



Regional Food System Strategy

FEBRUARY 2011





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PREFACE

Food is a top of mind issue for many people. There are growing concerns about the rising incidence of obesity, food safety, disappearing farmland, depleted fish populations, food waste, and the carbon footprint of food. At the same time there is a renewed interest in growing food, preparing healthy meals, buying local foods, and working with others to provide equitable access to nutritious food in our communities.

In 2008, the Metro Vancouver Board initiated a Regional Food System Strategy as part of its commitment to make this a sustainable region. Since then hundreds of residents have attended public meetings to talk about agriculture and food issues. We heard about a wide array of problems but more importantly, many ideas for changing the way food is produced, consumed and disposed of that would improve the well-being of residents, the economic viability of local farms and food businesses, as well as the ecological health of the region.

This regional interest in food issues is taking place at the same time research indicates that the global food system is likely to face significant changes. Food prices are rising reflecting a growing demand for food and constraints on food production, both in agriculture and fisheries. Within this context, we have an opportunity to expand the local food supply within Metro Vancouver if all levels of government, their agencies, food producers and others in the food sector, non-governmental organizations, community groups and individuals can agree to a common vision and a plan to realize it.

Towards this end, this Regional Food System Strategy is a first step in creating a collaborative approach to sustainable, resilient and healthy food system that will contribute to the well-being of all residents and the economic prosperity of the region while conserving our ecological legacy. This Strategy takes into account the current strengths of Metro Vancouver's food system and the challenges that must be grappled with, to propose goals and strategies that will make the system more sustainable, resilient and healthy.

To achieve this means that we will still eat foods from around the world, but there will be more local food in our grocery stores and on our plates. Our food choices will be healthier ones and the food system will do a better job of sustaining the natural systems on which we all rely.

There are important and exciting initiatives already underway that are changing Metro Vancouver's regional food system. The next step in realizing the vision proposed here is to develop an Action Plan for the Regional Food System Strategy, involving key stakeholders, to implement strategic priorities. Subsequent steps will involve evaluating alternative actions and assessing the progress towards the goals of the Strategy.

This Regional Food System Strategy is presented in three parts. The first part explores the nature of the Metro Vancouver food system, its challenges and the general scope and approach of this Strategy in addressing these challenges. The second part sets out the goals and strategies to achieve the vision of a sustainable, resilient, and healthy regional food system with list of indicators for evaluating our progress. The third section is an appendix containing a more comprehensive list of actions that are already underway that support the goals of this Strategy as well as more proposed actions. This section is titled "Additional Actions for Consideration in the Action Plan", it is a work-in-progress that will inform the development of the first Action Plan.

Given the collaborative nature of the regional food system, the Strategy is best viewed as a working document that will be periodically reviewed by participating agencies, organizations and the public to consider whether priorities should be refined and new goals or strategies be established. This periodic review should be at least every five years.

PART ONE: THE BIG PICTURE

METRO VANCOUVER SUSTAINABILITY FRAMEWORK

Since 2002, Metro Vancouver has formally put the concept of sustainability at the centre of its operating and planning philosophy and advanced its role as a leader in the attempt to make the region one which is explicitly committed to a sustainable future. This comprehensive endeavour became known as the Sustainable Region Initiative, or more familiarly as the “SRI”. In 2008, Metro Vancouver’s Board adopted a Sustainability Framework outlining its vision, mission, values, sustainability imperatives, and sustainability principles. Depicted in Figure 1, the Sustainability Framework provides the foundation for Metro Vancouver’s suite of plans, including the Regional Food System Strategy.

REGIONAL VISION STATEMENT

Metro Vancouver seeks to achieve what humanity aspires to on a global basis – the highest quality of life embracing cultural vitality, economic prosperity, social justice and compassion, all nurtured in and by a beautiful and healthy natural environment. We will achieve this vision by embracing and applying the principles of sustainability, not least of which is an unshakeable commitment to the well-being of current and future generations and the health of our planet, in everything we do. As we share our efforts in achieving this vision, we are confident that the inspiration and mutual learning we gain will become vital ingredients in our hopes for a sustainable common future.

Metro Vancouver is a political body and corporate entity operating under provincial legislation as a ‘regional district’ and ‘greater boards’ that delivers regional services, planning and political leadership on behalf of 24 local authorities. It comprises of:

- | | | | | |
|---------------------------|--|-------------------------|-----------------------------|----------------------------|
| CITY OF ABBOTSFORD | CITY OF COQUITLAM | TOWNSHIP OF LANGLEY | DISTRICT OF NORTH VANCOUVER | CITY OF SURREY |
| VILLAGE OF ANMORE | CORPORATION OF DELTA | VILLAGE OF LIONS BAY | CITY OF PITT MEADOWS | TSAWWASSEN FIRST NATION |
| VILLAGE OF BELCARRA | CITY OF LANGLEY | DISTRICT OF MAPLE RIDGE | CITY OF PORT COQUITLAM | CITY OF VANCOUVER |
| BOWEN ISLAND MUNICIPALITY | ELECTORAL AREA A (UNINCORPORATED AREA) | CITY OF NEW WESTMINSTER | CITY OF PORT MOODY | DISTRICT OF WEST VANCOUVER |
| CITY OF BURNABY | | CITY OF NORTH VANCOUVER | CITY OF RICHMOND | CITY OF WHITE ROCK |

Figure 1 Metro Vancouver's Sustainability Framework

The Metro Vancouver Sustainability Framework

REGIONAL VISION The highest quality of life embracing cultural vitality, economic prosperity, social justice and compassion, all nurtured in and by a beautiful and healthy natural environment. Achieved by an unshakeable commitment to the well-being of current and future generations and the health of our planet, in everything we do.

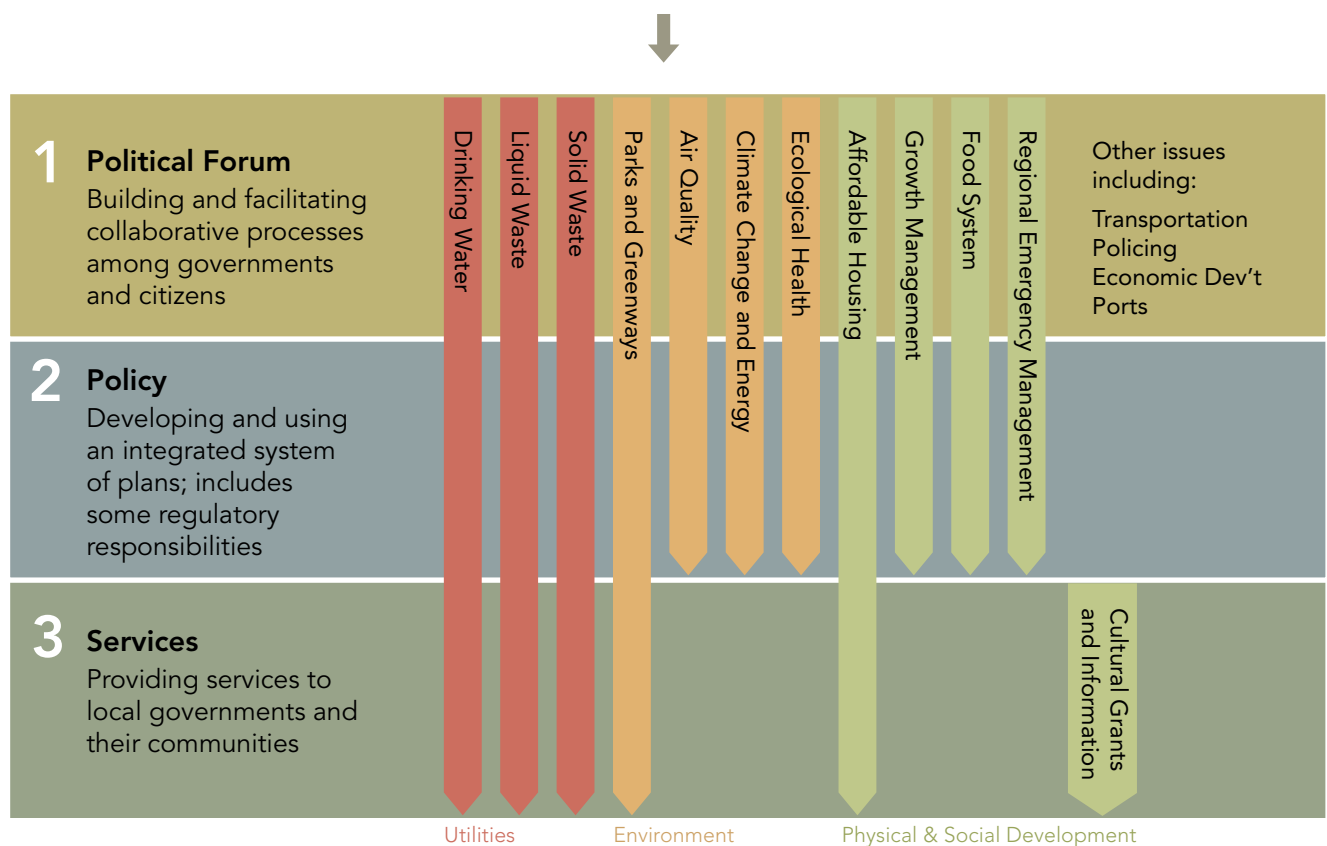
METRO VANCOUVER ROLE AND MISSION Serve the region and attain excellence in meeting these responsibilities. Plan for the future by developing and using an integrated system of plans. Facilitate collaboration with local governments and citizens.

VALUES Integrity is our foundation. Passion for our work and pride in our accomplishments are our drivers. Respect for the public and compassion in our relationships are our guideposts.

SUSTAINABILITY IMPERATIVES Have regard for local and global consequences and long-term impacts. Recognize and reflect the interconnectedness and interdependence of systems. Be collaborative.

SUSTAINABILITY PRINCIPLES Protect and enhance the natural environment. Provide for ongoing prosperity. Build community capacity and social cohesion.

...these are the foundation for Metro Vancouver's three interconnected roles:



Progress towards a sustainable region is measured by



which establish strategic priorities and key activities

VISION OF THE METRO VANCOUVER REGIONAL FOOD SYSTEM

As part of its commitment to a sustainable future for the region and its people, Metro Vancouver will, work with others to create:

a sustainable, resilient and healthy food system that will contribute to the well-being of all residents and the economic prosperity of the region while conserving our ecological legacy.

A sustainable food system meets the needs of the present generation without compromising the ability of future residents to meet their needs. Accomplishing this will require protecting and conserving the region's rich ecological legacy while taking actions that provide for ongoing profitability in the food sector, support healthier eating habits and address inequities in food access. Healthy, functioning ecosystems are essential for the on-going provision of food from land and sea as well as a wealth of other natural goods and services we all depend on. By spending a larger portion of their food budget on local foods, residents, businesses and public sector institutions will contribute to a stronger, more vital food sector that in turn will stimulate new investment and associated jobs. In addition, policies that increase public awareness of making more sustainable and healthier food choices combined with programs designed to improve food access will contribute to better health outcomes on a personal level and less strain on our collective healthcare system.

A sustainable food system must be resilient, that is capable of recovering from unforeseen setbacks and

short-term crises. Resiliency is achieved by having a food supply that comes from a diversity of sources, both local and distant. In Metro Vancouver, this means increasing the production of food that can be efficiently and sustainably cultivated within the region. Diversity also applies to the wide range of venues where consumers can obtain nutritious foods. At the same time, community-led initiatives addressing food and hunger issues will continue to build networks that enhance the transfer of knowledge on a range of food-related topics, including how to grow food and prepare healthy meals. These efforts build community capacity and enhance the region's social capital.

A sustainable food system is also a healthy system, it is one that improves the well-being of individuals and reduces the stress on the health care system through better food choices and eating habits. This would help reduce the risk of diet-related diseases, including obesity, Type II diabetes, heart disease, certain cancers and osteoporosis.¹ Public education campaigns can raise awareness of the value of eating better while alluding to the positive personal experiences of preparing and sharing food with family members, friends and within communities. For some vulnerable groups and low income households in the region, programs to ensure access to nutritious foods are required. A healthy food system will also provide consumers assurance that food (fresh, packaged and prepared) by commercial ventures is safe.

¹ Health Canada & Public Health Agency of Canada. 2010. It's Your Health.



THE REGIONAL FOOD SYSTEM STRATEGY

Food is essential to life and to our wellbeing. We all need to eat, but food is much more than a factor in our personal health. Specific meals and foods are associated with family histories and traditions. An interest in how food is grown can connect urban residents to natural cycles and the efforts of food producers. While the actual production and consumption of food is shaped by economic forces, the functioning of healthy natural systems is essential to sustaining our ability to obtain food from the land and sea.

Despite the importance of food, the viability of how we currently feed ourselves has recently become an issue of serious study and discussion. Anticipated changes in oil prices, climatic conditions, agricultural productivity, and fish populations have begun to raise concerns about the resiliency of our food system.

The Regional Food System Strategy is focused on how actions at the regional level can move us toward a sustainable, resilient and healthy food system while recognizing that the Metro Vancouver food system is affected by influences at the global scale. This Strategy provides a vision and structure that will enable more collaboration among different agencies and groups to shape the food system in Metro Vancouver. The points of common interest are:

- increasing capacity to produce more local food,
- improving financial viability of local farmers and food processors,
- encouraging people to eat healthier diets,
- ensuring a more equitable access to nutritious food,
- reducing waste in the food system, and
- protecting the ecological health of our region and surrounding waters.

