wines Ltd.	Vineyard	Wine Grapes	Penticton	250-328-2158	info@originwines.ca	www.originwines.ca/
413	Orofino Wineyards	Vineyard	Wine Grapes	Cawston	250.499.0068	admin@orofinovineyards.	www.orofinovineyards.com
414	Painted Rock Estate Winery	Vineyard	Wine Grapes	Okanagan Falls	250-493-6809	info@paintedrock.ca	www.paintedrock.ca
415	Park Hill Farmers	Vineyard	Wine Grapes	Oliver	250-498-2786	hbuchler@vip.net	NA
416	Paynter Family Farmer	Vineyard	Wine Grapes	Kelowna	250-768-4815	lepaynter@gmail.com	NA

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417	Pentâge Winery	Vineyard	Wine Grapes	Penticton	250-493-4008	julie@pentage.com	www.www.pentage.com
418	Persus Wimery & Vineyard	Vineyard	Wine Grapes	Penticton	250-490-8829	tastingroom@perseuswinery.	www.perseuswinery.com/
419	Pheasant Run Farmer	Vineyard	Wine Grapes	Kaleden	778-931-1032	lljking@yahoo.com	NA
420	Pipe'Dreams Vineyard and Estate Winery	Vineyard	Wine Grapes	Oliver	250-485-4192	taste@pipedreamswinery.	www.pipedreamswinery.com
421	Poplar Grove Winery	Vineyard	Wine Grapes	Penticton	250.493.9463	wine@poplargrove.ca	www.poplargrove.ca/
422	Quinta Ferreira Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-4756	winery@quintaferreira.com	www.quintaferreira.com
423	River Stone Estate Winery	Vineyard	Wine Grapes	Oliver	250-498-7798	riverstone@eastlink.ca	www.riverstoneestatewinery.ca
424	Road 13 Vineyards	Vineyard	Wine Grapes	Oliver	250.498.8330	winery@road13vineyards.	www.road13vineyards.com
425	Robin Ridge Winery	Vineyard	Wine Grapes	Keremeos	250.499.5504	contact@robinridgewinery.	www.robinridgewinery.com
426	Rollingdale Farmer & Winery	Vineyard	Wine Grapes	Kelowna	250-769-4825	kdale@rollingdale.ca	www.rollingdale.ca/
427	Ruby Blues Wineryt Ltd.	Vineyard	Wine Grapes	Penticton	250-276-5311	rubyblueswinery@shaw.ca	www.rubyblueswinery.ca/
428	Rust Wine Co.	Vineyard	Wine Grapes	Oliver	250.498.3276	info@rustwine.com	www.rustwine.com/
429	Rustic Roots Winery	Vineyard	Wine Grapes	Cawston	250.499.2754	rusticroots@nethop.net	www.rusticrootswinery.com
430	Sage Hills Organic Vineyard & Winery	Vineyard	Wine Grapes	Summerland	250-276-4344	info@sagehillswine.com	www.sagehillswine.com
431	Sandhill Vineyards LTD. Red Rooster Winery	Vineyard	Wine Grapes	Penticton	250-492-2424	info@redroosterwinery.com	www.redroosterwinery.com/
432	Savard Vines	Vineyard	Wine Grapes	Summerland	250-494-1926	See: www.savardvines.ca/ Contact-Us	www.savardvines.ca/
433	Saxon Estate Winery	Vineyard	Wine Grapes	Summerland	250-494-0311	See: www.saxonwinery.com/ contact-page/	www.saxonwinery.com
434	Scorched Earth Winery	Vineyard	Wine Grapes	Kelowna	250-717-7994	info@scorchedearthwinery.ca	www.scorchedearthwinery.ca
435	Secret Wines	Vineyard	Wine Grapes	Oliver	NA	NA	NA
436	See Ya Later Ranch	Vineyard	Wine Grapes	Okanagan Falls	250-497-8267	info@sylranch.com	www.sylranch.com
437	Sekhon, Pritam	Vineyard	Wine Grapes	Osoyoos	250-495-7018	pavensekhon@gmail.com	NA
438	Serendipity Winery	Vineyard	Wine Grapes	Naramata	250-486-5290	wineclub@serendipitywin- ery.com	www.serendipitywinery.com
439	Seven Stones Winery	Vineyard	Wine Grapes	Cawston	250.499.2144	NA	www.sevenstones.ca
440	Silkscarf Winery	Vineyard	Wine Grapes	Summerland	250-494-7455	See: silkscarf-winery.com/ pages/contact-us	www.silkw.net/

	Farm/Business Name	Business Type	Enterprize Type	Location	Phone	Email	Website
441	Silver Sage Winery	Vineyard	Wine Grapes	Oliver	250-498-0310	See: silversagewinery.com/ contact-us/	www.silversagewinery.com/
442	Sleeping Giant Fruit Winery	Vineyard	Wine Grapes	Summerland	250-494-0377	sleepinggiant@telus.net	www.sleepinggiantfruitwinery.
443	SoleTerre Farmer	Vineyard	Wine Grapes	Oliver	NA	soleterre@telus.net	<u>NA</u>
445	Sperling Vineyards	Vineyard	Wine Grapes	Kelowna	778-478-0260	info@sperlingvineyards.com	www.sperlingvineyards.com
446	SpierHead Winery	Vineyard	Wine Grapes	Kelowna	250-7623-7777	info@spierheadwinery.com	www.spierheadwinery.com
447	St Laszlo Vineyards Estate Winery	Vineyard	Wine Grapes	Keremeos	250.499.2856	NA	www.stlaszlo.com
448	St. Hubertus Estate Winery	Vineyard	Wine Grapes	Kelowna	250-764-7888	wine@st-hubertus.bc.ca	www.st-hubertus.bc.ca/
449	Stag's Hollow Winery	Vineyard	Wine Grapes	Okanagan Falls	250 497 6162	info@stagshollowwinery.com	www.stagshollowwinery.com
450	Sumac Ridge Estate Winery	Vineyard	Wine Grapes	Summerland	250-494-0451	info@sumacridge.com	www.sumacridge.com
451	Summergate Winery	Vineyard	Wine Grapes	Summerland	250-583-9973	info@summergate.ca	www.summergate.ca/
452	Summerhill Winery	Vineyard	Wine Grapes	Kelowna	250-764-8000 (ex222)	ezra@summerhill.bc.ca	www.summerhill.bc.ca/
453	Summerland Estate Winery	Vineyard	Wine Grapes	Summerland	250-494-9323	"sharon21pm@gmail.com	www.summerlandestatewinery.
454	Synchromesh Wines	Vineyard	Wine Grapes	Okanagan Falls	250-535-1558	wine@synchromeshwines.ca	www.synchromeshwines.ca
455	T.H. Wines	Vineyard	Wine Grapes	Summerland	250-494-8334	info@thwines.com	www.thwines.com
456	Tantalus Vineyards	Vineyard	Wine Grapes	Kelowna	250-764-0078	Eric Savics	www.tantalus.ca
457	The Back Door Winery	Vineyard	Wine Grapes	Summerland	250-800-1199	sales@backdoorwinery.com	www.backdoorwinery.com
458	The Vibrant Vine	Vineyard	Wine Grapes	Kelowna	778-478-4153	NA	www.thevibrantvine.com
459	Therapy Vineyards & Guest House	Vineyard	Wine Grapes	Naramata	250-496-5217	info@therapyvineyards.com	www.therapyvineyards.com
460	Thornhaven Estates Winery	Vineyard	Wine Grapes	Summerland	250-494-7778	info@thornhaven.com	www.thornhaven.com
461	Three Sisters Winery	Vineyard	Wine Grapes	Penticton	236-422 -2296 604-363-3402	rebecca@earlco.com	www.3sisterswinery.com/
462	Tightrope Winery	Vineyard	Wine Grapes	Penticton	778-476-7673	info@tightropewinery.ca	www.tightropewinery.ca/ Contact-Us
463	Tinhorn Creek Vineyards	Vineyard	Wine Grapes	Oliver	250.498.3743	winery@tinhorn.com	www.tinhorn.com
464	Township 7 Vineyards & Winery	Vineyard	Wine Grapes	Penticton	250-770-1743	wine@township7.com	www.township7.com/
465	Upper Bench Estate Winery	Vineyard	Wine Grapes	Penticton	250-770-1733	info@upperbench.ca	www.upperbench.ca/contact-us/
466	Van Westen Vineyards	Vineyard	Wine Grapes	Naramata	250-496-0067	NA	www.vanwestenvineyards.com