Defining what is meant by local food can be difficult. For the purposes of this Strategy, local food is defined as being grown or harvested in B.C.



A Food Systems Approach

The Strategy has been constructed using a food systems approach. A food system refers to all the processes involved in keeping us fed: from growing and harvesting food to its processing, packaging, transportation, distribution, preparation, marketing, and its final consumption. It also includes the management of food and packaging waste and the recovery of nutrients within the region.

A food system operates within and is influenced by the cultural, social, economic and environmental context in which it is situated. The food system in Metro Vancouver reflects the history of the first people of the region and subsequent waves of immigration. While the places we buy and consume our food reflect the way neighbourhoods and municipalities were developed, the structure of our regional food system also reflects economic and social forces at the national and global levels. Adopting a food systems approach means this strategy looks at the “big picture” and takes a holistic view of the food system to understand how the different components all fit together.

Figure 2 Diagram of a Regional Food System

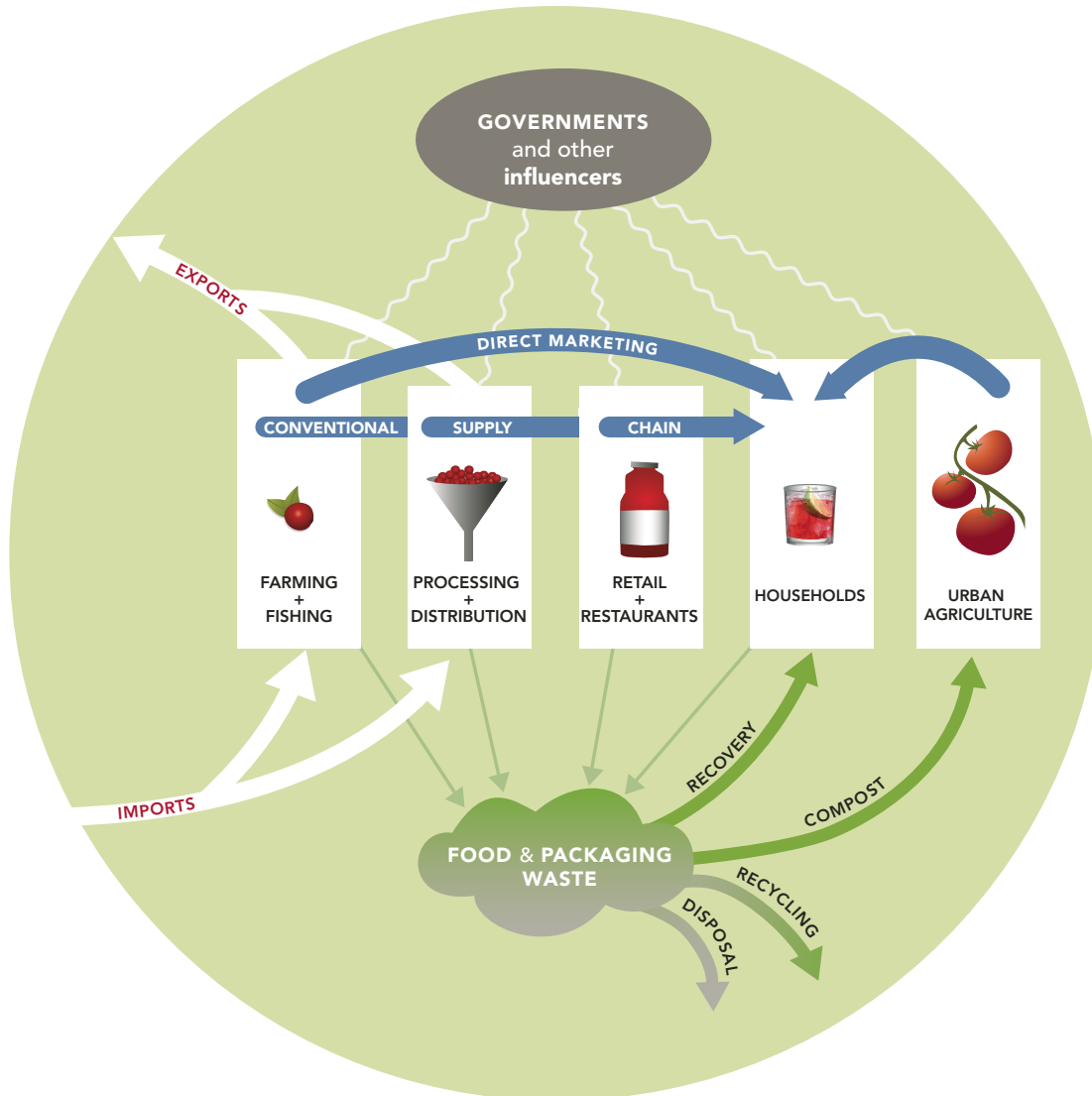


Figure 2 is a diagram of a regional food system. The products of farmers, ranchers and fishermen who grow or harvest food are transformed into “shelf ready” products through sorting, grading, packaging and other processing activities. In the conventional food supply chain, these products are warehoused for distribution to grocery stores, food markets, restaurants and other businesses that sell the food to the consumers. The conventional supply chain is supplemented by direct marketing activities. This occurs when farmers, fisher-

men and small scale food processors sell their products directly to restaurants and consumers at the dock, farm gate, farmers markets and other venues.

Each step of the supply chain increases value but produces waste. A study in 2007 estimated that 38 percent of food available for retail sale was wasted² with even more spoilage and waste occurring in homes. On farms,

² Statistics Canada. 2009. Human Activity and the Environment: Food in Canada.

surplus crops and waste are ploughed over but in urban areas food waste from processing plants, warehouses, grocers, restaurants and homes become part of the regional waste stream. A commitment to sustainability involves reducing the amount of food and packaging waste. This involves reducing the amount of waste created in the first place as well as expanding food recovery activities, increasing composting, recovering nutrients, and recycling more food packaging that now ends up in the disposal system.

Decisions made within the food supply chain are primarily guided by market factors. Food producers and others in the food supply chain make decisions as to how to maximize their returns while consumers decide how to best spend their food budgets.

However since food is an essential good and because food production, distribution, and disposal all have social, health and environmental implications, governments, at all levels, have assumed roles to address issues not remedied by market forces. These include issues like disparities in food access, loss of prime farmland, food safety, and degradation of fish habitat. Other groups that influence the food system include professional associations, non-governmental organizations, community groups, educational institutions and the media. Understanding the functions of the food system and the roles of various groups is essential for determining the best avenues for building a sustainable, resilient and healthy regional food system.

The price differential between similar food items may be important at a grocery store or in a restaurant, but it does not always explain why consumers choose certain foods. Our eating preferences are affected by our cultural upbringing, social circles, income status, ability to access certain foods, knowledge about nutrition and food preparation, as well as personal habits and tastes. In addition, advertising and marketing campaigns can have significant influence on food choices, especially among children.



Metro Vancouver's Food System

It is possible to build a sustainable, resilient and healthy food system in Metro Vancouver – we have many strengths on which to build. The region has rich agricultural lands, a biologically rich coastline and freshwater resources to produce more food. There is a strong and growing enthusiasm for making positive changes in the way food is produced, distributed and disposed. The private sector has the skills and entrepreneurial drive to build a larger, more vibrant food sector. At the community level there are many individuals working on a wide range of initiatives from community gardens to salmon stewardship. However, increasing the sustainable production of more food within the region, improving food choices, and ensuring access to nutritious foods for all residents will require the implementation of innovative actions as well as a much greater level of collaboration among agencies and groups involved in the food system.

The population of Metro Vancouver represents more than half of the province's population and it is where 817,230 households spend almost \$5 billion annually on food.³ Most of the food we buy is not grown or caught here. A provincial study estimated that 48 percent of food consumed within the province was produced here but this analysis only included fresh foods and not processed food.⁴ Supermarket shelves and produce bins are full of food items containing products from around the world.

Agriculture

Since the 1950's, productivity in the global food sector surged while prices paid for food dropped. This was primarily accomplished by the application of industrial production techniques and targeted subsidies in the food sector coupled with the ability to ship produce and processed foods to markets around the world using

relatively inexpensive fossil fuels. Overall, consumers have benefited from this situation, because food prices are low and the variety of food products available has increased.

This trend has not been as beneficial to local food producers. While food prices determined in global markets have dropped, the costs of operating a farm in Metro Vancouver have climbed. The challenges of making a living meant until 1973, many farmers were choosing to sell their land and leaving the industry or moving to where conditions were more conducive to farming.

To stem the tide of the loss of farmland, the B.C. government created the Agricultural Land Reserve (ALR) in 1973. The objective of the ALR is to protect farmland in perpetuity. This visionary policy was critically important in slowing the conversion of farmland to residential and other urban uses in the most populated regions of the province like Metro Vancouver. Today there is an estimated 60,940 hectares of ALR lands in Metro Vancouver⁵ (Figure 3). Most of the prime agricultural lands are located on the Fraser River Delta in Richmond, Delta, Surrey, Burnaby, and Pitt Meadows or in the uplands of Langley, and Maple Ridge (Table 1).

Not all of the ALR lands in Metro Vancouver are actively farmed. Work is underway to estimate how much of the ALR land in Metro Vancouver is actively farmed and this estimate should be available in 2012.

The creation of the ALR has not eliminated the pressures to convert farmland to other uses but it has certainly diminished the rate of conversion. A highly productive and diversified agriculture industry remains in Metro Vancouver. Farmland in Metro Vancouver represents only 1.5 percent of the total agricultural land in B.C. but it generates 28 percent of the province's gross farm income. Table 2 provides a list of the more than 130 different agricultural products in the region.⁶

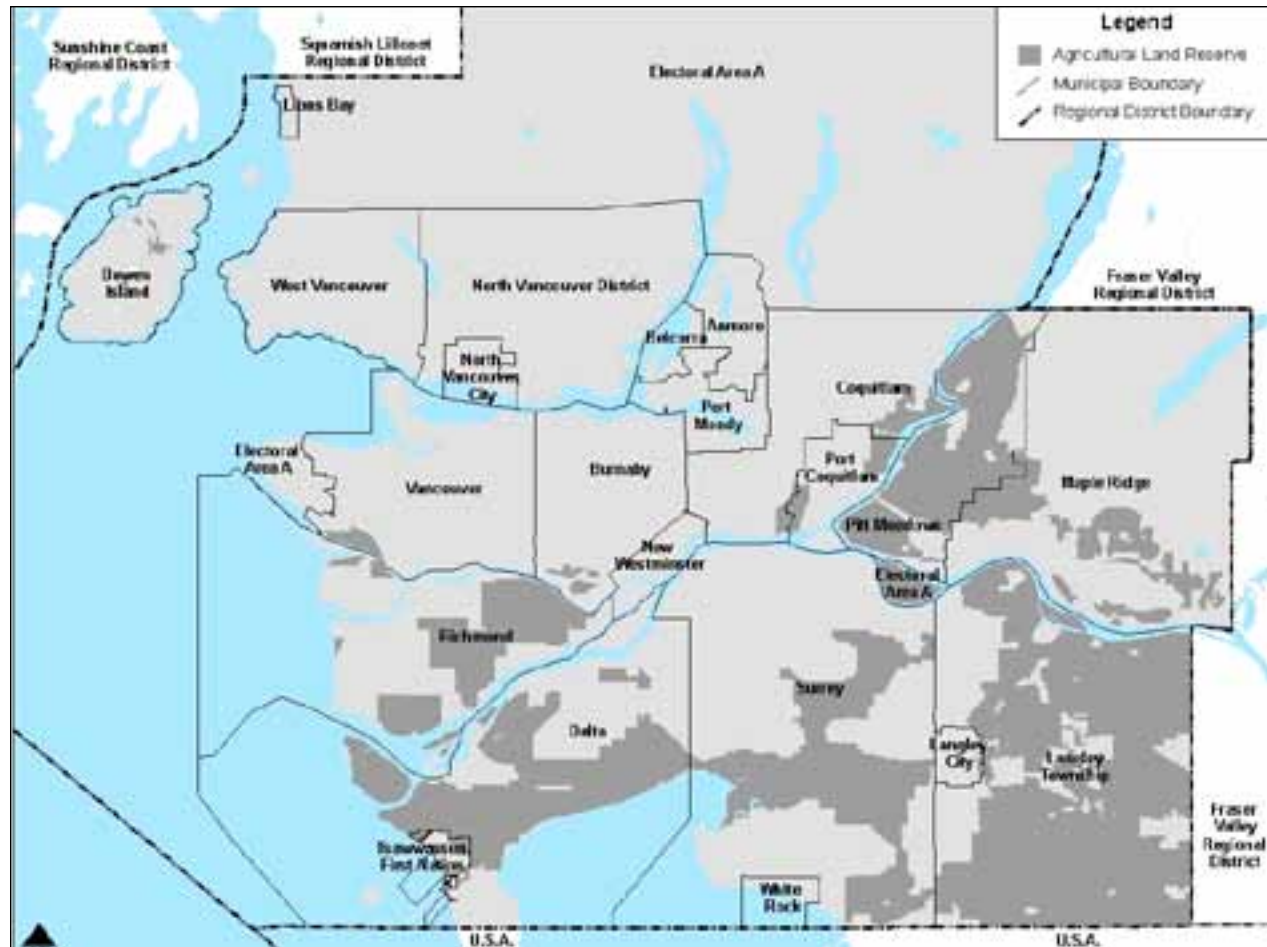
³ Population figures from Census 2006. The calculation on spending is based on data from 2001 "Food Expenditure in Canada" report from Statistics Canada.