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467	Vanessa Vineyard Estate Winery	Vineyard	Wine Grapes	Cawston	250.499.8811	winery@vanessavineyard. com	www.vanessavineyard.com
468	Vispering Vines	Vineyard	Wine Grapes	Okanagan Falls	250-497-8491	vvines@shaw.ca	NA
469	Waterside Winery	Vineyard	Wine Grapes	Enderby	250-838-9757	watersidewinery.com	NA
470	Wild Goose Winery	Vineyard	Wine Grapes	Okanagan Falls	250-497-8919	leslie@wildgoosewinery.com	www.wildgoosewinery.com
471	Windy Ridge Farmer	Vineyard	Wine Grapes	Kaleden	250-497-5878	shancheroff@gmail.com	NA
472	Winemaster Penticton	Vineyard	Wine Grapes	Penticton	250-492-2688	info@winemasterpenticton.	www.winemasterpenticton.ca/
473	Yellow Rose Ventures Ltd.	Vineyard	Wine Grapes	Kelowna	250-862-2650	anne@eidse.com	www.myfarmpal.com/local- organic/yellow-rose-ventures- ltd/
474	Young & Wyse Collection	Vineyard	Wine Grapes	Osoyoos	250.495.3245	info@youngandwysewine.	www.youngandwysewine.com

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1	Bliss Tea Kombucha	Beverage Manufacturing - Food Processing	Tea, Tincture, Jams etc	West Kelowna	250-808-9333	NA	www.blissteakombucha.com/
2	Mobile Juice Factory	Beverage Manufacturing - Food Processing	Juice	Vernon	250-307-4122	See: mobilejuicefactory. com/contact-us/	www.mobilejuicefactory.com/ mobile-juicing/
3	Okanagan Mobile Juicing	Beverage Manufacturing - Food Processing	Juice	Vernon	250-550-8885	info@mobilejuicing.com.	www.mobilejuicing.com/con- tact-us/
4	Okanagan Spirits Inc.	Beverage Manufacturing - Food Processing	Spirts/distillery	Vernon	1-888-292-5270	info@okanaganspirits.com	www.okanaganspirits.com/contact/
5	The BX Press Inc.	Beverage Manufacturing - Food Processing	Cider	Vernon	250-503-2163	hello@thebxpress.com	www.thebxpress.com/
6	Dominion Cider Co.	Beverage Manufacturing - Food Processing	Cidery	Summerland	778-516-8006	info@dominioncider.com	www.dominioncider.com/#-farm
7	Nomad Cider	Beverage Manufacturing - Food Processing	Cider	Summerland	250-469-6601	info@nomadcider.ca	www.nomadcider.ca/our-ci- der/
8	Cannery Brewing Company	Beverage Manufacturing - Food Processing	Brewery / beer	Penticton	250.493.2723	info@cannerybrewing. com	www.cannerybrewing.com
9	Highway 97 Brewery	Beverage Manufacturing - Food Processing	Brewery / beer	Penticton	250-462 4081	John@hwy97brewery.com	www.hwy97brewery.com/
10	Penticton Kombuchery	Beverage Manufacturing - Food Processing	Tea, Tincture, Jams etc	Penticton	250-460-1735	NA	www.facebook.com/penticton- kombuchery/
11	The People's Craft House	Beverage Manufacturing - Food Processing	Beer	Penticton	250-328-2028	info@thepeoplescraft- house.com	www.thepeoplescrafthouse.
12	The Tin Whistle Brewing Company	Beverage Manufacturing - Food Processing	Beer	Penticton	250-770-1122	admin@thetinwhistle- brewery.rocks	www.thetinwhistlebrewery.
13	Jobst-Hof Orchard	Beverage Manufacturing - Food Processing	Produce	Oyama	250-548-4056	NA	www.facebook.com/jobsthof/
14	Faustino Estate Cidery	Beverage Manufacturing - Food Processing	Cidery	Osoyoos	250-495-7035	arelvas@telus.net	www.faustinoestatecidery.com
15	Howling Moon Cider House	Beverage Manufacturing - Food Processing	Cider	Oliver	778-439-2373	cider@howlingmoon.ca	www.howlingmoon.ca
16	The Dubh Glas Distillery	Beverage Manufacturing - Food Processing	Liquor	Oliver	778-439-3580	GuestServices@thedubh-glasdistillery.com	www.thedubhglasdistillery.
17	BuQi Kombucha Tea	Beverage Manufacturing - Food Processing	Tea, Tincture, Jams etc	Lake Country	NA	buqi@hotmail.com	www.facebook.com/Buqikom- buchatea/
18	Avenue M	Beverage Manufacturing - Food Processing	Produce / microgreens	Kelowna	250-859-4002	info@avenuem.ca	www.avenuem.ca/

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19	BC Tree Fruits Cider Co.	Beverage Manufacturing - Food Processing	Juice, Cider	Kelowna	250-979-2629	ciderorders@bctree.ca	www.bctreefruitscider.com
20	Canoe Coffee Roasters	Beverage Manufacturing - Food Processing	Coffee	Kelowna	250-215-8012	canoecoffee@gmail.com	www.canoecoffeeroasters.
21	Flying Leaf Tea Co.	Beverage Manufacturing - Food Processing	Tea	Kelowna	250-863-3899	info@flyingleaftea.com	www.flyingleaftea.com/
22	Function Junction	Beverage Manufacturing - Food Processing	Juice, Cider	Kelowna	250-863-8011 250-863-0757	info@function-junction.ca	www.function-junction.ca
23	Jiva Kombucha	Beverage Manufacturing - Food Processing	Tea / Tinctures	Kelowna	NA	info@sajivakombucha. com	www.sajivakombucha.com/
24	Okanagan Apple Essence	Beverage Manufacturing - Food Processing	Juice	Kelowna	250-868-8572	wohm@okanagan.net	www.applessence.com
25	Soma Craft Cidery	Beverage Manufacturing - Food Processing	Wine Grapes	Kelowna	778-477-5771	info@somacidery.com	www.somacidery.com/
26	Sunshine Market (Alchemy Juice)	Beverage Manufacturing - Food Processing	Juice	Kelowna	250-764-7344	See: www.thealchemy- juicelab.com/contact/	www.thealchemyjuicelab.com/ new-page-2/
27	Tree Brewing Co	Beverage Manufacturing - Food Processing	Beer	Kelowna	250-642-1956	info@treeberr.com	www.treebeer.com
28	Wards Cider & The View Winery	Beverage Manufacturing - Food Processing	Cider/Wine	Kelowna	250-860-0742	info@theviewwinery.com	www.wardshardcider.com/ our-process/
29	Waterside Winery	Beverage Manufacturing - Food Processing	Wine	Enderby	250-838-9757	watersidewinery@mail. com	www.watersidewinery.com/
30	Crannog Ales	Beverage Manufacturing - Food Processing	Hops/Beer	Sorrento	250-675-6847	crannog@crannogales. com	www.crannogales.com/col- lections
31	Honeymoon Meadery	Beverage Manufacturing - Food Processing	Mead	Venon	250-542-8088	www.honeymoonmead. ca/contact-us/	www.honeymoonmead.ca/ home/
32	Marten Brewing Company	Beverage Manufacturing - Food Processing	Beer	Vernon	778-475-5115	Info.MartenBrewpub@ gmail.com	www.martenbrewpub.com/
33	Wildcraft Forest	Beverage Manufacturing - Food Processing	Tea	Lumby	"250-547-2001 250-547-9812"	treks@uniserve.com	www.wildcraftforest.com/
34	East Kelowna Cider Co.	Beverage Manufacturing - Food Processing	Cider	Kelowna	250-860-8118	NA	NA
35	Quails' Gate Estate Winery	Beverage Manufacturing - Food Processing	Winery	Kelowna	250-769-4451	info@quailsgate.com	www.quailsgate.com/
36	Bad Tattoo Brewing Company	Beverage Manufacturing - Food Processing	Beer	Penticton	250-493-8686	info@badtattoobrewing. com	www.badtattoobrewing.com/

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37	Legend Distilling	Beverage Manufacturing - Food Processing	Spirits	Naramata	778-514-1010	info@legenddistilling. com	www.legenddistilling.com/
38	Maple Leaf Spirits	Beverage Manufacturing - Food Processing	Spirits	Penticton	250-493-0180	info@engel.ca	www.mapleleafspirits.ca/
39	Old Order Distilling Co.	Beverage Manufacturing - Food Processing	Spirits	Penticton	778-476-2210	oldorderdistilling.ca/ contact/	www.oldorderdistilling.ca/
40	Summerland Heritage Cider Company	Beverage Manufacturing - Food Processing	Cider	Summerland	778-738-1155	NA	www.summerlandcider.com/
41	Lambert Creek Organic Meats	CFIA Beef	Meat	Enderby	250-838-6399	NA	www.facebook.com/pages/ Lambert-Creek-Organic-Meats- Ltd/1665743090356930
42	Colonial Farms Ltd.	CFIA Poultry	Poultry Abbattoir	Armstrong	250-546-3008	NA	NA
43	Kelowna Free Graze Lamb	Class A - Slaughter and Processing	Sheep/Lamb, Goats	Kelowna	250-861-7005	kevin@kelownafreegra- zelamb.com	www.kelownafreegrazelamb.
44	North Okanagan Poultry Processing Inc	Class A - Slaughter and Processing	Poultry	Enderby	250-306-2447	NA	www.facebook. com/North-Okana- gan-Poultry-Process- ing-Inc-1663046053914572/
45	Valley Wide Meats	Class A - Slaughter and Processing	Meat	Enderby	250-838-7980	valleywidemeats@gmail. com	www.facebook.com/valley- widemeats/
46	Armstrong Artisan Meats	Class A - Slaughter and Processing	Meat	Armstrong	250-546-3500	gunnera@telus.net	www.armstrongartisanfarm.
47	Longhorn Farms Abattoir	Class B - Slaughter Only	Cows/Cattle	Kelowna	250-765-4396	NA	NA
48	Don MacKay and Nancie MacKay	Class B - Slaughter Only	Meat	Vernon	250-542-4814	NA	NA
49	Fernandes Farms Ltd	Co-Packer	Fruit	Osoyoos	250-495-6678	freshfruit@telus.net	www.sochamber.ca/list/mem- ber/fernandes-farms-ltd-347
50	Okanagan Sunshine Fruit Packers Ltd.	Co-Packer	Tree Fruit	Oliver	250-498-9641	NA	www.facebook.com/pages/ Okanagan-Sunshine-Fruit-Pack- ers-Ltd/1106039379448479
51	Rancho Vignola	Co-Packer	Nuts, Dried Fruit, Seeds	Armstrong	250-546-3343	info@ranchovignola.com	www.ranchovignola.com/
52	Kaleena Cakes	Commercial Bakery - Food Processing	Baked Goods	West Kelowna	250-878-5979	info@kaleenacakes.com	www.kaleenacakes.ca/
53	Natures Oven	Commercial Bakery - Food Processing	Baked Goods	West Kelowna	250-769-5515	NA	NA
54	Sweet On You Designer Cups & Cakes	Commercial Bakery - Food Processing	Baked Goods	West Kelowna	250-317-3889	info@sweetonyoucakes. ca	www.facebook.com/Sweet- On-You-Designer-Cups-and- Cakes-172370809444368/
55	The Pie Lady's Kitchen - Bakery	Commercial Bakery - Food Processing	Baked Goods	West Kelowna	NA	NA	NA
56	Cobs Bread	Commercial Bakery - Food Processing	Baked Goods	Vernon	250-260-3733	Feedback@COBSBread. com	www.cobsbread.com/about/

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57	Eating Clean	Commercial Bakery - Food Processing	Baked Goods	Vernon	250-550-7137	john@eatingclean.ca	www.eatingclean.ca/
58	Mile High Kitchen & Catering	Commercial Bakery - Food Processing	Baked Goods	Vernon	250-307-5650	orders@milehighcater- ing.ca	www.milehighcatering.ca/
59	Okanagan Bakehouse (Bakery)	Commercial Bakery - Food Processing	Baked Goods	Vernon	250-549-3024	NA	www.okbakehouse.com/
60	Quail's Farm	Commercial Bakery - Food Processing	Baked Goods	Vernon	NA	NA	NA
61	Red Barn Catering	Commercial Bakery - Food Processing	Baked Goods	Vernon	250-545-1916	NA	www.facebook.com/ pages/Red-Barn-Fam- ily-Restaurant-Cater- ing-The/104238719628045
62	Taste of Charity	Commercial Bakery - Food Processing	Baked Goods	Vernon	250-545-5176	NA	www.facebook.com/Tasteof- Charityboutiquebakery/
63	The Bulldog Bakery	Commercial Bakery - Food Processing	Baked Goods	Vernon	NA	NA	NA
64	Whisked Away Baking	Commercial Bakery - Food Processing	Baked Goods	Vernon	NA	NA	NA
65	True Grain	Commercial Bakery - Food Processing	Baked Goods	Summerland	250-494-4244	summerland@truegrain. ca	www.truegrain.ca/
66	Britannia Pies	Commercial Bakery - Food Processing	Baked Goods	Penticton	250-493-2888	NA	www.facebook. com/pages/Britan- nia-Pies/1058177564243017
67	Cobs Bread Riverside Village	Commercial Bakery - Food Processing	Baked Goods	Penticton	250-492-8670	Feedback@COBSBread.	www.cobsbread.com/about/
68	Walla Foods	Commercial Bakery - Food Processing	Baked Goods	Penticton	250-770-2001	NA	www.wallafoods.com/
69	Wine Crush Market	Commercial Bakery - Food Processing	Baked Goods	Penticton	250-486-1193	support@winecrush.ca	www.winecrush.ca/
70	Decadence Cake Company	Commercial Bakery - Food Processing	Baked Goods	Osoyoos	250-408-8894	decadencecakecompa- ny@telus.net	www.facebook.com/Deca- denceCakeCompany/
71	The White Apron Pastry Co.	Commercial Bakery - Food Processing	Baked Goods	Naramata	778-476-4046	hello@thewhiteapron.ca	www.whiteaproncustomcakes.
72	Mr. D's Gourmet Cheesecakes	Commercial Bakery - Food Processing	Baked Goods	Lake Country	250-878-1374	mrdsglutenfree@telus. net	www.mrdsglutenfree.com/
73	Oyama Sunblush	Commercial Bakery - Food Processing	Baked Goods	Lake Country	250-548-3267	kwarkentin@shaw.ca	www.oyamasunblush.com
74	Rose Family Orchard	Commercial Bakery - Food Processing	Baked Goods	Lake Country	250-801-1273	jamierosebc@gmail.com	www.vieworchard.com/

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75	Winfield Bakery	Commercial Bakery - Food Processing	Baked Goods	Lake Country	250-766-3625	fritzthebaker@hotmail. com	www.facebook.com/windfield- bakeryandcoffee/
76	Baby Cakes Gourmet Cupcakes	Commercial Bakery - Food Processing	Baked Goods	Kelowna	NA	NA	NA
77	Bean Scene Coffee Works	Commercial Bakery - Food Processing	Baked Goods	Kelowna	778.484.5445	wholesale@beanscene.ca	www.beanscene.ca/
78	Bouchons Bistro	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-763-6595	NA	www.bouchonsbistro.com/
79	Bread on Wheels Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	778-477-5555	info@breadonwheels.ca	www.breadonwheels.delivery- bizpro.com/pages.php?page- id=4
80	Cobs Bread	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-861-1891	Feedback@COBSBread. com	www.cobsbread.com/about/
81	Energybombs	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-469-3963	michaelandjana@mac. com	www.energybombs.com/
82	Kakes By Kathie	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-808-3382	info@kakesbykathie.com	www.kakesbykathie.com/
83	Lakeview Market Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-762-2913	barb@lakeview-market. com	www.lakeview-market.com/
84	Master Bakery Incorporated	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-765-3520	NA	www.facebook.com/Mas- ter-Bakery-466177103524025 /?rf=137782382905661
85	Naturally Delicious	Commercial Bakery - Food Processing	Baked Goods	Kelowna	718-237-3727	info@naturallydelicious. com	www.naturallydelicious.com/
86	Nuttier Than A Fruitcake	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-860-4174	moni@fruitcake.ca	www.fruitcake.ca
87	Okanagan Grocery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-862-2811	okanagangrocery@gmail. com	www.okanagangrocery.com/
88	PJ's Party Cakes	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-763-1144	NA	www.pjscakes.com/contactus. html
89	Real Deal Australian Meat Pies	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-864-6926	ryan@realdealpies.com	www.realdealpies.com/con- tact/
90	Specialty Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-765-5822	NA	www.specialtybakery.ca/
91	Specialty Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-765-5822	NA	www.specialtybakery.ca/
92	Sugar Sweet Cake Company - Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-808-2433	kirsten@sugarsweetcake- co.ca	www.sugarsweetcakeco.ca/ index.html

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93	The Bread Company	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-763-7773	NA	www.thebreadcompany.ca/
94	The Sawdust Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	778-796-7965	thesawdustbakery@ gmail.com	www.facebook.com/thesaw- dustbakery/
95	Weigert Fine Foods	Commercial Bakery - Food Processing	Baked Goods	Kelowna	1-855-340-4401	NA	NA
96	Whisk Cake Company	Commercial Bakery - Food Processing	Baked Goods	Kelowna	778-753-5678	tanya@whiskcakes.com	www.whiskcakes.com/
97	Wine Country Bakery	Commercial Bakery - Food Processing	Baked Goods	Kelowna	250-807-2262	winecountrybak- ery2015@gmail.com	www.winecountrybakery.com/
98	Frosted Tier Cakes	Commercial Bakery - Food Processing	Baked Goods	Armstrong	778-212-5677	frostedtiercakes@gmail. com	www.facebook.com/Frosted- TierCakeCreations/
99	Log Barn 1912 Bakery	Commercial Bakery - Food Processing	Baked Goods	Armstrong	250-546-2000	marketing@logbarn.ca	www.logbarn.ca/
100	OK Frozen Dough	Commercial Bakery - Food Processing	Baked Goods		250 546 0311	NA	www.okfrozendough.com/
101	SunRidge Community Church	Community Kitchen - Food Processing	NA	West Kelowna	250-769-7612	info@sunridge.org	www.sunridge.org/
1-2	Lakers Club House	Community Kitchen - Food Processing	NA	Vernon	250-550-3678	NA	www.vernon.ca/parks-rec- reation/recreation-facilities/ lakers-clubhouse
103	The Vernon Jazz Club	Community Kitchen - Food Processing	NA	Vernon	1-855-868-7333	NA	www.vernonjazz.com/about/
104	Harold Simpson Memorial Youth Centre	Community Kitchen - Food Processing	NA	Summerland	250-494-7988	NA	www.summerlandyouthcentre.
105	Princeton Community Services	Community Kitchen - Food Processing	NA	Princeton	250-295-6666	info@pdcss.com	www.inclusionbc.org/mem- ber-associations/member-or- ganizations/princeton-dis- trict-community-services-so- ciety
106	Riverside Community Kitchen	Community Kitchen - Food Processing	NA	Princeton	250-295-6067	NA	NA
107	Grace Mennonite Brethren Church	Community Kitchen - Food Processing	NA	Penticton	250-492-0088.	NA	www.gracemb.ca/
108	Okanagan School of the Arts, Shatford Centre	Community Kitchen - Food Processing	NA	Penticton	250-770-7668	info@shatfordcentre.com	www.shatfordcentre.com/
109	Our Redeemer Lutheran Church	Community Kitchen - Food Processing	NA	Penticton	250-492-6861	NA	www.orlc.shawbiz.ca/
110	Osoyoos United Church	Community Kitchen - Food Processing	NA	Osoyoos	250-495-2001	united.church@telus.net	www.osoyoosunited.ca/