⁴ B.C. Ministry of Agriculture and Lands. 2006. B.C.'s Food Self-Reliance: Can B.C.'s farmers feed our growing population.

⁵ Source: Agricultural Land Commission as of November, 2010.

⁶ Census of Agriculture. 2006. Statistics Canada.

Figure 3 Map of the Metro Vancouver's Agricultural Land Reserve



Farms in Metro Vancouver are primarily family-owned operations and relatively small in size. Of the over 2,618 farms in the region, the average size is 16 hectares and more than half are 4 hectares (10 acres) or smaller. In comparison, the average farm size in B.C. and Canada were 143 and 295 hectares respectively.⁷

There are profitable farm operations in Metro Vancouver serving both export and local markets. Local growers are successfully selling blueberries, cranberries, greenhouse vegetables and other products to international markets. Farmers who produce poultry, eggs and dairy products under supply management boards also tend

to be profitable. While opportunities to sell local produce into the conventional supply chain exist for large scale producers, they are limited for smaller producers. In response, some farmers and fishermen successfully sell their products directly to restaurants and consumers. There are also local food processors that have developed niche and artisan food products that are doing well.

It is however a challenge to make an adequate living as a farmer in Metro Vancouver. The current level of agricultural production in the region may not be sufficient to support a range of agricultural related businesses including processing. This is related to many factors but the loss of actively farmed land is a key driver.

⁷ 2006 Census Bulletin #2 Census of Agriculture. Issued August 2007. Metro Vancouver.

Table 1 Distribution of Agricultural Land Reserve (ALR) in Metro Vancouver Municipalities

Municipality	Total Land Area (ha)	Land in ALR (ha)	% Land in ALR	% Regional Share of ALR
Anmore	2,755	nil	--	--
Belcarra	523	nil	--	--
Bowen Island	5,010	182	4%	0.3%
Burnaby	9,117	234	3%	0.4%
Coquitlam	12,308	823	7%	1.3%
Delta	18,017	9,386	52%	15.4%
Electoral Area A (Barnston)	78,090	618	1%	1.0%
Langley City	1,024	43	4%	0.1%
Langley Township	31,154	23,487	75%	38.5%
Lions Bay	269	nil	--	--
Maple Ridge	26,816	3,784	14%	6.2%
New Westminister	1,571	nil	--	--
North Vancouver City	1,216	nil	--	--
North Vancouver District	16,363	nil	--	--
Pitt Meadows	8,827	6,856	78%	11.3%
Port Coquitlam	3,003	589	20%	1.0%
Port Moody	2,644	nil	--	--
Richmond	12,919	5,175	40%	8.5%
Surrey	31,823	9,286	29%	15.2%
Tsawwassen First Nation	684	180	26%	0.3%
Vancouver	11,741	297	<0	0.5%
West Vancouver	8,925	nil	--	--
White Rock	511	nil	--	--
Metro Vancouver Total	285,310	60,940	21%	100%

Source: *Agricultural Land Commission November 2010*

Prior to the creation of the ALR there was a significant loss of agricultural land in the region. Since then, farmland has been attractive investment for speculators who are not interested in farming but hope to eventually remove the land from ALR and convert it to other uses. At the same time, non-farm use of farmland has been increased both through approved changes and violations of approved use of farmlands. The related loss of agricultural activity in the region has led to the relocation of some agricultural support services, like veterinarians and feed stores, to further into the Fraser Valley where the concentration of agriculture is greater.

This increases the cost of operating a farm in Metro Vancouver. This loss of agricultural activity, coupled with broader market trends has led to the relocation of food processing operations where cost of operations are lower. As a result there is less value added production of agricultural products in Metro Vancouver.

The high cost of farmland in Metro Vancouver also constrains farmers from expanding their operations as well as practicing crop rotation important for maintaining soil quality. Land prices are also a significant barrier to the entry of new and young farmers to the industry. The cost of land is related to the competition

Table 2 Farm products from Metro Vancouver

Livestock	number of animals
Hens and Chickens	4,075,408
Turkeys	332,397
Other Poultry	132,835
Cattle & Dairy Cows	29,433
Mink	157,248
Horses & Ponies	6,237
Sheep & Lambs	4,699
Pigs	3,832
Goats	1,234
Llamas & Alpacas	578
Colonies of Bees (for honey)	4,305
Fruit Crops	number of hectares
Blueberries	2,734
Cranberries	1,503
Strawberries	208
Raspberries	198
Apples	42
Grapes	31
Pears	12
Sweet Cherries	10
Plums and Prunes	5
Peaches	5
Other Fruit	53
Vegetable Crops	number of hectares
Potatoes	2,285
Nursery Products	1,192
Green/Wax Beans	804
Sweet Corn	405
Squash and Zucchini	116
Green Peas	267

Vegetable Crops con't	number of hectares
Lettuces	213
Pumpkins	203
Carrots	196
Chinese Cabbage	105
Cabbage	97
Beets	55
Spinach	47
Rutabagas/Turnips	45
Cucumbers	42
Onions	39
Shallots/Green Onions	35
Cauliflower	19
Peppers	18
Broccoli	17
Tomatoes	14
Celery	7
Other Vegetables	229
Field Crops	number of hectares
Barley	513
Wheat	368
Oats	528
Forage seed	411
Corn for Grain	181
Other Hay and Fodder	7,597
Other Crops	area in m2
Mushrooms	85,424*
Greenhouse Vegetables	1,743,581
Greenhouse Flowers	1,007,752
Other Greenhouses	485,169

Source: 2006 Census of Agriculture

* Only for Township of Langley and City of Surrey

for land in a metropolitan region with a growing population, particularly one with the natural barriers, like the mountains and shorelines that define Metro Vancouver. In addition to expensive land, operating a farm that abuts a residential neighbourhood or other urban land uses introduces conflicts and new expenses. The sounds and smells associated with farming are considered a nuisance and transporting produce and equipment is less efficient on roads filled with commuters and other urban traffic.

Innovation in policies to protect farmland and improve the viability of farming is essential for expanding local food production. Innovation on the farm is also critical for improving the competitiveness and sustainability of agriculture. However, low financial returns and small size of farming operations in the region mean that the ability within the farming sector to invest in research and development is low. If growing more local food is an important collective objective, then governments and academic institutions must help to fill the gaps.

In summary, large and small farmers in Metro Vancouver face some significant challenges in sustaining their operations. These challenges will need to be remedied or addressed if we want to increase food production within the region.

Other elements of the food sector

In addition to a rich diversity of agriculture products, seafood and fish are harvested from the Fraser River, urban streams, the shoreline and Salish Sea. The storied cultures of the First Nations who have lived in the region for many generations reflect the importance of the abundance from the sea, in particular, salmon. An important chapter in the economic development of Metro Vancouver revolves around the canneries located near the docks where commercial fishermen landed their catches. Efforts to increase the abundance of native fish and shellfish populations could mean that marine-based sources of protein could once again be an important element of the regional food system.

The food sector is a vital component of the regional economy. One in every eight jobs in Metro Vancouver is in a food-related industry, including agriculture, fishing, processing, distribution, retail and food services. Total revenue for the B.C. food industry is estimated to be over \$35 billion dollars⁸ and a significant portion these businesses are located in Metro Vancouver.

There is growing public interest in purchasing local foods. Sales at farmers markets are increasing and food events continue to attract crowds. Local chefs are leading innovators and promoters of a Northwest cuisine that relies on local produce, artisan farm products, and sustainable sources of seafood. At the same time, more residents are becoming interested in growing their food in backyards and community gardens. Turnout at food related public events continues to climb while more residents are volunteering with community groups working on food security issues.

Also within the region there are individuals and households who do not have sufficient access to fresh and healthy foods. One study shows that the cost of a nutritious food basket in B.C. exceeds the means of a family of four on income assistance.⁹ In celebrating the positive elements, it is be recognized that some households could be much better served by the regional food system.

The food system in Metro Vancouver also evolved from a rich cultural diversity that has shaped the region. The food we cook and enjoy at restaurants, community events and with friends and family is a reflection of the fact that forty percent of the region's residents were born outside of Canada. The ongoing mixing of people, cultures and knowledge is an asset in building a sustainable, resilient and healthy food system.

⁸ B.C. Ministry of Agriculture and Lands. (2006). Fast Stats: Agriculture, Aquaculture and Food. B.C. Ministry of Agriculture and Lands. B.C. figures include sales from agriculture (\$2.6 billion), aquaculture (0.23 billion), food processing (\$6.9 billion), food wholesaling (\$10.3 billion) and food retail and food service industry (18.7 billion). The data does not include information on commercial fisheries.

⁹ Dieticians of Canada. (2009). The Cost of Eating in B.C. 2009. Dieticians of Canada, B.C. Region and the Community Nutritionists Council of B.C..



Challenges Facing the Global Food System

The Metro Vancouver food system is nested in the national and global food systems. The global food system is likely to undergo significant changes as a series of environmental and economic conditions change. The global demand for food will increase over the next 40 years due to continued growth in population and consumption. Meeting that demand will result in greater competition for land, water and energy resources and further exploitation of global fisheries. This will occur at the same time, that the negative environmental impacts of the food system must be reduced and food production has to adapt to the effects of climate change.¹⁰ Through collaborative actions the Regional Food System Strategy will aim to mitigate or address the following challenges:

Supporting healthier diets

In relatively prosperous countries like Canada a disturbing dichotomy has emerged. In the midst of an abundance of relatively cheap food, the incidence of diet-related chronic diseases has increased. A growing number of people are labelled as “malnourished” meaning they are either over consuming foods that should be consumed in moderation or they are not consuming enough nutritious foods or a combination of both.¹¹ There are a number of factors behind this trend. People are spending less time preparing healthy meals and as a result are not passing on their knowledge about how to cook a well-balanced, nutritious meal to their children. For vulnerable groups, the food that is most easily accessible and relatively cheap is high in calories and low in nutritional value with large amounts of sweeteners, fats and salt.

Reducing the carbon footprint of food

Modern agriculture and the food system as a whole have developed a strong dependence on fossil fuels to produce, transport and process food. One study estimates that the conventional agri-food system uses

¹⁰ Godfrey, H. Charles J. et al. (2010). “Food Security: the Challenge of Feeding 9 Billion People” in *Science* Vol. 327, no. 5967, pp. 812-818.

¹¹ Food, Health and Well-being in British Columbia. Provincial Health Officer’s Annual Report 2005, page xvii.

7.3 units of energy to produce one unit of food energy.¹² The reliance of the food system on fossil fuels has both economic and environmental implications. Oil prices are projected to rise significantly in the future as global production levels peak. The use of fossil fuels in producing, processing, storing and transporting food has made the sector a relatively large source of global greenhouse gas emissions. A commitment to effective climate change mitigation strategies will require reducing the carbon footprint of food.

Preparing for uncertainty in the global food supplies

Greater uncertainty in terms of global food supply are related to a growing and more affluent world population coupled with the negative trends in key ecological indicators. The shortage of freshwater, the loss of topsoil and the rising temperatures and other effects associated with climate change is making it increasingly hard to expand the world's grain supply as quickly as increases in demand¹³. At the same time, wild fish stocks are diminishing as a result of changes in the ocean ecosystems, loss of habitat, over-fishing, pollution and introduction of exotic species. Any combination of these factors can lead to reduced food availability and higher food prices.

Creating opportunities for local food businesses

Globally the trend in food markets has been towards increasing corporate concentration of processing and warehousing facilities; facilities that are optimally located in low cost regions located near markets or major transportation hubs. For many locales, including Metro Vancouver, this has resulted in the loss of value-added and warehousing facilities that are important for local farmers. At the same time, large food retail chains are interested in buying food commodities in large lots and low prices, a situation which puts food

producers, large and small, in a region with high land and other costs at a disadvantage. But for small to medium size farms which produce in smaller quantities, it is even more difficult to sell their products to public institutions, grocery stores and restaurants.

Working across multiple jurisdictions

Despite being a basic human need, food is not the mandate of any one level of government or agency. Instead, various components of the food system reside with the federal, provincial or local government agencies. This means that particular food issues are dealt with in isolation and the impact of any particular policy on the operation of the whole system is rarely evaluated or considered. Instead the mosaic of agency mandates as well as the specialized knowledge of experts, scientists and government staff tends to determine policies. For example, the effect of measures developed to address food safety concerns may impose significant barriers on farming operations in Metro Vancouver. At the same time, opportunities for capturing synergies in developing more environmentally sound practices given the current situation are lost.

This Regional Food System Strategy aims to address food system challenges by identifying actions that will build and strengthen relationships while bridging the gaps that exist in the Metro Vancouver food system. This will require creative and innovative thinking about policies, identifying resources, and building a commitment to working collaboratively to achieve the vision of this Strategy.