	Farm/Business Name	Business Type	Enterprise Type	Location	Phone	Email	Website
111	Mara Community Hall	Community Kitchen - Food Processing	NA	Mara	250-838-7599	NA	NA
112	Baba's Country Kitchen	Community Kitchen - Food Processing	NA	Lumby	250-547-9003	shamor03@gmail.com	www.facebook.com/babas- countrykitchenperogies/
113	Mabel Lake Hall	Community Kitchen - Food Processing	NA	Lumby	na	NA	www.rdno.ca/index.php/ services/recreation/white-val- ley-parks/mabel-lake-commu- nity-hall
114	White Valley Community Centre	Community Kitchen - Food Processing	NA	Lumby	250-547-8866	info@whitevalley.ca	www.whitevalley.ca/
115	Winfield Memorial Hall	Community Kitchen - Food Processing	NA	Lake Country	250-766-4131	NA	www.winfieldmemorialhall.com/
116	Village of Keremeos - Community Kitchen	Community Kitchen - Food Processing	NA	Keremeos	250-499-2711	coordinator@keremeos. ca	www.keremeos.ca/
117	Village of Keremeos - Victory Hall	Community Kitchen - Food Processing	NA	Keremeos	250-499-2711	coordinator@keremeos. ca	www.keremeos.ca/
118	Arion Therapeutic Farm	Community Kitchen - Food Processing	NA	Kelowna	778-477-1006	Ariontherapeuticfarm@ gmail.com	www.ariontherapeutic.farm/contact/
119	Chabad Okanagan	Community Kitchen - Food Processing	NA	Kelowna	250-575-5384	NA	www.jewishokanagan.com/
120	East Kelowna Community Hall	Community Kitchen - Food Processing	NA	Kelowna	250-860-2746	eastkelownahall@gmail. com	www.eastkelownahall.com/
121	First Baptist Church	Community Kitchen - Food Processing	NA	Kelowna	604-683-8441	info@firstbc.org	www.firstbc.org/
122	First Lutheran Church	Community Kitchen - Food Processing	NA	Kelowna	250-764-3111	church@firstlutheran.ca	www.firstlutheran.ca/
123	Fresh From The Farm	Community Kitchen - Food Processing	NA	Kelowna	250-718-2778	freshfromthefarmbc@gmail.com	www.facebook.com/freshfrom- thefarmkelowna/
124	German Canadian Harmonie Club	Community Kitchen - Food Processing	NA	Kelowna	250-712-0354	germanclubkelowna@ outlook.com	www.germancanadianharmo- nieclub.ca/
125	Karis Support Society	Community Kitchen - Food Processing	NA	Kelowna	250-860-9507	info@karis-society.org	www.karis-society.org/
126	Kelowna and District Fish and Game Club	Community Kitchen - Food Processing	NA	Kelowna	250-764-7558	rangeops@kdfgc.org	www.kdfgc.org/
127	Kelowna Canadian Italian Club	Community Kitchen - Food Processing	NA	Kelowna	250-762-0900	kcic@shaw.ca	www.kelownaitalianclub.com/
128	Kelowna Lawn Bowling Club	Community Kitchen - Food Processing	NA	Kelowna	250-448-6010	info@kelownalawnbowl- ingclub.com	www.kelownalawnbowling.

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129	Kelowna Secondary School Kitchen	Community Kitchen - Food Processing	NA	Kelowna	250-870-5105	NA	www.kss.sd23.bc.ca/About/ Map/Pages/default.aspx
130	Kelowna Seventh-Day Adventist Church	Community Kitchen - Food Processing	NA	Kelowna	250-860-7458	NA	www.kelownaadventist.ca/
131	Mewata Girl Guide Camp	Community Kitchen - Food Processing	NA	Kelowna	NA	NA	www.monasheegirlguides. com/camping/camp-mewata/
132	Mission Creek Alliance Church	Community Kitchen - Food Processing	NA	Kelowna	250-860-2427	office@mcachurch.ca	www.mcachurch.ca/
133	Okanagan Mission Community Hall	Community Kitchen - Food Processing	NA	Kelowna	250-764-7477	NA	www.okmissionhall.net/
134	Parkinson Activity Centre	Community Kitchen - Food Processing	NA	Kelowna	250-762-4108	NA	www.kelowna.ca/parks-rec- reation/recreation-facilities/ parkinson-activity-centre
135	Rutland Centennial Hall	Community Kitchen - Food Processing	NA	Kelowna	250-765-6516	NA	www.rutlandparksociety.com/ index.php/centennial-hall/ about-the-hall
136	Saj Common Kitchen	Community Kitchen - Food Processing	NA	Kelowna	250-864-3491	info@sajcommonkitchen. com	sajcommonkitchen.com/
137	St. Charles Garnier Catholic Church Hall	Community Kitchen - Food Processing	NA	Kelowna	250-860-6776	NA	www.stcharlesgarnier.ca/
138	St. Ilija Missionary Parish	Community Kitchen - Food Processing	NA	Kelowna	250-712-0526	NA	NA
139	The Colonial	Community Kitchen - Food Processing	NA	Kelowna	250-717-8217	NA	NA
140	The Kelowna Wedgewood	Community Kitchen - Food Processing	NA	Kelowna	250-860-7100	NA	NA
141	Unitarian Fellowship of Kelowna	Community Kitchen - Food Processing	NA	Kelowna	250-763-7212	NA	www.kelownaunitarians.ca
142	Jane's Farmhouse Kitchen	Community Kitchen - Food Processing	NA	Kaleden	250-497-7894	janesfarmhouse@gmail. com	www.facebook com/Janes-Farm- house-377482878990603/
143	Riverside Community Hall	Community Kitchen - Food Processing	NA	Enderby	NA	info@riversidehall.ca	www.riversidehall.ca/
144	Coldstream Women's Institute Hall	Community Kitchen - Food Processing	NA	Coldstream	250-545-5304	phiggins@coldstream.ca.	www.coldstream.ca/content/ parks-recreation-and-culture
145	Armstrong & District Curling Club	Community Kitchen - Food Processing	NA	Armstrong	250-546-9449	sgunner@telus.net / arm- strongcurling@telus.net	NA
146	Centennial Hall	Community Kitchen - Food Processing	NA	Armstrong	250-546-9456.	NA	www.cityofarmstrong.bc.ca/ content/facilities