12 Centre for Sustainable Systems, University of Michigan. 2009. "U.S. Food System Factsheet". Pub. No. CSS01-06.

13 Brown, Lester (2009). Could food shortages bring down civilization? Scientific American Magazine, April 22, 2009.

Partners: Roles and Responsibilities

Stronger connections between and among the food sector, governments, educational institutions and community organizations as well as the active engagement of individuals will enhance our ability to build capacity in the food sectors and to revitalize the regional food system.

Food sector

The food sector encompasses a vast range of businesses organized to move fresh farm and seafood products from the farm or dock to food retailers, like grocery stores, supermarkets, and food speciality stores, as well as restaurants, hotels and cafeterias in large institutions. Important intermediaries in the system include food processors and packers, wholesalers and food service distributors.

Most of the farm fresh products grown or raised in Metro Vancouver are sold directly to wholesalers for grading and packaging before being shipped to food retailers. Meat and dairy products require more processing and packaging – some of which can be done locally. Most fish and seafood landed in Metro Vancouver is exported but a small percentage is processed and distributed locally. The food processing sector in Metro Vancouver is composed primarily of medium to small scale businesses while the wholesale distribution centres are either owned by large retail chains or large private companies. Two large food service distributors dominate sales to food services in Metro Vancouver.¹⁴

Decision-making in the private sector is guided by a need to be financially viable in the face of changes in market demand, production costs, competition, regulation, the structure of the industry. As stated earlier, the challenges to operating a financially viable operation in farming, fishing and food processing must be addressed and mitigated to ensure that the opportunities for expanding local food production are realized.



¹⁴ Hild, Chris (2009) The economy of local food in Vancouver. Report produced for the Vancouver Economic Development Commission.



Photo: Ministry of Agriculture

This will mean that food service distributors, wholesalers, retailers and restaurants in the food sector will need to identify how to increase the amount of local food products they provide their customers while concurrently helping to build demand by contributing to “buy local” campaigns.

For the vast number of small scale food producers and processing developing secured local venues for selling their products directly to consumers will be important. These venues include farm gate sales and farmers markets among other options. Expanding these direct marketing venues may involve partnerships with the non-profit sector and community organizations along with good working relationships with local governments.

Research and development is key to improving productivity and business success in the food sector. Obviously the private sector has a role but because innovation in the food sector can produce economic, social and environmental benefits, governments and academic institutions should also be involved.

Government of Canada

Federal government authority for food rests primarily in agriculture, fisheries, aquaculture and health services. Agriculture and Agri-Food Canada is focused on the international and inter-provincial trade and commerce of agricultural products, farm income stabilization, agriculture research and development, and the regulation of animals and plants. The Canadian Food Inspection Agency (CFIA) is responsible for safe and sustainable food production. This includes regulating food products, packaging and labelling, monitoring farm animal health, testing food products on farms and at processing facilities for biological, chemical or physical contamination, enforcing federal food safety regulations, responding to food safety emergencies, testing products for chemical residues as well as export/import requirements, and protecting Canada’s plant resource base from incursions of pests and diseases.

The Department of Fisheries and Oceans has the responsibility for conserving and protecting aquatic habitat, working in collaboration to manage commercial, recreational and Aboriginal fisheries, and creating the conditions to support sustainable aquaculture.

Health Canada helps maintain and improve the health of Canadians by regulating consumer products, delivering environmental health and protection programs, tracking diseases, and overseeing workplace health. The Public Health Agency of Canada aims to reduce pressure on the health care system by promoting good health, preventing chronic diseases and injury, and protecting against infectious diseases and other health threats.

Province of British Columbia

The Province shares a mandate for agriculture and health with the federal government and also has primary authority over strategies for economic growth, job creation, social welfare, transportation systems, and the environment.

The Ministry of Agriculture is responsible for providing a balanced approach that will promote economic and social development objectives with those of environmental sustainability for agriculture and agri-food products in B.C. In addition, it monitors and manages the risk of diseases that affects farming, works to balance urban/agriculture interests and delivers farm income stabilization programs. In addition, the Ministry funds the Agricultural Land Commission and the B.C. Farm Industry Review Board. The later adjudicates on what is 'normal farm practice.'

The Ministry of Health Services has overall responsibility for ensuring British Columbians have access to quality, appropriate and timely health services by setting province-wide goals, standards and performance agreements for health service delivery by the health authorities. It is also responsible now for promoting health and reducing the risk of chronic disease conditions.

The Ministry of Environment's role in sustainable environmental management and stewardship includes implementation of B.C.'s Climate Action Plan and Living Water Smart. The Ministry also works on strategies to manage waste, recover resources, reduce toxins and emissions, and conserve wildlife and marine species and habitats.

The Ministry of Community, Sport and Cultural Development is charged with promoting sustainable, livable communities that provide healthy and safe places for British Columbians. In 2009 the Ministry received proposals for new policy rules for the assessment of farmland from the Farm Assessment Review Panel.

First Nations

There are eleven First Nations located in Metro Vancouver: Hwlitsum, Katzie, Kwantlen, Kwikwetlem, Matsqui, Musqueam, Qayqayt, Semiahmoo, Squamish, Tsawwassen and Tsleil-Waututh. Over 40 other First Nations, tribal councils and treaty groups outside the region, including those in the Fraser Valley and on Vancouver Island, also have traditional territories and asserted claims involving lands within this region. Currently, only the Tsawwassen First Nation is a treaty First Nation and a member of Metro Vancouver.

Many First Nations are involved in economic development planning for their communities and people. This may involve fisheries, harvesting of plants, berries and other wild resources and, in some cases, agriculture. Management and allocation options for fisheries are tied to the reconciliation of aboriginal and Crown interests.

Health Authorities

The Provincial Health Services Authority (PHSA) and regional health authorities provide a range of services from hospital care to community-based residential, home health, mental health and public health services. Through the Community Food Action Initiative and the Model Core Program for Public Health, these health authorities link health and food objectives. In Metro Vancouver, Vancouver Coastal Health delivers services to the City of Vancouver, Richmond, and the North Shore municipalities while Fraser Health provides services to municipalities north and south of the Fraser from Burnaby to Maple Ridge and the Township of Langley.

Metro Vancouver

The regional government's role in the food system is related to a number of its mandates, including:

- developing and implementing a regional growth strategy that protects agricultural lands as well as industrial lands important for food processing, storage and distribution facilities
- managing solid waste to reduce food and packaging waste destined for disposal as well as identifying opportunities to recover waste in the food system for energy or as soil amendments
- providing drinking water and associated infrastructure
- collecting and treating sewage and promoting best practices for stormwater management
- regulating factors affecting air quality – better air quality should improve crop productivity but specific regulations may affect businesses within the food sector
- planning for regional parks that guide land acquisitions, programs and services, capital developments, community partnerships and volunteer initiatives
- serving as the main political forum for discussion of significant community issues of regional importance through facilitation, partnerships, advocacy, education and community engagement.

Municipalities

The extent of the municipal role in the food system is determined by the type of lands within their jurisdiction. For municipalities with large tracts of farmland, agriculture is an important element of their economy and community fabric which requires specific plans, supporting services, or bylaws to support farming while maintaining the character of rural areas. The more urban municipalities put more emphasis on community services, urban agriculture, farmers markets and other avenues to distribute and access food.

Similar to regional governments, the municipal role in the food system is related to their jurisdictional responsibilities, including:

- governing land use through Official Community Plans and related zoning bylaws that specify how food producers, business involved in the food industry and homeowners can use their properties
- deciding how to use municipally-owned lands
- establishing taxation levels for farmland and other property assessment categories
- developing plans for municipal infrastructure, buildings and properties like composting facilities, community centres and parks that can be utilized to support community food security
- supplying drinking water, solid waste collection, stormwater management, drainage, diking systems, and enforcing riparian regulations
- developing community economic development plans to increase agriculture or other food sector business
- using public education as a means for addressing the range of health and social problems that confront their constituencies
- promoting community engagement to involve citizens in developing food policies and initiatives.

Non-governmental Organizations and Community Groups

Some non-governmental organizations (NGOs) and community groups have been working to influence agriculture and other aspects of the food system since the mid-1970s. And as a result of growing interest in food and a greater understanding of the social and environmental implications of the food system, many more groups have incorporated work on agriculture, fisheries, public health and environment into their agendas. Non-governmental organizations serve an important role in providing an alternative vision to the status quo, advocating for policy change and then monitoring the effect of practices and policies. Many charitable organizations, like food banks, also provide critical community services for vulnerable groups. Supplementing this work are the efforts and energy of community groups. These groups are primarily volunteer-based where members are engaged in a variety of projects such as building community gardens and sharing growing, preserving and food preparation skills.

Educational Institutions

Schools, universities and colleges are sites for important research as well as creative teaching initiatives that influence and support changes in the regional food system. As centres of learning and research, scientists and other experts at universities can make important contributions in developing and analyzing practices, policies and technologies that will lead to innovations in the food system. In addition to contributions to science and research, educational institutions are important sites for initiating changes in the food system. The development of procurement policies that prioritize local foods have been pioneered by universities while planting gardens at elementary schools are places where children can learn about the process of growing foods.

Consumers and the Public

Consumer demand is a powerful force in the food system. Over the past few decades the increased demand for convenience foods and the popularity of dining out has reflected changes in personal and family lifestyles. At the same time, consumers are expressing an interest in purchasing foods that reflect their values. Some consumers are asking questions about where their food is produced; the working conditions and incomes of farmers, farm labour and fishermen; the use of pesticides; along with the technologies and practices used to produce their food. In response, new products have emerged including “fair trade” products and certified organic foods. In addition, success in reducing the amount of food and food packaging waste is dependent on changes in consumer behaviour.

Aligning with Provincial Initiatives

Key provincial plans supported by the Regional Food System Strategy include the following:

B.C. Agriculture Plan: Growing a Healthy Future for B.C. Families (2008)

This plan outlines strategies to ensure continued development and growth of an economically viable and resilient agriculture and food sector which contributes significantly to: the health of residents, climate change mitigation, environmental sustainability, and a growing B.C. economy. Many of the actions in this plan complement the direction of other provincial initiatives.

B.C. Climate Action Plan (2008)

The success in achieving the provincial target of a 33 percent reduction in greenhouse gas emissions by 2020 and an 80 percent reduction below 2007 levels by 2050 depends on our ability to integrate supporting initiatives in a range of sectors including the food system. The greatest potential to reduce greenhouse gases in the food system will be through changes in food procurement policies, new initiatives to reduce food waste and increase recycling, increased efforts in energy conservation and efficiency, as well as a switch to renewable sources of energy.

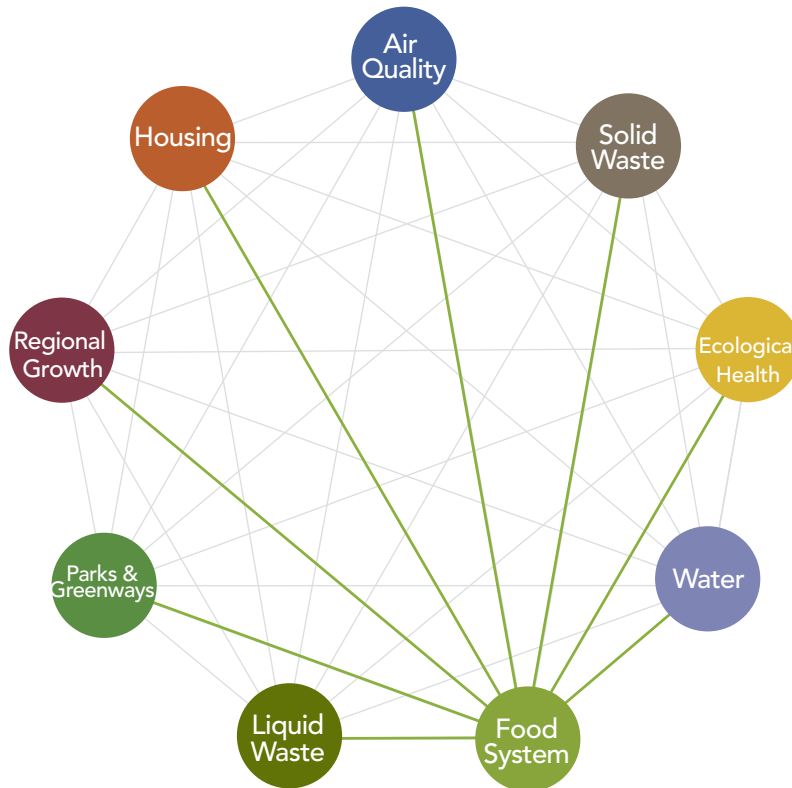
Living Water Smart: British Columbia's Water Plan (2008)

The Living Water Smart plan sets the direction for changes to water management and water use in B.C. by modernizing the *Water Act*, protecting stream health and aquatic environments, improving water governance arrangements, introducing more flexibility and efficiency in the water allocation system, and regulating ground water use in priority areas and for large withdrawals. Adaptation to climate change impacts and addressing pressures placed on water resources from a growing population and economy are critical to food production from the region's agricultural land and waterways. (Note: A policy proposal for modernizing the *Water Act* was released in December 2010.)