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147	St. Joseph's Parish Hall	Community Kitchen - Food Processing	NA	Armstrong	250-546-8215	NA	www.rcdk.org/ver- non-north-okanagan/st-jo- sephs-church-armstrong
148	Farmbound	Distributor	Weekly box distribution	Vernon	236-426-4408	info@farmbound.ca	www.farmbound.ca/
149	Okanagan Grown Product Ltd	Distributor	Vegetable - Local branch of vegetable commission	Vernon	250-545-0694	gm@okanagangrown. com	www.okanagangrown.com/index.html
150	OK Fruit	Distributor	Box program	VARIOUS	250-951-3980	okfruit@gmail.com	www.okanaganfruit.ca/contact
151	Sunshine Fruit Ltd.	Distributor	Fruit	Oliver	250-498-9641, 250-408-8622	hchattha@oksunfruit. com, oksunshinefruit@ live.ca	www.oksunfruit.business.site/
152	Canal Seafood Ltd	Distributor	Seafood	Penticton	250-809-8893	NA	NA
153	Fernandes Farms Ltd.	Distributor	Fruit	Osoyoos	250-495-6678	NA	NA
154	BC Tree Fruits	Distributor	Tree Fruit	Kelowna	250-470-4200	info@bctree.com	www.bctree.com
155	CFP Consolidated Fruit Packers Ltd	Distributor	Fruit	Kelowna	250-868-1400	osoyoos@cfp-ltd.ca	www.cfp-ltd.ca/about-cfp.htm-l#about1
156	De Simone Farms	Distributor	Juice	Kelowna	250-765-7615	jessie@desimonefarms. com	www.desimonefarms.com
157	Okanagan Quaity Wholesale Ltd	Distributor	vegetables	Kelowna	250-763-5565	info@okqualitywholesale.	www.okqualitywholesale.com/
158	Urban Harvest	Distributor	Organic Distributor	Kelowna	250-868-2704	order@urbanharvest.ca	www.urbanharvest.ca/
159	Global Fruit	Distributor	Cherries	Creston	250-428-2320	info@globalfruit.org	www.globalfruit.org
160	Cawston Cold Storage	Distributor	Tree Fruit	Cawston	250-499-7777	See website	www.naturesfirstfruit.com/
161	Direct Organics Plus	Distributor	Marketing Co-op for Tree Fruit	Cawston	250-499-5233	See: www.directorganic- splus.com/contact.php	www.directorganicsplus.com/ contact.php
162	Harker's Organics	Distributor	Veggies/Fruits	Cawston	250-499-2751	hfr@nethop.net	www.harkersorganics.com/
163	Fieldstone Organics	Distributor	Grain	Armstrong	250-546-4558	info@fieldstoneorganics. ca	www.fieldstoneorganics.ca/
164	Okanagan Food Hub Cooperative	Distributor	Produce/fruit/ meat/prepared foods	Kelowna	250-838-6581		
165	New Century Produce Inc	Distributor	fresh produce, cereal crop and specialty items	Armstrong	250-546-0499	dcentury@shaw.ca / kcentury@shaw.ca	www.newcenturyproduce.
166	Foothills Creamery	Food Manufacturing - Food Processing	Butter, Ice cream	West Kelowna	1-800-783-8577	NA	www.foothillscreamery.com/
167	Greek House Market	Food Manufacturing - Food Processing	Dips, prepared foods	West Kelowna	250-769-4966	greekhouse@telus.net	www.greekhousemarket.ca/contact.html
168	Liv a Lil Chocolate	Food Manufacturing - Food Processing	Chocolate	West Kelowna	778-363-1194	chocolate@livalilchoco- late.com	www.livalilchocolate.com/

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169	Oh Natural Foods	Food Manufacturing - Food Processing	Prepared foods / catering	West Kelowna	250-215-5767	NA	www.ohnaturalfoods.com
170	The Allergic Chef	Food Manufacturing - Food Processing	Prepared foods, spices	West Kelowna	NA	NA	www.theallergicchef.ca/
171	Westbank Harvest - Fruit Juice Manufacturing	Food Manufacturing - Food Processing	Fruit juices	West Kelowna	250-212-7004	westbankharvest@gmail.com	www.westbankharvest.com/
172	Bagel Lane Cafe Inc.	Food Manufacturing - Food Processing	Coffee shop, baked goods	Vernon	250-503-2021	NA	www.facebook.com/ pages/Bagel-Lane-Cafe- Inc/104357666281836
173	Bent Noodle Pasta Co.	Food Manufacturing - Food Processing	Pasta	Vernon	NA	NA	NA
174	Best Brand Sales and Manufacturing Inc	Food Manufacturing - Food Processing	Popcorn	Vernon	888-915-6624	NA	www.canadianorganicpopcorn. com/index.html
175	Black Forest Noodle Company	Food Manufacturing - Food Processing	Pasta	Vernon	NA	NA	NA
176	Go Left Nuts Co.	Food Manufacturing - Food Processing	Snacks, nuts	Vernon	250-308-6191	NA	NA
177	Home for Dinner	Food Manufacturing - Food Processing	Prepared foods/meals	Vernon	NA	NA	www.homefordinner.info/
178	Max Voets Coffee Roasting Ltd.	Food Manufacturing - Food Processing	Coffee	Vernon	250-549-2711	voets_coffee@cnx.net	www.voetscoffee.com/
179	Mum's Okanagan Hot Sauce Ltd.	Food Manufacturing - Food Processing	Sauces	Vernon	250-545-9329	corytaylor@mumsokana- gan.com	www.mumsokanagan.com/
180	Nature's Fare Markets	Food Manufacturing - Food Processing	Prepared foods / produce	Vernon	250 260 1117	adesrosiers@naturesfare. com	www.naturesfare.com/
181	Summit Specialty Foods Ltd	Food Manufacturing - Food Processing	Distributor	Vernon	250 542 5540	Rachel@SummitSpecial- tyFoods.com	www.summitspecialtyfoods.com/
182	Taoist Tai Chi Society Of Canada	Food Manufacturing - Food Processing	NA	Vernon	NA	NA	www.taoist.org/
183	The Canadian Organic Popcorn Company Inc.	Food Manufacturing - Food Processing	Popcorn	Vernon	1-888-915-6624	info@canadianorgan- icpopcorn.com	www.canadianorganicpopcorn. com/index.html
184	Valley Produce Plus	Food Manufacturing - Food Processing	Produce	Vernon	250-545-2924	NA	NA
185	Vernon Recreation Centre	Food Manufacturing - Food Processing	NA	Vernon	250-545-6035	NA	www.vernon.ca/parks-rec- reation/recreation-facilities/ greater-vernon-recre- ation-complex

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186	Doug's Homestead Gourmet Meats	Food Manufacturing - Food Processing	Meat		250-292-8364	dougshomestead@gmail. com	www.dougshomestead.com
187	Backyard Beans Coffee Roasting	Food Manufacturing - Food Processing	Coffee	Summerland	250-494-5279	backyardbeans@shaw.ca	www.backyardbeanscoffee.
188	Blissful Belly Wholefood	Food Manufacturing - Food Processing	Baking mixes / prepared food	Summerland	NA	NA	www.blissfulbelly.ca/
189	Camp Boyle	Food Manufacturing - Food Processing	Summer camp	Summerland	250-555-1212	jared@okvalley.com	www.properties.okana- ganscouting.ca/properties/ Contact.htm
190	Farm Gate Bakery	Food Manufacturing - Food Processing	Baked goods	Summerland	NA	NA	NA
191	Indian Food by Gurpinder	Food Manufacturing - Food Processing	Prepared meals	Summerland	NA	NA	NA
192	Lone tree coffee	Food Manufacturing - Food Processing	Coffee	Summerland	250-494-0064	NA	www.lonetreecoffee.com/
193	Oma goodness	Food Manufacturing - Food Processing	Salad Dressings / Marinades	Summerland	250-486-4848	julie@omagoodness.ca	www.omagoodness.ca/
194	Prairie Creek Edibles Ltd.	Food Manufacturing - Food Processing	Prepared foods / GF snacks	Summerland	250-494-1400	ediblepc@telus.net	www.prairiecreekedibles.com/
195	Rad Jamz & Preserves	Food Manufacturing - Food Processing	Jams	Summerland	778-363-6911	NA	www.facebook.com/pg/rad- jamz/about/?ref=page_internal
196	Salubrious Seeds - Producing Seed Oil	Food Manufacturing - Food Processing	Oils	Summerland	250-494-7530	salubriousseeds@gmail. com	www.salubriousseeds.ca/a-sa- lubrious-story.html
197	Summerland Sweets	Food Manufacturing - Food Processing	Jamery	Summerland	1-800-577-1277	summerlandsweets@ telus.net	www.summerlandsweets.com/
198	Blackstone Farms	Food Manufacturing - Food Processing	Honey / Produce	Penticton	250-496-5822	NA	NA
199	Gorgeous Georgia's Homemade Ice Cream	Food Manufacturing - Food Processing	Ice Cream, Frozen Desserts	Penticton	250-486-6189	info@gorgeousgeorgias. com	www.gorgeousgeorgias.com/
200	Just Pies	Food Manufacturing - Food Processing	Pies	Penticton	250-490-3341	NA	www.justpies.foodpages. ca/?qqq=contact#contact
201	Mr. Marks Caribbean Foods	Food Manufacturing - Food Processing	Prepared foods / meals	Penticton	250-486-3821	mrmarkscfp@gmail.com	www.mrmarkscfp.com/con- tact/
202	Painted Rock Estate Winery	Food Manufacturing - Food Processing	Wine	Penticton	250-493-6809	info@paintedrock.ca	www.paintedrock.ca/
203	Penticton Art Gallery	Food Manufacturing - Food Processing	Art gallery	Penticton	250-493-2928	info@pentictonartgallery. com	www.pentictonartgallery.com/

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204	Poplar Grove Cheese	Food Manufacturing - Food Processing	Cheese	Penticton	250-492-4575	NA	www.poplargrovecheese.ca/
205	Pulse Kitchen	Food Manufacturing - Food Processing	Baked goods/ catering/ prepared meals	Penticton	NA	stephanosliapis@outlook.	www.pulsekitchen.com/
206	South Okanagan Events Centre Warehouse	Food Manufacturing - Food Processing	Event center	Penticton	NA	NA	NA
207	Sushi Kojo Prep Kitchen	Food Manufacturing - Food Processing	Prepared foods / sushi	Penticton	236-422-4566	NA	www.sushikojo.com
208	Veggie Village	Food Manufacturing - Food Processing	Produce	Penticton	NA	NA	NA
209	Little Schoolhouse Society	Food Manufacturing - Food Processing	Church	Peachland	250-575-8226	info@peachland.ca	www.peachland.ca/contact
210	Garlic Freak	Food Manufacturing - Food Processing	Processed Garlic Products	Osoyoos	250-485-7929	NA	www.facebook.com/Gar- lic-Freak-151131471712573/
211	Kyleburn Confectionery	Food Manufacturing - Food Processing	Baked goods / sweets	Osoyoos	250-495-6233	NA	www.kyleburnconfectionery. foodpages.ca/
212	Great Bear Enterprises Ltd.	Food Manufacturing - Food Processing	Prepared snacks	Oliver	604-721-8430	NA	www.greatbearbites.com/
213	Hester Creek Estate Winery	Food Manufacturing - Food Processing	Wine	Oliver	250-498-4435	info@hestercreek.com	www.hestercreek.com/
214	MoSa Services	Food Manufacturing - Food Processing	Museum	Oliver	NA	NA	NA
215	Okanagan Harvest	Food Manufacturing - Food Processing	Dried cherries	Oliver	250-498-4669	okanaganharvest@gmail. com	www.okanaganharvest.com
216	Okanagan Falls Seniors Centre	Food Manufacturing - Food Processing	Community centre / senior centre	Okanagan Falls	250-497-8199	NA	NA
217	Skaha Salsa	Food Manufacturing - Food Processing	Sauces	Okanagan Falls	NA	NA	www.facebook.com/Barn. Burner.Salsa/
218	Sun Stream Fruit Ltd	Food Manufacturing - Food Processing	Drying fruit	Okanagan Falls	250-497-5525	NA	NA
219	Firecracker Jacks	Food Manufacturing - Food Processing	Sauces	Naramata	778-514-4422	NA	www.firecrackerjacks.food- pages.ca/
220	Fruit Guy Farms	Food Manufacturing - Food Processing	Produce / dried fruits	Naramata	250 490-0174	michael@driedfruitguy. com	www.driedfruitguy.com/
221	Wineland Dressings	Food Manufacturing - Food Processing	Salad Dressings	Naramata	250-462-0963	info@wineland.ca	www.wineland.ca

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222	Wolf Tree Coffee Co.	Food Manufacturing - Food Processing	Coffee Roaster	NA	250-498-4074	wolftreecoffee@gmail. com	www.wolftreecoffee.com/
223	Bella Stella Cheese	Food Manufacturing - Food Processing	Cheese	Lumby	250-547-6305	bellastellacheese@gmail. com	www.bellastellacheese.com/
224	Castle Cheese (West) Inc.	Food Manufacturing - Food Processing	Cheese	Lumby	250-547-2100	NA	NA
225	Royal Canadian Legion #167	Food Manufacturing - Food Processing	Legion center	Lumby	250-547-2338	NA	NA
226	Triple Island Farm	Food Manufacturing - Food Processing	Cheese	Lumby	250-547-6125	NA	www.tripleislandfarm.com/
227	Cooling Rack Bakehouse	Food Manufacturing - Food Processing	Bakery	Lake Country	250-863-0887	NA	NA
228	Gescina - The Chemistry of Nature Inc.	Food Manufacturing - Food Processing	Essential oils / skin care	Lake Country	778-484-4827.	: eremey151@gmail.com	www.gescinaselixir.com/ contact/
229	Lake Country Harvest	Food Manufacturing - Food Processing	Dried fruit	Lake Country	250-470-7759	info@lakecountryharvest.	www.lakecountryharvest.com/ contact
230	Miller's Natural Products	Food Manufacturing - Food Processing	Teas / jams / salad dressing	Lake Country	250-862-7448	millersnaturalproducts@ shaw.ca	www.martinmillerwebsit. wixsite.com/millers-natural/ contact
231	Seriously Chocolate Tea	Food Manufacturing - Food Processing	Tea	Lake Country	NA	NA	www.seriouslychocolatetea. com/password
232	Swiss Chocolatier	Food Manufacturing - Food Processing	Chocolate	Lake Country	250-766-1918	NA	NA
233	Gregors Gourmet	Food Manufacturing - Food Processing	Prepared foods / catering	Keremeos	250-302-8045	fuchs.greg@gmail.com	www.facebook.com/gregors- gourmet/
234	Worrenberg Farms	Food Manufacturing - Food Processing	Juices	Keremeos	250-499-5722	NA	NA
235	Ancient Hill Winery	Food Manufacturing - Food Processing	Winery	Kelowna	250 491 2766	info@ancienthillwinery. com	www.ancienthillwinery.com/
236	Artisto Gelato - Frozen dessert manufacturer	Food Manufacturing - Food Processing	Gelato / desserts	Kelowna	250-860 6255	info@artistogelato.com	www.artistogelato.ca/con- tact-us/
237	Caramoomel Products Inc	Food Manufacturing - Food Processing	Canning Pickling Jam	Kelowna	778-760-5844	NA	www.caramoomel.com/
238	Carmelis Goat Cheese Artisan	Food Manufacturing - Food Processing	Goat Dairy, Cheesemaker	Kelowna	250-764-9033	info@carmelis- goatcheese.com	www.carmelisgoatcheese.com/
239	Centenial Foodservice	Food Manufacturing - Food Processing	Meat	Kelowna	250-491-4468 or 1-800-661- 4071		www.centennialfoodservice.

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240	Centre Culturel Franco Phone of L'Okanagan	Food Manufacturing - Food Processing	Community centre	Kelowna	250-860-4074	info@leccfo.org	www.leccfo.org/en/
241	Cherry Hill Coffee Inc	Food Manufacturing - Food Processing	Coffee	Kelowna	250-861-4733	info@cherryhillcoffee. com	www.cherryhillcoffee.com/
242	Discover Wines	Food Manufacturing - Food Processing	Wines	Kelowna	250-868-3990	NA	www.discoverwines.com/
243	Don-O-Ray Processing	Food Manufacturing - Food Processing	Produce	Kelowna	250-860-2557	donorayveg@gmail.com	www.facebook.com/DonORay- Farms/
244	Everyday Original Spice	Food Manufacturing - Food Processing	Spices	Kelowna	NA	NA	NA
245	Falcon Ridge Farms	Food Manufacturing - Food Processing	Tea, Tincture, Jams etc	Kelowna	250-212-0755	marlyswolfe@me.com	www.falconridgefarms.ca/ contact/
246	Flavors Kitchen	Food Manufacturing - Food Processing	Prepared foods / perogies	Kelowna	NA	NA	NA
247	Food First Enterprises Ltd Salad Dressing	Food Manufacturing - Food Processing	Salad dressings	Kelowna	250-769-3932	littlecreekdressing@ gmail.com	www.littlecreekdressing.com
248	Freshbox	Food Manufacturing - Food Processing	Prepared foods / asian inspired meals	Kelowna	250-763-0586	NA	www.freshboxfood.ca
249	Fudge 4 You	Food Manufacturing - Food Processing	Sweets / fudge	Kelowna	250-215-3593	info@fudge4you.com	www.fudge4you.com/
250	Habby Jack's Hot Foods	Food Manufacturing - Food Processing	Canning Pickling Jam	Kelowna	250-765-3311	habbyjack@habbyjacks. com.	www.habbyjacks.com/
251	Hacienda.Ca	Food Manufacturing - Food Processing	Inn / suites	Kelowna	604-925-2362	yorkria@yahoo.ca	www.hacienda.ca/
252	Immaculate Conception Church	Food Manufacturing - Food Processing	Church	Kelowna	250-762-3910	NA	www.icckelowna.ca/home. html
253	Ingram Farms - Apairie	Food Manufacturing - Food Processing	Honey	Kelowna	250-768-7078	info@ingramfarms.ca	www.ingramfarms.ca/index. html
254	Joolz 9-Bars! - Food Processor (Other)	Food Manufacturing - Food Processing	Prepared snacks	Kelowna	NA	decksters@shaw.ca	www.facebook.com/pg/Joolz- 9-Bars-1455709011312844/ about/?ref=page_internal
255	Karat Chocolate	Food Manufacturing - Food Processing	Chocolate	Kelowna	604-317-7779	NA	www.karatchocolate.ca/
256	Kaye's Bees Apiary	Food Manufacturing - Food Processing	Honey	Kelowna	250-762-2203	bobnkaye@shaw.ca	www.brainybee.ca/
257	Kernels Popcorn	Food Manufacturing - Food Processing	Popcorn	Kelowna	250-763-5322	NA	www.kernelspopcorn.com