Healthy Eating Strategy (2007)

The B.C. Healthy Living Alliance developed a Healthy Eating Strategy to address key risk factors for chronic diseases by building the skills and knowledge of individuals that should lead to greater consumption of vegetables and fruit and decreasing consumption of unhealthy food and beverage choices while supporting programs that improve food access necessary for a healthy diet. This integrated approach is essential to promote healthy food and beverage choices that can also meet the needs of vulnerable populations.

Figure 4 Metro Vancouver's Interconnected Management Plans



Coordinating with Other Metro Vancouver Plans

The Regional Food System Strategy is one plan among a suite of interconnected management plans developed around Metro Vancouver's Sustainability Framework (Figure 4).

The Regional Food System Strategy includes coordinated actions with the Regional Growth Strategy and the Integrated Solid Waste and Resource Management Plan. The Regional Growth Strategy focuses on land use policies to guide future development of the region and contains policies that protect the region's agricultural land base and improve the economic viability of farming. The Integrated Solid Waste and Resource Management Plan contains a number of strategies and actions designed to minimize waste in the region which will be accomplished through recycling, reuse and the

recovery of materials and energy. These include actions to reduce food and packaging waste.

There are also links between the Regional Food System Strategy and other Metro Vancouver plans, specifically the Drinking Water Management Plan, Integrated Liquid Waste and Resource Management Plan, Air Quality Management Plan, the Regional Parks and Greenways Plan, and the Affordable Housing Strategy.

Table 3, Linkages between Metro Vancouver Management Plans, summarizes key links where actions identified in other Metro Vancouver plans affect the Regional Food System Strategy, and conversely where actions in this Strategy contribute to the goals of other Metro Vancouver plans.

Table 3 Linkages between Metro Vancouver Management Plans

Linkages Between Metro Vancouver Plans

REGIONAL GROWTH STRATEGY



INTEGRATED SOLID WASTE AND RESOURCE MANAGEMENT PLAN



INTEGRATED LIQUID WASTE AND RESOURCE MANAGEMENT PLAN

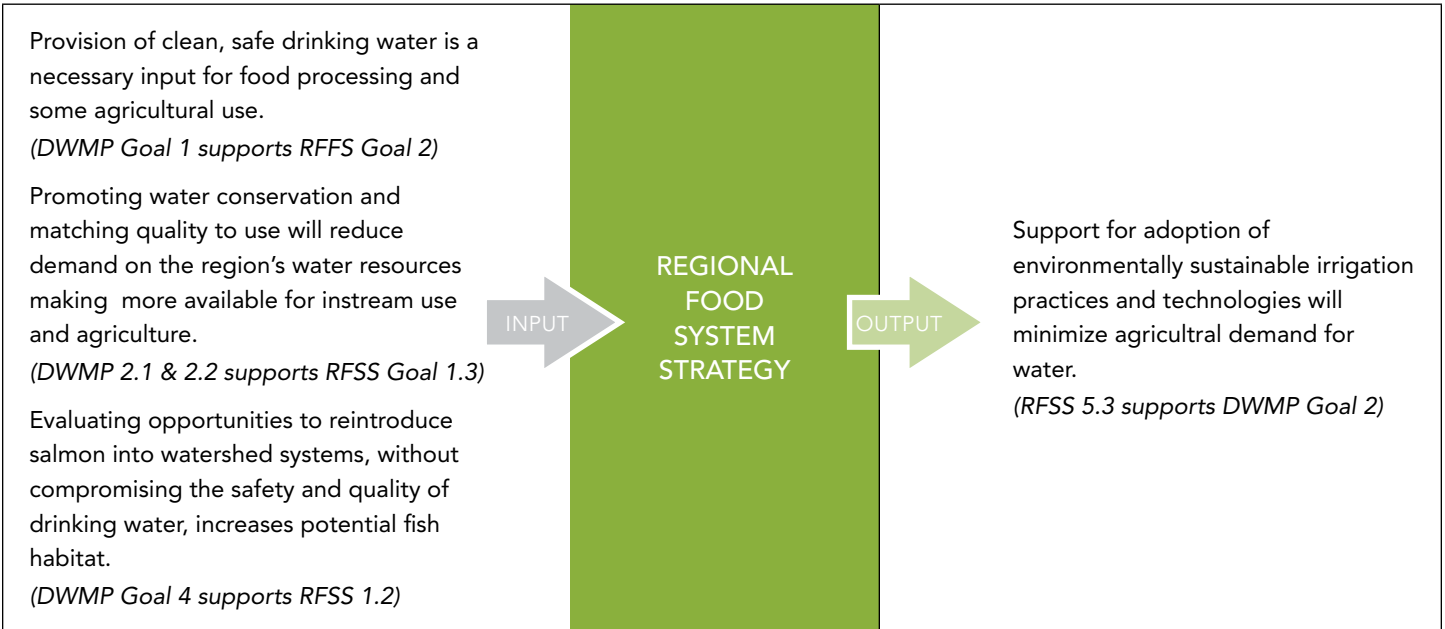


AFFORDABLE HOUSING STRATEGY

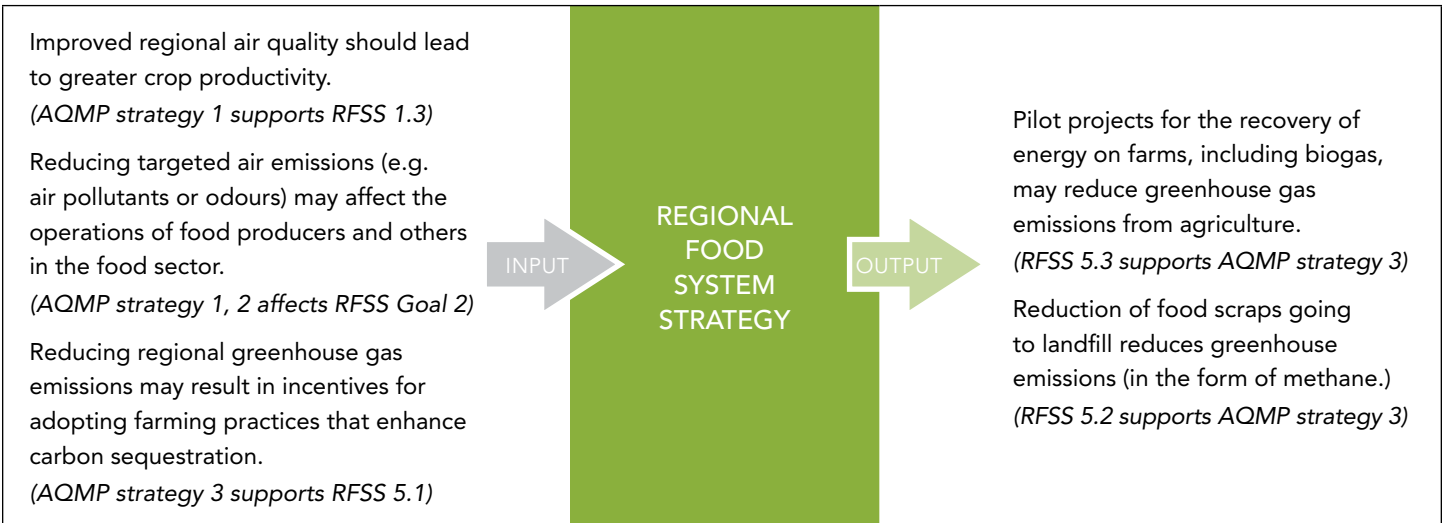


Linkages Between Metro Vancouver Plans

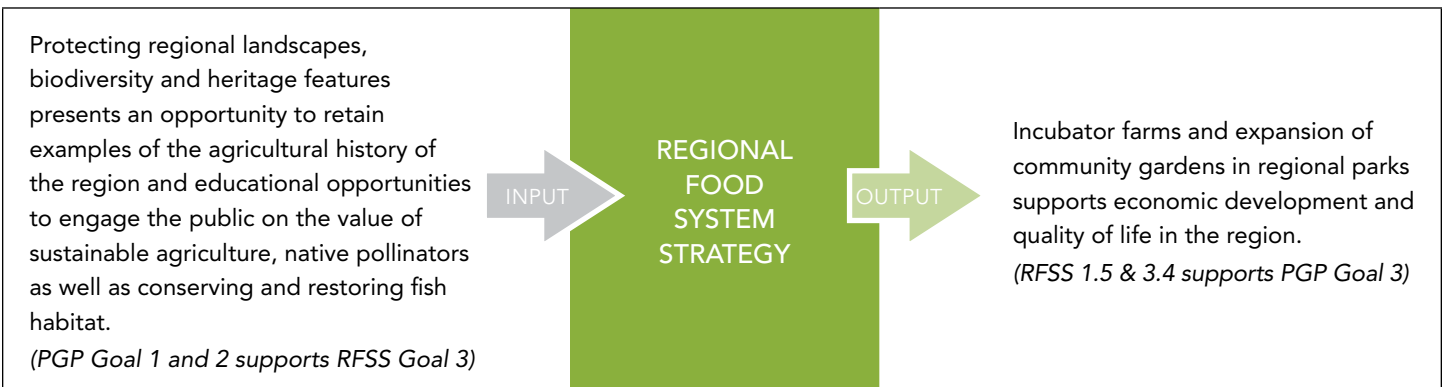
DRINKING WATER MANAGEMENT PLAN



AIR QUALITY MANAGEMENT PLAN



PARKS AND GREENWAYS PLAN



PART TWO: GOALS, STRATEGIES and SAMPLE ACTIONS

There are many opportunities to build a sustainable, resilient and healthy food system in Metro Vancouver and these are captured in the five goals and twenty-one strategies described below. Under each goal, a list of sample actions of what Metro Vancouver, municipalities, other levels of government and organizations could adopt and implement are provided. A more comprehensive list of the work being done by the private sector, organizations, community groups, all levels of government and educational institutions as well as proposed actions can be found in Appendix A. The appendix is a document that will evolve and will be used in developing the Action Plan.

Developing and implementing an Action Plan is the next step in realizing the goals proposed in the Strategy. This will involve developing partnerships and identifying strategic priorities for collaborative action in the short term. The process will involve evaluating alternative actions, assessing the progress towards the stated goals through performance measures, and revising the Strategy and Action Plan as necessary.



Goal 1: Increased Capacity to Produce Food Close to Home

Expanding the amount of food that can be efficiently and sustainably produced locally is an important step in reducing the vulnerability of Metro Vancouver residents to uncertainties in the global food system. To increase the amount of local food, the key inputs for food production in the region must be secured and affordable. For agriculture, this means the land base is protected, that there is a reliable access to labour and affordable water in a community setting that supports farming. For the fishing industry a commitment to management practices that supports abundance in local fish and seafood populations is essential for expanded food production. This translates into actions to protect marine and other aquatic ecosystems, salmon spawning habitat, and reduction of contaminants entering these habitats.

Building capacity to produce food will also require actions to ensure it is possible for young people to enter the profession. In addition to traditional agricultural lands, new innovative commercial food production enterprises are emerging inside urban developments that will boost food production close to home.

Strategy 1.1 Protect agricultural land for food production

The metropolitan region of Vancouver is experiencing population growth of over 30,000 new residents each year. This will mean that the pressure to exclude lands from the Agricultural Land Reserve (ALR) for urban development will continue. However, a greater threat to farmland in Metro Vancouver may be the cumulative effect of allowing a range of non-farming activities on agricultural land such as construction of roads and large estate homes as well as the lack of enforcement of restrictions limiting the dumping of fill and truck parking on farmland. Prime farmland is a limited resource and protecting it is essential for ensuring resiliency in regional food system as well as its long term sustainability.

Strategy 1.2 Restore fish habitat and protect sustainable sources of seafood

The Fraser River Estuary in Metro Vancouver, as all estuary systems, is one of the most productive ecosystems in the planet. At present, the huge quantities of filter feeding bivalves, like clams and oysters, are not harvested due to risk of contaminants, from within the region and upstream sources. Addressing these sources of pollution would increase the potential to harvest more shellfish locally which could be a future source of protein if harvesting can be conducted in a manner that protects the biological diversity of the estuary.

Continued improvement in managing marine fisheries could ensure that salmon and other fish will continue to be a food source. Within Metro Vancouver, our contribution to restoring the abundance of salmon involves protecting and restoring spawning and rearing habitat in the network of urban streams in the region. Past approaches to land use decisions as well as storm and rainwater management have lead to the degradation of this habitat.

Strategy 1.3 Enable expansion of agricultural production

Access to water is also an important input to increasing food production. Farmers require access to sufficient volumes of affordable water of appropriate quality. Likewise the success of salmon runs is dependent on maintaining sufficient stream flows. The trend towards hotter, drier summer months coupled with less snow pack anticipated under most climate change scenarios will only increase the need for coordinated water conservation and management policies if commercial food production in the region is to expand.

Labour is another critical input for agricultural production. The demand for farm labour is seasonal with the high point being during the harvest. This creates swings in the demand for labour over the course of a year.

Another barrier to increasing agricultural food production is the tensions that can arise when residences and other urban uses are adjacent to agricultural operations.