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258	La Boulangerie Sandrine Pastry & Chocolate	Food Manufacturing - Food Processing	Sweets / Chocolate / bakery	Kelowna	250-860-1202	sandrinepastry@telus. net	www.sandrinepastry.com/
259	Lakeview Market	Food Manufacturing - Food Processing	Meat	Kelowna	250-762-2913	barb@lakeview-market. com	www.lakeview-market.com
260	Las Mexicanas	Food Manufacturing - Food Processing	Prepared foods / meals	Kelowna	780.881.3549	NA	www.lasmexicanas.ca/
261	Laurel Packinghouse - Kelowna Museums Society	Food Manufacturing - Food Processing	Museum - orchard museum	Kelowna	778-478-0325	NA	www.kelownamuseums.ca/ venue/the-laurel-packing- house/
262	L'Escale Out of School Care	Food Manufacturing - Food Processing	Daycare	Kelowna	250-868-1538	NA	www.lescalefrenchdaycare.
263	Lionheart Bars	Food Manufacturing - Food Processing	Prepared snacks	Kelowna	778-214-3968	info@lionheartbar.ca	www.lionheartbar.ca/
264	Little Creek Dressing	Food Manufacturing - Food Processing	Salad Dressings	Kelowna	778-478-1879	littlecreekdressing@ live.ca	www.littlecreekdressing.com/ contact.html
265	Meadow Vista Honey Wines	Food Manufacturing - Food Processing	Wines	Kelowna	250-862-2337	hello@meadowvista.ca	www.meadowvista.ca/directions/
266	Moo Cookie & Zabeanra Food & Beverage Services	Food Manufacturing - Food Processing	Baked goods / prepared foods	Kelowna	NA	NA	NA
267	Moonstone Ferments	Food Manufacturing - Food Processing	Kombucha	Kelowna	250-860-3693	NA	NA
268	Motherlove Ferments	Food Manufacturing - Food Processing	Kombucha	Kelowna	NA	NA	www.motherloveferments.
269	Mr. Thanks Dumpling Making	Food Manufacturing - Food Processing	Prepared foods / dumplings	Kelowna	778-477-6968	NA	NA
270	Naturalight Foods Inc	Food Manufacturing - Food Processing	Extracts	Kelowna	250-491-9800	naturalight@telus.net	www.naturalightfoods.com/ contact
271	Natures Pop Sales	Food Manufacturing - Food Processing	Prepared drinks / soft drinks	Kelowna	250-868-8572	NA	NA
272	New Life Church Kelowna	Food Manufacturing - Food Processing	Church	Kelowna	250-762-4255	newlife@newlife.bc.ca	www.newlife.bc.ca/
272	Okanagan Ice Pops	Food Manufacturing - Food Processing	Desserts	Kelowna	NA	NA	www.okapops.ca/
274	Okanagan Lavender Herb Farm	Food Manufacturing - Food Processing	Herbs	Kelowna	250-764-7795	info@okanaganlavender. com	www.okanaganlavender.com/
275	Pauls Produce Inc Produce Store	Food Manufacturing - Food Processing	Produce	Kelowna	250-763-3131	mike@mikesproduce.ca	www.mikesproduce.ca/

	Farm/Business Name	Business Type	Enterprise Type	Location	Phone	Email	Website
276	Petite Sweets	Food Manufacturing - Food Processing	Sweets	Kelowna	250-317-3499	NA	www.petitesweetskelowna.
277	Pioneer Gourmet Coffee	Food Manufacturing - Food Processing	Coffee	Kelowna	250-860-1920	NA	www.pioneergourmetcoffee.
278	Power Plant Whole Foods Inc	Food Manufacturing - Food Processing	Protein Powder, Seeds, Vegetables	Kelowna	250-718-7341	martin@powerplant- wholefoods.com	www.powerplantwholefoods.
279	Put A Lid On It	Food Manufacturing - Food Processing	Jams / Jellies / Sauces	Kelowna	250-491-2750	NA	NA
280	Queen "B" Kettle Korn Limited	Food Manufacturing - Food Processing	Popcorn	Kelowna	250-868-2770	contact@queen-b.ca	www.queen-b.ca/
281	Ridgetop Meat Pies	Food Manufacturing - Food Processing	Prepared foods / pies	Kelowna	250-878-1526	NA	NA
282	Smart Start Meals	Food Manufacturing - Food Processing	Food kits / prepared meals	Kelowna	NA	info@smartstartmeals.ca	www.smartstartmeals.ca/
283	Smoothie Booth	Food Manufacturing - Food Processing	Juices / smoothies	Kelowna	NA	NA	NA
284	Spierhead Winery	Food Manufacturing - Food Processing	Wine	Kelowna	250-763-7777	info@spierheadwinery. com	www.spearheadwinery.com/
285	Sun Rich Fresh Foods Inc	Food Manufacturing - Food Processing	Fruit	Kelowna	250-765-2211	customerservice@sun- rich.com	www.sun-rich.com/
286	Sun Rype Products Ltd	Food Manufacturing - Food Processing	Fruit	Kelowna	250-470-6533	NA	www.sunrype.ca/
287	Sun Valley Fresh Foods	Food Manufacturing - Food Processing	Produce	Kelowna	250-448-9000	accountmanager2@ svff.ca	www.svff.ca/
288	Sunny Day Pops	Food Manufacturing - Food Processing	Desserts	Kelowna	250-808-1261	NA	www.facebook.com/Zen- PopsKelowna/
289	Sysco Kelowna	Food Manufacturing - Food Processing	Distributor	Kelowna	800-663-4401 or 250-766- 0011	NA	www.sysco.ca/canada/home. cfm?id=2421
290	Tamarac Fresh Cut Foods	Food Manufacturing - Food Processing	Produce / packaged produce	Kelowna	250-765-2211	tdimaria@okanagan.net	www.russandtonys.com
291	Taste of the Okanagan Specialty Foods Inc.	Food Manufacturing - Food Processing	Dips / sauces / dressings	Kelowna	250-491 9079	info@tasteoftheokana- gan.com	www.tasteoftheokanagan.com/
292	The Jammery	Food Manufacturing - Food Processing	Jams / Jellies / Sauces	Kelowna	250766-1139	NA	www.jammery.com/
293	Urban Distilleries	Food Manufacturing - Food Processing	Alcohol / distillery	Kelowna	778-478-0939	NA	www.urbandistilleries.ca/

	Farm/Business Name	Business Type	Enterprise Type	Location	Phone	Email	Website
294	Valoroso Foods	Food Manufacturing - Food Processing	Prepared foods / Italian foods	Kelowna	604-559-9479	NA	www.valorosofoods.com/
295	Vegilante Plant Based Foods	Food Manufacturing - Food Processing	Prepared foods / vegan foods	Kelowna	NA	NA	NA
296	Wise Earth Farm	Food Manufacturing - Food Processing	Produce / CSA boxes	Kelowna	250-869-6539	wiseearthfarm@gmail. com	www.wiseearthfarm.com/
297	Okanagan Rawsome	Food Manufacturing - Food Processing	Crackers, dips, packaged foods	Grindrod	1-888-408- 7518	orders@okanaganraw- some.ca	www.okanaganrawsome.com/
298	Bairds Best Bitters	Food Manufacturing - Food Processing	Alcohol / bitters	Enderby	250-833-6079	NA	www.bairdsbestbitters-belve- derest.foodpages.ca/
299	Brit & Bean	Food Manufacturing - Food Processing	Prepared meals / frozen food	Enderby	778-443-3334	NA	www.thebritandbeanenderby.
300	Church of God in Christ Mennonite	Food Manufacturing - Food Processing	Church	Enderby	250-838-6063	NA	www.chimp.net/charities/ church-of-god-in-christ-men- nonite-enderby
301	Denzels Gourmet Foods Ltd.	Food Manufacturing - Food Processing	Sauces / spices	Enderby	250-838-0338	denzel@denzelshot- sauce.com	www.denzelshotsauce.com/
302	Don Ennis	Food Manufacturing - Food Processing	NA	Enderby	NA	NA	NA
303	Gallagher's Gourmet Goodies	Food Manufacturing - Food Processing	Baked Goods	Enderby	250-469-4271	radiorocker885@gmail. com	www.facebook.com/gallagh- ersgourmetgoodies/
304	Wolfgang's Grain and Flour	Food Manufacturing - Food Processing	Flour	Enderby	250-838-5910	wolfgangs_flour@telus. net	www.wolfgangsgrainandflour. ca/contact
305	Back To Earth	Food Manufacturing - Food Processing	Dried fruits / oils / skin care	Coldstream	250-550-6789	na	www.getbacktoearth.com/
306	She Devil Delights	Food Manufacturing - Food Processing	Prepared foods / dips / sauces	Coldstream	250-309-4667	"heather@shedevilde- lights.com	www.shedevildelights.com/
307	Tillicum Valley Tea Co.	Food Manufacturing - Food Processing	Теа	Coldstream	NA	NA	NA
308	Klippers Organics	Food Manufacturing - Food Processing	Produce / CSA boxes	Cawston	250-499-2050	hello@klippersorganics. com	www.klippersorganics.com/
309	Sun Valley Treats	Food Manufacturing - Food Processing	Produce / apples	Cawston	250-499-8825	applechips@sunvalley- treats.com	www.sunvalleytreats.com
310	The Vinegar Works	Food Manufacturing - Food Processing	Grapes, Vinegar	Cawston	778-739-9873	Thevinegarworks@thegarden.ca	www.thegarden.ca/vinegar- works/contactus.html
311	Zebroff's	Food Manufacturing - Food Processing	Produce / Jams / Sauces	Cawston	250-499-5374	zebroffs@nethop.net	www.bcorganicfarmers.com/ farms/zebroffs/index.html