The Farm Protection Act, also known as the Right to Farm, ensures that farmers using normal farm practices are protected from lawsuits, bylaws and other injunctions. Municipalities can help reduce conflicts through policies that anticipate contentious issues at the urban/agricultural interface.

Strategy 1.4 Invest in a new generation of food producers

The high cost of agricultural land in the region coupled with low profit margins associated with small scale farming has meant few young people can choose farming as a career. This is true for those new to the profession and farmers migrating from other regions. Innovative policies are needed to attract and retain new entrants into farming. Prospects for success can be improved with initiatives that reduce the cost of entry and provide new farmers with the technical knowledge and business skill required for operating a successful farm.

Strategy 1.5 Expand commercial food production in urban areas

In addition to rural agriculture, enterprising individuals are using public and private lands as well as green roofs to cultivate and sell food within the urbanized areas of Metro Vancouver. Sophisticated and expensive new technologies to cultivate food in cities may be introduced in the future, like vertical greenhouses, but in the meantime, municipalities will need to decide if and how to best manage and support small scale commercial agriculture within residential, commercial and industrial areas.

Goal 1 Sample Actions

METRO VANCOUVER WILL

- Work with the Agricultural Land Commission to protect the region's agricultural land base through the Regional Growth Strategy.
- Support hatcheries on the Capilano, Seymour and Serpentine Rivers, as well as the Kanaka, Noons, Crippen, and Hyde Creeks to augment existing low salmon runs in the region.
- Implement the Integrated Liquid Waste and Resource Management Plan (ILWRP) that will through sewage treatment upgrades and source controls reduce the amount of contaminant loadings entering the Fraser River and surrounding marine waters.
- Monitor and maintain indicators and other measures related to trends in agricultural land and food production in the region and publish the results.
- Establish a small number of incubator farms on Metro Vancouver lands to provide new farmers with a site to start their business.

ACTIONS REQUESTED OF MUNICIPALITIES

- Work with the Agriculture Land Commission to protect the agricultural land base.
- Complete Integrated Stormwater Management Plans (ISMPs) that will improve the health of urban streams.
- Develop zoning by-laws and guidelines for commercial urban agriculture.

ACTIONS REQUESTED OF OTHER GOVERNMENTS AND ORGANIZATIONS

- The Province strengthen the role and responsibility of the Agricultural Land Commission and provide adequate resources for this work.
- The Ministry of Agriculture develops farm homeplate standards to limit the impact of residential uses in the ALR.
- The Province implement new policy rules for the assessment of farmland that improve the competitive position of the province's farm sector, provide incentives to farm agricultural land, and support sustainable agricultural practices.
- The federal government could create an independent regulatory body, a migrant worker commission, to investigate and address the challenges of Canada's labour migration programs and protect Canada's legacy as a fair and just society.
- The Department of Fisheries and Oceans should continue to ensure that the management of fisheries and aquaculture in B.C. provides for the long-term sustainability and abundance of native stocks.
- Reduce agricultural land speculation by applying value capture mechanisms for the benefit and compensation of agriculture when ALR land is excluded or converted to non-farm use.



Goal 2: Improve the Financial Viability of the Food Sector

Increasing capacity alone is not sufficient to ensure that local food production will be expanded; it is also necessary for local farmers, fishermen, and food processors to receive sufficient returns for their products. Improving financial viability within the food sector will require changes in policies as well as investment in new or revitalized regional food infrastructure. To increase the competitiveness of the processing sector, existing facilities will need to be upgraded, renovated and expanded. Smaller farmers need access to venues where they can sell their products directly to consumers and all farmers could benefit from improved storage and distribution facilities within the region. Large public sector institutions in Metro Vancouver, like universities, schools and

health care facilities, can help stimulate production of local foods by including local foods in their purchasing policies. In addition, government policy and programs should support the expansion of food production and processing activities in the region.

Making these changes should improve the financial viability within food sector but it will also produce social and economic benefits. The expansion of local agriculture, fishing and value added production will contribute to the economic prosperity of the region (see Multiplier Effect sidebar).

Strategy 2.1 Increase the capacity to process, warehouse and distribute local foods

To sell more locally produced food, there needs to be more facilities for processing farm and fish products as well as more capacity for warehousing and distribution. Building this capacity will test the business acumen of firms in the supply chain and it will also require greater collaboration between the public and private sector to develop the networks and the financial tools necessary to attract new investment in the development and revitalization of food infrastructure in Metro Vancouver. In addition to investment in physical facilities, investment in skills and competencies related to food safety will be important.



Strategy 2.2 Include local foods in the purchasing policies of large public institutions

Serving more locally produced and processed foods in the cafeterias and other food services of hospitals, universities, schools and local governments will create a new demand for local foods. Increasing the amount of local food purchased by public institutions will establish secure markets for local producers and should assure potential investors, from the private or social enterprise sectors, that investment in local food businesses and infrastructure is financially sound. Implementation of local food procurement policies will have to respect various trade agreements including the North American Free Trade Agreement (NAFTA) and the New West Partnership Trade Agreement (NWPTA).

Strategy 2.3 Increase direct marketing opportunities for local foods

Many small scale food producers and processors are opting to sell their products through direct marketing activities. Expanding the venues for direct marketing involves policy change that enables on-farm activities, like processing and sales, agri-tourism, as well and a commitments to multi-vendor sites like farmers markets. For the number and size of farmers markets to expand, restrictions on the location of new and permanent market sites and signage promoting the markets must be reduced, while access to water and power must be improved. Other initiatives include pocket markets and community supported agriculture (CSAs). Direct marketing activities represent an opportunity to connect urban residents with producers that grow and harvest their foods.

The Multiplier Effect

Every time money is spent on food produced locally, as opposed spending on food imported from elsewhere, it boosts local economic activity and incomes. This is because a locally owned business is more likely to purchase inputs from local suppliers who will then also have more to spend locally. When more consumers buy locally this creates new jobs, improved revenues for food producers and new investment opportunities.

The local food multiplier for Metro Vancouver has not been estimated but a study done of the local food economy in Seattle found that shifting 20 percent of food dollars into “locally directed spending” would inject nearly \$1 billion into that region’s economy each year. This impact is demonstrated in the production sector, where food grown by local farmers for export generates \$1.70 in local economic activity for every dollar in sales. However, if the same farmer sells at a farmers market, each dollar in sales will generate \$2.80 in local income.¹⁵

¹⁵ Sonntag, V. (2008) Why Local Linkages Matter: Findings from the Local Food Economy Study. Seattle, Washington. Sustainable Seattle.

Strategy 2.4 Further develop value chains within the food sector

A value chain refers to a collaborative approach among producers, processors, distributors or retailers to bring a product to market. An effective value chain involves a strong business relationship among the firms within the chain to produce a food item that satisfies a targeted market. For instance, a value chain can be produced that responds to quality requirements or the ethical and environmental values of consumers, including equitable return for farmers or fair trade, safe working conditions and fair pay for farm workers, humane treatment of animals, and specific environmental practices including organic production. The effect of collaboration is to reduce the risk and improve profit margins all along the value chain. This is in contrast to the conventional supply chain where competition all along the supply chain tends to produce standardized products at the lowest possible price for the consumer.

Strategy 2.5 Review government policies and programs to ensure they enable the expansion of the local food sector

The overlapping nature of government jurisdictions and mandates affecting the food system can result in policies and programs that unintentionally run counter to the development of a sustainable, resilient and healthy food system. Therefore, all levels of government and their agencies must engage in a systematic review of policies and programs to ensure that they are consistent with this vision of this Strategy. The use of systems thinking should be useful as will a commitment to collaboration in evaluating how to enable the expansion of local food production and the food sector in Metro Vancouver without compromising other social, economic and environmental objectives.



Goal 2 Sample Actions

METRO VANCOUVER WILL

- Review existing policies to ensure that they are consistent with the vision of the Regional Food System Strategy.
- Commit to buying more local food.

ACTIONS REQUESTED OF MUNICIPALITIES

- Develop and implement municipal plans and strategies that promote and support the viability of agriculture as appropriate.
- Review existing policies to ensure that they are consistent with the vision of the Regional Food System Strategy.
- Commit to buying more local food.

ACTIONS REQUESTED OF OTHER GOVERNMENTS AND ORGANIZATIONS

- Review existing policies to ensure that they are consistent with the vision of the Regional Food System Strategy.
- Provide on-going support for Investment Agriculture Foundation's B.C. Value Chain Initiative.
- Healthcare authorities, universities and school boards commit to buying more local food.
- Create a B.C. Agri Food Centre website that provides agricultural and food businesses with access to research and expertise on new production technologies, product development, marketing and operational management.
- Through the pooling of private and public resources, create an Agricultural Trust Fund that provides funding and loan pool for improving the viability of sustainable farming and food processing in the region.
- Establish a Centre of Excellence for Food Technology similar to what exists in other provinces.

Goal 3: People Make Healthy and Sustainable Food Choices



Despite the variety of food available in grocery stores and restaurants and its relatively low cost for most people, there is a disturbing rise in the incidence of diet-related chronic diseases such as diabetes, cardiovascular disease and cancer. Better diets will contribute to our overall health and well-being while reducing strains on the health care system.

Consumers are beginning to ask more questions about the food they eat; about its nutritional value and how growing and harvesting practices affect the environment and their own health. Improved labeling as well as public awareness and engagement campaigns can support individuals interested in making better food choices, choices that lead to healthier people and a healthier planet.

Strategy 3.1 Enable residents to make healthy food choices

Eating a well-balanced and nutritious diet is one of the best ways to stay healthy. Due to a variety of factors though, many households rely on eating prepared foods at home or on meals from fast food restaurants. The long term effect of this trend is poorer diets and lost knowledge about how to prepare healthy meals. Initiatives to support individuals interested in improving their shopping and food preparation skills are important. However, due to time and other constraints, using pre-packaged or processed foods will continue to be a part of everyday cooking, so the nutritional content of the food we purchase and eat needs to be better understood. Making it easier to identify the healthy food options from labels and menus is critical especially in a region where English is not everyone's first language.

Strategy 3.2 Communicate how food choices support sustainability

Thinking about how the food on our plate is connected to a much bigger system of food production, distribution and disposal is likely not top of mind for consumers while shopping for dinner. However, empowering consumers with relevant information about how their food choices influence their health as well as the sustainability of the regional food system can make a difference. This can be accomplished through labeling initiatives, in-store promotion, and social marketing campaigns promoting the choice of local and sustainable foods.

Strategy 3.3 Enhance food literacy and skills in schools

Young people who have a greater awareness of how their food is produced, the health implications of the food they eat and other aspects of the food system will be better equipped to make informed food choices in

the short and long-term. Food literacy is essential to building a sustainable, resilient and healthy food system. This work begins with ensuring that the next generation is more connected to the food they eat – how to buy, grow, and prepare healthy food. For parents trying to provide healthier and more sustainable meals, school programs can help to support their efforts.

Strategy 3.4 Celebrate the taste of local foods and the diversity of cuisines

Experiencing local food is one of the best ways to develop a passion for it. Festivals celebrating the harvests from land and sea as well as the wealth of different cuisines within the region offer opportunities to taste new foods and learn new ways to prepare familiar foods. Harvest events remind us of the seasonality of foods and the connections between food, culture and nature. Creating and promoting these events are important opportunities for building new networks among farmers, fishermen, chefs, community groups, media, and local governments.



Photo: Ministry of Agriculture

Goal 3: Sample Actions

METRO VANCOUVER WILL

- Advocate for the reinstatement of provincial support for the “Buy B.C.” campaign.
- Engage in activities that will increase awareness within the region of the different aspects of the food system including video programs produced by Greater Vancouver TV and regional dialogues.
- Continue to provide funding for the annual Agriculture Awareness grant program for non-profit organizations within Metro Vancouver.
- Co-host an annual conference for groups working on food issues within the region. The conference would provide an opportunity to share knowledge, develop skills and connect with others.
- Create special events and programs in regional parks throughout the growing season to highlight in-season produce and provide opportunities for direct marketing of local foods.

ACTIONS REQUESTED OF MUNICIPALITIES

- Support and promote the farm tours that highlight farms, farm-gate vendors, open air markets, eateries, heritage sites and fairs in the Lower Mainland.
- Provide support to community groups working on food issues within their municipalities.
- Expand the number of events celebrating local harvests and the diversity of cuisines within a municipality.

ACTIONS REQUESTED OF OTHER GOVERNMENTS AND ORGANIZATIONS

- Invigorate and expand the “Buy B.C.” campaign.
- Require better nutritional quality information on packaged and prepared foods through labeling or other innovative technologies.
- Maintain the Food Security Gateway website that provides individuals and community groups with information on making “healthy eating the easy choice” and building food secure communities.
- Continue and expand the educational programs delivered by the Agriculture in the Classroom Foundation that provides teachers with high quality print and video resources as well as programs in the schools such as Spuds in Tubs and Take a Bite of B.C.
- Develop innovative social marketing campaigns that support better food choices.
- Develop common messaging that links consumption of local foods to the viability of agriculture, fishing, and food production in the region.
- Develop creative school programs that will engage students and their families to increase the amount of fruits and vegetables they consume.