	Farm/Business Name	Business Type	Enterprise Type	Location	Phone	Email	Website
312	Bernie's Turbo Spice	Food Manufacturing - Food Processing	Spices	Armstrong	250-546-2859	info@turbospice.com	www.turbospice.com/
313	Caravan Farm Theatre	Food Manufacturing - Food Processing	Open air theater	Armstrong	250-546-8533	publicity@caravan- farmtheatre.com	www.caravanfarmtheatre.com/
314	Chocoliro Finest Chocolate	Food Manufacturing - Food Processing	Chocolate	Armstrong	250-546-2886	NA	www.chocoliro.com/
315	Gambrinus Malting Corporation	Food Manufacturing - Food Processing	Malter/Grain Processing	Armstrong	250-546-8911	info@gambrinusmalting. com	www.gambrinusmalting.com/
316	Pure	Food Manufacturing - Food Processing	Baked Goods, Honey	Armstrong	250-546-4849	purearmstrong@gmail. com	www.purearmstrong.ca/contact.html
318	Rogers Foods	Food Manufacturing - Food Processing	Cereals and Flours	Armstrong	1-800-356- 8735	NA	www.rogersfoods.com/
319	Sapori Olive Oils & Vinegars	Food Manufacturing - Food Processing	Oils / Vinegars / Dressings	Armstrong	NA	NA	www.saporioilsandvinegars.
320	The Village Cheese Company	Food Manufacturing - Food Processing	Cheese	Armstrong	250-546-8651	kelly@villagecheese.com	www.villagecheese.com/
321	Zion United Church	Food Manufacturing - Food Processing	Church	Armstrong	250-546-9384	NA	www.unitedchurcharmstrong.
322	Hillcrest Farm Market	Food Manufacturing - Food Processing	Jam, jellies, baked goods	Kelowna	250-765-8000	info@hillcrestfarmmar- ket.com	www.hillcrestfarmmarket.
323	Okanagan Grocery Artisan Breads	Food Manufacturing - Food Processing	Breads/baked goods	Kelowna	250-862-2811	okanagangrocery@gmail. com	www.okanagangrocery.com/
324	Salted Brick	Food Manufacturing - Food Processing	Meats/ Preserved Foods	Kelwona	778-484-3234	info@saltedbrick.com	www.saltedbrick.com/
325	The Bench Market	Food Manufacturing - Food Processing	Prepared Foods/bakery	Penticton	250-492-2222	NA	www.thebenchmarket.com/ contact-the-bench-market/
326	The Lake Village Bakery	Food Manufacturing - Food Processing	Breads/baked goods	Osoyoos	250-495-3366	info@thelakevillagebak- ery.ca	www.thelakevillagebakery.ca/
327	True Grain Bread	Food Manufacturing - Food Processing	Bakery/Flour Milling	Summerland	250-494-4244	summerland@truegrain. ca	www.truegrain.ca/true-grain- bread-summerland/
328	The Grist Mill and Gardens	Food Manufacturing - Food Processing	Jams	Keremeos	250-499-2888	info@oldgristmill.ca	www.oldgristmill.ca/
329	Oxbow Flats Farm	Home Business – Food Processing	Produce (Vegetables)	Oliver	250-498-7510	NA	www.facebook.com/oxbow-flatsfarm/
330	Bareback Marinades	Home Business – Food Processing	Marinades	Naramata	250-809-4751	info@barebackmari- nades.ca	www.barebackmarinades.ca/ contact/
331	Grown Here Farms	Home Business – Food Processing	Produce (Vegetables)	Cawston	604-260-4986	NA	www.grownherefarms.ca/ about-us/

	Farm/Business Name	Business Type	Enterprise Type	Location	Phone	Email	Website
332	Joe Strocen	Meat Processing - Food Processing	Meat	West Kelowna	NA	NA	NA
333	K & L European Sausage's	Meat Processing - Food Processing	Meat	West Kelowna	250-769-4728	NA	NA
334	Pioneer Meats	Meat Processing - Food Processing	Meat	West Kelow- na	250-769-1895	pioneermeats@hotmail. com	www.pioneermeatco.com
335	T-Bone's Fresh Meal Market	Meat Processing - Food Processing	Meat	West Kelow- na	250-707-4667	t-bones2@telus.net	www.mytbones.com
336	Butcher Boys	Meat Processing - Food Processing	Meat and grocery	Vernon	250-542-2968	info@butcherboys.ca	www.butcherboys.ca
337	Grillers Meats & Eats	Meat Processing - Food Processing	Meat	Vernon	250-549-3100	NA	NA
338	Ritter & Son	Meat Processing - Food Processing	Meat	Vernon	250-545-9691	NA	NA
339	Vernon Sausage Co. Ltd.	Meat Processing - Food Processing	Meat	Vernon	NA	NA	NA
340	Ogopogo Meats & Sausages	Meat Processing - Food Processing	Meat	Summerland	778-516-5595	ogopogomeats@shaw.ca	www.ogopogomeats.com
341	A&K Grimm Sausage	Meat Processing - Food Processing	Meat	Penticton	250-493-9187	NA	NA
342	Echo Valley Farm	Meat Processing - Food Processing	Meat	Lumby	250-547-6394	NA	NA
343	Sundowner Ranch Meats & European Style Sausage	Meat Processing - Food Processing	Meat	Lumby	250-547-8909	NA	NA
344	Grillers Meats	Meat Processing - Food Processing	Meat	Lake Country	778-480-6878	NA	www.grillersmeats.ca/week- ly-specials/
345	Black Mountain Custom Meat Cutting	Meat Processing - Food Processing	Meat	Kelowna	250-765-0518	NA	NA
346	Bonanza Meat Packers - Meat Processing	Meat Processing - Food Processing	Meat	Kelowna	250-765-9741	NA	www.bonanzameats.com/
347	Canadian Meat Republic	Meat Processing - Food Processing	Meat	Kelowna	778-363-7377	NA	www.meatonly.ca/
348	Choices Market	Meat Processing - Food Processing	Meat	Kelowna	250-862-4864	NA	www.choicesmarkets.com/de- partment/meat-seafood/
349	Hartman Custom Meat Cutting and Sausage	Meat Processing - Food Processing	Meat	Kelowna	250-801-4564	NA	NA
350	Illichmann's Meats, Sausage & Gourmet Foods	Meat Processing - Food Processing	Meat	Kelowna	250-860-6604	info@illichmanns.com	www.illichmanns.com
351	Italian Meat Master	Meat Processing - Food Processing	Meat	Kelowna	250-469-0328	italianmeatmaster@ gmail.com	www.italianmeatmaster.com/
352	Johnny's Fresh Meat's & Deli	Meat Processing - Food Processing	Meat	Kelowna	250-860-5646	NA	www.johnnysfreshmeatsand- deli.com
353	Mission Meats	Meat Processing - Food Processing	Meat	Kelowna	250-764-7232	missionmeats@telus.net	www.missionmeats.com
354	Pennings Quality Meats	Meat Processing - Food Processing	Meat	Kelowna	250-862-3098	NA	www.facebook.com/ pages/Penninga-Quali- ty-Meats/105494766177283

Post-Production Business Directory

	Farm/Business Name	Business Type	Enterprise Type	Location	Phone	Email	Website
355	Springfield Meat & Sausage	Meat Processing - Food Processing	Meat	Kelowna	NA	NA	www.springfieldmeats.food- pages.ca/
356	T'Bone's Fresh Meal Market	Meat Processing - Food Processing	Meat	Kelowna	250-763-5966	tbones1@telus.net	www.mytbones.com
357	Mike's Specialty Meats & Custom Cutting	Meat Processing - Food Processing	Meat	Enderby	NA	NA	NA
358	Roland's Custom Meat Cutting	Meat Processing - Food Processing	Meat	Enderby	NA	NA	NA
359	Rory Griffin	Meat Processing - Food Processing	Meat	Cherryville	NA	NA	NA
360	Arnie's Meats (Federated Meats)	Meat Processing - Food Processing	Meat	Armstrong	NA	NA	NA
361	The Wild Moon Organics Co.	Meat Processing - Food Processing	Broth	Armstrong	778-212-6497	NA	NA
362	Helmut's Sausage Kitchen	Meat Processing - Food Processing	Meat	Kelowna/ Vernon	Kelowna 250-861-3281 Vernon 250-260-3281	www.helmutssau- sagekitchen.ca/con- tact-us	www.helmutssausagekitchen. ca/
363	Codfathers Seafood Markey	Meat Processing - Food Processing	Seafood	Kelowna	250-763-3474	Codfathers.orders@ yahoo.ca	
364	Buy the Sea Seafood Market	Meat Processing - Food Processing	Seafood	Penticton	250-492-3474	www.buythesea.ca/con- tact.php	www.buythesea.ca/index.php
365	VersaCold Logistics Services	Storage and Warehouse	Freezer Storage	Kelowna	604-258-0350	info@VersaCold.com	www.versacold.com/en/page/ facilities-all-locations
366	Rancho Cooling	Storage and Warehouse	Freezer/ Cooler/Dry Storage	Armstrong	250-938-5062	NA	www.ranchocooling.ca/

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