Goal 4: Everyone has Access to Healthy, Culturally Diverse and Affordable Food

Some Metro Vancouver residents lack the means to purchase fresh foods and may not have access to a kitchen to prepare a healthy meal. This applies to low income households where expenses related to housing and medications take priority over food. For people living in low-income housing, like single occupancy rooms in hotels, the facilities for preparing a meal are limited. A renewed commitment on the part of the provincial and federal governments is key to providing sufficient resources, effective programs and policy support for addressing poor diets and hunger associated with poverty, low incomes, and high housing costs.

In the meantime, improvements in food access by vulnerable groups can be made through urban agriculture activities, innovative use of community facilities, and food recovery initiatives. In addressing food access, cultural norms and religious requirements related to food will have to be taken into account. This is particularly important in a region where most of the new population growth will come from immigration.

Strategy 4.1 Improve access to nutritious food among vulnerable groups

Vulnerable groups include the homeless, low income households, and seniors with low fixed incomes. Research links poverty and malnutrition to higher rates of disease and low life expectancy. Moreover, the overlapping cycles of poverty and hunger negatively impact early childhood development, can add to mental health problems and social exclusion – making it much more difficult for communities and families to contribute to and fully experience the advantages of living in Metro Vancouver.

Food access can be improved through actions that expand the opportunities to access fresh foods and improve the skills people have in growing, preparing and canning their own food. Community centres and schools can become important hubs for learning about canning, preserving and cooking as well as sharing information about food issues. Building food self-reliance in vulnerable neighbourhoods will generate both individual and community benefits.



Strategy 4.2 Encourage urban agriculture

Historically, the cultivation of food in urban areas was quite common and is enjoying a resurgence within most communities in Metro Vancouver. Vegetables are grown in community gardens and in backyards while fruits are being harvested along boulevards, parks and private lands. Community groups are using urban gardens as a means to improve the access vulnerable populations have to fresh foods while in school yards children are learning about how food is grown. Urban agriculture is the means for improving diets as well as building social capital and awareness of food issues. Urban agriculture also provides community and ecological benefits; it contributes to the development of a sense of place, provides colour and softens the concrete landscape of urban neighbourhoods, and contributes to the ecological health of the region. However, expanding the area of public lands dedicated to community gardens will have to be balanced with the recreational and conservation values associated with some of these lands.

Strategy 4.3 Enable non-profit organizations to recover nutritious food

Food banks, health authorities and others have been feeding the low income families and individuals for decades in Metro Vancouver but the demand for their services continues to grow. Food recovery initiatives will be important in helping to address food needs while reducing the amount of food that goes to waste in the region. Food recovery entails the collection of edible and safe food for distribution to vulnerable populations. This can take several forms including food gleaning and perishable food rescue. Gleaning refers to the collection of crops from farmers' fields that are not going to be brought to market due to harvesting methods or low market prices. Perishable food rescue applies to the collection of over-ripe produce at food wholesalers and retailers. Concerted effort to expand both activities, while assuring the safety of this food, could improve the diets of people dependent on food programs.



Goal 4: Sample Actions

METRO VANCOUVER WILL

- Advocate for sufficient funding and effective programs for ensuring all of the region's residents can be properly fed.
- Advocate for revisions in food safety regulations and requirements that would enable the redistribution of safe, nutritious and edible foods.
- Work with tenant associations in Metro Vancouver Housing Corporation complexes to establish community kitchen facilities and gardens.

ACTIONS REQUESTED OF MUNICIPALITIES

- Identify municipal lands that could be used for community gardens.
- Evaluate the opportunities for using facilities in community centres for community kitchens.

ACTIONS REQUESTED OF OTHER GOVERNMENTS AND ORGANIZATIONS

- Develop and implement programs, with sufficient funding, that improve food access for low income households and other vulnerable populations.
- Collaborate on the development of neighborhood precincts where community members share and learn skills on how to grow and cook fresh foods and share information on food issues.



Goal 5: A Food System Consistent with Ecological Health

Healthy functioning ecosystems provide a range of goods and services that we tend to take for granted but are essential for our well-being. These include the provision of food, purification of water, clean air, climate regulation, nutrient cycling, pollination, and wildlife habitat which are called ecological goods and services. Because these are the result of natural processes, the cost of maintaining these goods and services are not adequately captured in market prices.

Productive farmland and fisheries depend on healthy natural systems that, among other things, pollinate crops, regenerate soils, and cycle nutrients. While these systems are affected by a host of human activities, changes in the practices and behaviours of everyone involved in the regional food system is necessary to conserve, restore and protect the natural legacy of Metro Vancouver. This will involve changes in farming and fishing practices as well as changes in the purchase and disposal of food. At the same time, a commitment to sustainability requires being proactive in evaluating how best to adapt food production in the region to the effects of climate change.

Strategy 5.1 Protect and Enhance Ecosystem Goods and Services

Farmers and fishermen rely on healthy functioning ecosystems for their livelihood. In the case of farmers their lands also contribute to the ecological health of the region by providing drainage, habitat and carbon sequestration. The farmers of the region tend to be good stewards of their lands but the financial realities of farming means that programs that encourage the owners of agricultural lands to conserve and enhance the ecological services are also necessary to ensure the



long-term sustainability of the region. The Delta Farmland and Wildlife Trust has pioneered stewardship programs that provide farmers incentives to contribute to soil and wildlife conservation. New programs for compensating farmers who protect and enhance ecological services in the region need to be adopted to minimize the impacts on our natural legacy, of expanded agricultural production.

Strategy 5.2 Reduce waste in the food system

Given the perishable nature of food, it is impossible to avoid food and packaging waste but the amount of waste can be reduced. The generation of food waste occurs all along the food system – from the farm to the kitchen. Crops that do not meet certain grades are ploughed under while fresh produced damaged or spoiled along the food supply chain end up, for the most part, in the regional waste stream. “Shelf-ready” foods and take-away meals add another significant source of packaging destined for disposal. Progressive waste management strategies realize that actions that reduce waste in the first place will generate economic and environmental benefits as will programs to improve recycling, reuse and the recovery of nutrients. For instance, neighbourhood composting programs could produce valuable soil supplements for urban agriculture.

Strategy 5.3 Facilitate adoption of environmentally sustainable practices

Some agricultural and fishing practices have negative environmental implications. For example, the global system of producing, processing, transporting, packaging and disposing of food has become a significant contributor of greenhouse gases. This is primarily related to the reliance on fossil fuels as an energy source for the transportation and refrigeration of foods and as an input into chemical fertilizers and pesticides but also due to a dramatic expansion of meat production worldwide. Other environmental problems associated with conventional harvesting and food production methods

include depletion of fish stocks, water pollution due to nutrient run-off, and soil degradation. Recognizing their role in sustainability, food producers and others in the food sector are adopting practices that will reduce their carbon footprint and limit other negative impacts on the environment. Their efforts need to be supported with applied research, funding, and policy reform.

Strategy 5.4 Prepare for the impacts of climate change

Projected climate change risks for Metro Vancouver include higher temperatures, increased precipitation, more intense storm events, a decline in snowpack, and sea level rise.¹⁶ The variability of annual and seasonal precipitation can have a dramatic impact on agricultural operations and near shore and instream habitat. While warmer weather may increase the productivity of some crops, farmers will also have to cope with changing irrigation needs, flooding and storm damage along with possible new pests and diseases. Improving agriculture’s resilience to the impacts of climate change is critically important for sustaining the region’s food production capacity, so more study is needed to determine adaptation priorities in preparation for the effects of climate change already being experienced and those anticipated.

¹⁶Black Shield Preparedness Solutions. 2010. In “Adapting to Climate Change: A Risk-based Guide for Local Governments in British Columbia”.





Goal 5: Sample Actions

METRO VANCOUVER WILL

- Initiate pilot projects to reduce the use of disposable take-out food and beverage packaging, plastic and disposable bags in the commercial sector.
- Advocate for food packaging requirements that meet food safety regulations, maintain product quality and reduce the amount of waste in municipal collection systems.
- Work with event organizers to implement waste minimization and improve recycling at community festivals, sporting events, conferences and trade shows. Best practices will be documented in a toolkit.

ACTIONS REQUESTED OF MUNICIPALITIES

- Maintain dikes to protect urban and agricultural lands.

ACTIONS REQUESTED OF OTHER GOVERNMENTS AND ORGANIZATIONS

- Evaluate potential programs that could be used to compensate farmers for the ecological goods and services that agricultural land provides.
- Protect and enhance all significant wetlands, including riparian areas, streams, and intertidal habitats, that support fish and other seafood populations.
- Implement an effective and equitable plan for reducing greenhouse gas emissions in the agriculture sector that includes a valuation of carbon sequestration on some agricultural lands.
- Initiate pilot projects for farm-based anaerobic digestors to provide alternative energy sources for farms and other uses.

PERFORMANCE MEASURES

Goal 1: Increased Capacity to Produce Food Close to Home

1. Total hectares of land in the ALR in Metro Vancouver
 - 1a. Annual number of hectares excluded from the ALR
 - 1b. Annual number of hectares included into the ALR
 - 1c. Annual number of hectares approved for non-farm use in the ALR
2. Total hectares of land categorized as farm property
3. Estimate of the amount of actively farmed land in Metro Vancouver
4. Average age of farmers in Metro Vancouver

Goal 2: Improve the Financial Viability of the Food Sector

1. Total number of food sector jobs as a percent of total regional employment jobs in the food sector
2. Food sector jobs as a percent of total regional employment
3. Ratio of farm businesses gross receipts to operating expenses
4. Number of farmers markets
5. Annual gross receipts for farmers markets
6. Value of production per hectare of agricultural land
7. Total receipts from fishing and fish processing

Goal 3: People Make Healthy and Sustainable Food Choices

1. Proportion of Metro Vancouver residents that eats fruits and vegetables 5 or more servings per day
2. Proportion of Metro Vancouver residents with an overweight or obese self-reported Body Mass Index (BMI)
3. Proportion of Metro Vancouver residents with Type II Diabetes
4. Number of schools in Metro Vancouver participating in "Agriculture in the Schools"

Goal 4: Access to Healthy, Culturally Diverse and Affordable Food for Everybody

1. Annual cost of a nutritious food basket as a proportion of median income for a two parent family with two children in Metro Vancouver
2. Annual cost of a nutritious food basket as a proportion of after tax Low Income Cut-Off for a single parent family with two children in Metro Vancouver

Goal 5: A Food System Consistent with Ecological Health

1. Number of farmers participating with Environmental Farm Plans in Metro Vancouver
2. Fish habitat health indicator
3. Percentage of food waste diverted from disposal

GLOSSARY

Agricultural enterprise zones refers to designated areas where a planning authority uses zoning, tax exemptions and other programs to stimulate the location of agriculture-related businesses, such as feed stores or veterinarians, and the development of new enterprises, such as food processing and storage facilities.

Agricultural extension encompasses a wide range of scientific, technical, marketing and other business support for agricultural producers and is usually provided by a government agency or university.

Agri-tourism involves any agriculturally-based operation or activity that brings visitors to a farm or ranch including buying produce direct from a farm stand, navigating a corn maze, picking fruit, feeding animals, or staying at a bed and breakfast on a farm.

Carbon footprint of food is the total amount of carbon dioxide, or its equivalent of other greenhouse gases, emitted in the production, processing, and transportation of a food item.

Community kitchens refer to groups that cool together and share what they make in a friendly social atmosphere. Establishing community kitchens can help to improve the health and nutrition of those involved while strengthening community ties.

Community Supported Agriculture (CSA) Members of CSAs provide farmers a set fee at the beginning of the growing season and then receive proportional shares in the annual output of the participating farm or farms. The members therefore take on some of the risk, as well as the bounty, of the farming operation.

Ecological health recognizes that human and natural systems are linked. A decent, healthy and secure life is dependent on the provision of food, fresh water, energy and materials from natural systems and assets. Given current signs of ecological strain, like climate change and species extinction, protecting and improving the well-being of current and future generations will require wiser and less destructive use of natural assets and systems.

Ecosystem services refer to the basics of life provided by natural systems and biodiversity.

Fair trade is a product certification system designed to allow consumers to identify products that meet agreed environmental, labour and developmental standards.

Food hubs are centrally located facilities that bring together a full spectrum of activities and programs to support sustainable urban food systems.

Food policy is any governance decision, plan or regulation that affects the ways that food is produced, allocated, obtained, consumed or disposed.

Food precincts are neighbourhood food networks that help residents access food and information through community gardens, edible landscapes, mini-farmers markets, food buyers clubs and by providing a space for education and training in growing, processing, handling, and cooking of food.

Food processing is the transformation of food from its raw state into something that can be stored or eaten. It ranges from basic processing like grading and bagging fresh foods to developing highly refined and packaged foods.

Food production refers to the farming and gardening practices that produce the raw food products – fruits, vegetables, grain, legumes, meat, eggs, dairy products and fish.

Food recovery programs involve taking good and healthy food products considered surplus or not marketable by food industry standards and redirecting it to food programs who redistribute it to individuals and households in need. Well designed they can address food safety issues, improve the food access, and reduce food waste.

Food safety refers to efforts to ensure that food is handled, prepared, and stored in ways that prevent contamination of food by bacteria, viruses and parasites. Common causes of food borne illnesses in Canada include Red Tide, Listeria, Salmonella and E. Coli.

Food sector encompasses the range of food-related businesses including farms, ranches and fishing operations, food product manufacturing, farm and food product wholesaling and distribution, food and beverage stores, and food and beverage services.

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle.

Food system is the sequence of activities linking food production, processing, distribution and access, consumption and waste management as well as all the associated supporting and regulatory institutions and activities. A local or regional food system operates within a designated geographic area.

Local food is food produced or processed within a particular geographic boundary. For this document, local food refers to food grown and harvested in British Columbia.

Local food economy includes the production and consumption of food within a particular geographic boundary. On the production side, it consists of all businesses involved in producing, harvesting, distribution and retailing of food products. On the consumption side, it includes households and institutions, such as hospitals, which feed people as part of their operations.

Pocket markets are an alternative retail marketing arrangement for connecting urban consumers with local food producers. Community organizations act as local food brokers, purchasing fresh, healthy food from local farmers and food producers and then sell to urban consumers in small scale, portable, local food markets.

Resilience is the amount of change a system can undergo, or its capacity to absorb disturbance, and still be able to retain the same function, services, structure and feedbacks.

Social capital refers to the collective value of all social networks built through personal relationships and community involvement and the inclinations that arise from these networks to support others. A community with strong social capital is where social cohesion is strong and individuals exhibit personal investment in on-going events and activities.

Supply chain activities transform natural resources and raw materials into a finished product that is delivered to the final consumer. In a conventional supply chain, competition along the supply chain act to maximize their own return.

Supply management systems have been organized in some agriculture sectors; for instance, dairy, poultry and eggs. The objective is to match the quantity supplied of specific farm products to consumption levels within a geographic area at stable prices that ensures a fair return to farmers. Managing supply involves quotas that control production from farmers involved, penalties for over or under production, and tariffs that control imports.

Traceability refers to the recording through means of barcodes or other tracking media, all movement of a food product through the steps of the production and distribution process. This is critical in instances where an issue of contamination arises and a recall is required.

Urban agriculture is the practice of producing food within cities that encompasses a broad range of initiatives and production models that share the objective of providing urban residents access to fresh food grown in backyard gardens, roof top gardens, community gardens and urban farms.

Value chain refers to a supply chain where the relationship among firms is more intentional than in a conventional one. The cooperation and partnerships among the firms in a value chain are to provide products for a niche market or to address challenges the firms involved have in responding to market demands or producing at a scale that is profitable.

APPENDIX A: Additional Actions for Consideration in the Action Plan

The content of this Appendix is undergoing continual revision and refinement. To provide edits or additions, please contact foodstrategy@metrovancover.org

Appendix B provides a partial list of agencies and organizations involved in the region's food system.

Goal 1: Increased Capacity to Produce Food Close to Home

Strategy 1.1 Protect agricultural land for food production

EXAMPLES OF CURRENT ACTIONS

- The Regional Growth Strategy proposes that a new regional agricultural designation be adopted that will help protect the region's supply of agricultural land from urban development.
- The Agricultural Land Commission (ALC) has dedicated staff resources to monitor and enforce ALC infractions on the Agricultural Land Reserve (ALR) – yet more resources for enforcement are needed.
- The City of Surrey has adopted an ALR compensation policy that requires any land excluded from the ALR be matched, two to one, with an inclusion of new farm land in Surrey.
- The Langley Sustainable Agriculture Foundation is a new charitable foundation that aims to encourage land stewardship, promote sustainable farming and protect farmland in the Township of Langley.
- The Ministry of Agriculture and Metro Vancouver are updating municipal agricultural land use inventories to determine the status of actively farmed land in the region. The Ministry will use this data to develop a water demand model for agriculture in the region.

OTHER PROPOSED ACTIONS

- Use the tax system to encourage agricultural production on land in the ALR.
- Create a Regional Farmland Trust that could purchase farmland for sale or support irrigation and drainage infrastructure that can help ensure agricultural land is used for farming.
- When mitigating ALR exclusions with other land, ensure that the productive capacity of the farmland (land quality and growing season) and marketing opportunities are comparable.

Strategy 1.2 Restore fish habitat and protect sustainable sources of seafood

EXAMPLES OF CURRENT ACTIONS

- The Pacific Streamkeepers Federation supports local community groups involved in restoring streams through a comprehensive education and awareness program using a handbook and activity models that help volunteer citizens to monitor and evaluate stream conditions.
- B.C. Hydro, the Kwikwetlem First Nation and Metro Vancouver are exploring options to re-establish a sustained sockeye population in Coquitlam Lake reservoir while maintaining drinking water quality.
- Metro Vancouver and member municipalities are involved in the development of numerous Integrated Stormwater Management Plans that will improve the health of urban streams. Most of the region's watersheds will be completed by 2014.
- Sapperton Fish & Game Club with the help of others is bringing the Brunette River back to life. They have physically cleaned up the river; built a hatchery and are releasing salmon fry to build populations. In October 1984, the first Coho Salmon appeared after a 30 year absence.

OTHER PROPOSED ACTIONS

- Ensure adequate flow of water in streams for salmon populations in summer.
- Increase the potential to farm or harvest shellfish in a sustainable manner.
- Support “in-river” fisheries through experimental licenses that demonstrate a new mechanism for sustainable fishing by targeting specific runs of salmon and reducing the by-catch.

Strategy 1.3 Enable expansion of agricultural production.

EXAMPLES OF CURRENT ACTIONS

- The Ministry of Environment is modernizing policies in the B.C. *Water Act*, to ensure a safe, secure, affordable and adequate water supply for agricultural production.
- The City of Pitt Meadows is making improvements to the rural drainage system to enhance the supply of irrigation water for agriculture.
- The City of Richmond has enacted a bylaw that allows accommodations for seasonal farm labour.
- The Farm Industry Review Board addresses complaints from urban residents about farming operations and determines whether they are normal farm practices.
- Municipalities are managing the interface between agriculture and urban neighbours through development permits that require buffering between rural and urban developments. The City of Richmond requires that buffers be located on the urban land.

OTHER PROPOSED ACTIONS

- Reinstate the National Water Supply Expansion Program that provides funding for infrastructure to secure an affordable, long term water supply for agriculture.

- Create a fund that can be used to help finance irrigation and drainage infrastructure that will ensure water is accessible to agricultural operations in the ALR.
- Implement Development Permit Areas through permit conditions that require edge planning on urban land adjacent to farmland.
- Fund research that introduces new hardy crop varieties and innovative and efficient production methods.
- Provide business development and marketing extension services to food producers and processors.

Strategy 1.4 Invest in a new generation of food producers.

EXAMPLES OF CURRENT ACTIONS

- The Ministry of Agriculture’s Farm Business Advisory Services Program helps finance consulting services for business and succession planning.
- Kwantlen Polytechnic University in partnership with the Richmond Food Security Society and the City of Richmond is conducting a training program that provides practical knowledge, farm skills, apprenticeship, land leasing and hands on experience for new farmers.
- The B.C. Cooperative Association provides information and other support for cooperative farms where resources, capital and knowledge can be pooled.
- The Fraser Valley Direct Marketing Association has developed a Former Farmer to Farmer mentorship program.
- The Ministry of Agriculture actively supports the 4-H program, providing a vital link between youth and agriculture and contributes to the future of farming in B.C.

- B.C. Agriculture Council established B.C. Young Farmers in 2008 to provide a forum for young farmers to interact, address issues of concern, learn from one another and gain experience in association governance and the collective decision-making process.
- Farm Folk City Folk in partnership with B.C. Cooperative Association developed a Community Farms Program that establishes farms that are shared by more than one farm enterprise. The program provides access to land for new farmers and supports existing and starting new farming cooperatives, yet adequately housing the people who want to farm remains a challenge.
- TLC The Land Conservancy is renting TLC farm and ranch lands to producers. The Nicomekl Community Organic Farm in Langley operates on leased crown land to demonstrate how food production and conservation work together for mutual benefit.



OTHER PROPOSED ACTIONS

- Make ALR land accessible to new farmers by creating incubator farms on public land in the ALR or developing stronger tax incentives for private landowners to lease farmland.
- Create new loan and grant programs for new farmers to secure land, farm buildings or equipment for food production.
- Create a “land for lease” registry that matches new farmers who are looking for land to rent or own, with others who are looking to lease or sell their property.
- Create farm equipment banks or cooperatives that enable members to use or rent farm equipment.
- Create cooperative service centres that provide business planning, marketing and administrative support to new businesses in the food sector.

Strategy 1.5 Expand commercial food production in urban areas

EXAMPLES OF CURRENT ACTIONS

- Edible Garden Project in partnership with the North Shore Neighbourhood House, City of North Vancouver and the University of British Columbia is creating Loutet Park Farm to demonstrate how to operate an economically viable urban farm within a residential area.
- United We Can with assistance from others created the SoleFood Urban Farm, a social enterprise and urban farm that provides inner-city residents with employment and while supplying community kitchens, restaurants, caterers and residents with a source of local and organic food. Other partners included Projects in Place, Building Opportunities with Business, Foxglove Farm, Nature’s Path and many others.

- City Farm Boy is growing fruit and vegetables commercially in 14 private yards including a large rooftop garden at a downtown high rise. The produce is sold through farmers' markets and community supported agriculture.
- The Vancouver Food Policy Council and the Building Opportunities with Business (BOB) has funded a new project aimed at aiding urban farmers in developing viable urban farming business.

OTHER PROPOSED ACTIONS

- Review bylaws, zoning and business licenses requirements enable the development of urban agriculture enterprises.
- Develop a professional association to educate, support and encourage commercial food production in urban areas.

Goal 2: Improve the Financial Viability of the Food Sector

Strategy 2.1 Increase the capacity to process, warehouse and distribute local foods

EXAMPLES OF CURRENT ACTIONS

- Investment Agriculture Foundation of B.C. is funding agriculture sector-based strategic plans with producer groups to enable market and business expansion.
- Local Food First is leading a multi-party initiative to build the New City Market which will serve as a permanent commercial hub for bringing together wholesalers, processors, retailers and consumers to enable the expansion of local food in the regional economy.

- The Pacific Institute of Culinary Arts has a professional kitchen available for rental that is suitable for small scale processors requiring commercial kitchen facilities.
- The Small Scale Food Processor's Association is exploring the opportunities for a cooperative insurance package for its members.

OTHER PROPOSED ACTIONS

- Establish Agricultural Enterprise Zones to encourage the co-location of agriculture related businesses and services that support agricultural and value-added production. This can be done through revitalization tax exemptions and comprehensive zoning.
- Support the development of a B.C. food terminal to enhance the opportunities for local farmers, fishers and processors to supply local wholesale, retail and food services markets.

Strategy 2.2 Include local foods in the purchasing policies of large public institutions

EXAMPLES OF CURRENT ACTIONS

- The University of Victoria has adopted a procurement policy based on a quadruple bottom line, which includes carbon footprint considerations, that covers all its purchases, including food.
- Local Food Plus has successfully encouraged institutional buyers to purchase food certified as local and sustainable in Ontario and is now expanding their scope to include the Lower Mainland.
- The University of British Columbia is working with the City of Vancouver and Vancouver Coastal Health to develop common language and criteria to be used for sustainable food procurement.

OTHER PROPOSED ACTIONS

- Identify the immediate challenges to expanding institutional purchasing of local foods and actions to address the barriers.
- Compile a list of suppliers and contacts to assist municipalities and other institutions to assist with their food purchasing decisions.

Strategy 2.3 Increase direct marketing opportunities for local foods

EXAMPLES OF CURRENT ACTIONS

- The B.C. Association of Farmers Markets has developed a Farmers Market Guide, a directory of farmers' markets in B.C. that is funded and distributed through the Overwaitea Food Group's comprehensive network of stores and mailing list.
- The City of Vancouver recently approved bylaws and zoning amendments that enable farmers markets to operate throughout the city, reduced permit fees, and streamlined application process for setting up a market.
- Community groups have partnered with B.C. producers to establish farmers markets in West Vancouver, Burnaby, Coquitlam, Maple Ridge, Delta, Langley City, New Westminster, North Vancouver, Port Coquitlam, Port Moody, Surrey, Vancouver, and White Rock.
- Fraser Valley Farm Direct Marketing Association with assistance from the Ministry of Agriculture produces a Farm Fresh Guide that lists farms that sell directly to the public.
- Your Local Farmers Market Society and HB Lanarc has developed a Farmers Market Best Practices Manual for municipalities and farmers markets societies. The manual is designed to help market coordinators and city planning staff to navigate the government process by documenting and sharing previous experience from Vancouver.
- B.C. Association of Farmers Markets has led the development of MarketSafe, a food safety training guide for farmers markets and vendors. It was developed in partnership with B.C. FoodSafe secretariat, Vancouver Coastal Health, Fraser Health, and farmers' market managers.
- SFU Local Food Project with partners has created a Harvest Box Program for SFU community members who want to purchase local produce at affordable prices. Boxes of fresh produce are delivered bi-monthly to provide a source of fresh food on campus.
- Farm Folk City Folk initiated an Urban Grains Community Supported Agriculture (CSA) partnership with Jim Grieshaber-Otto, Anita's Organic Grain & Flour Mill and NOW B.C. to revive local grain production and provide members with grain grown locally in Agassiz.
- NOW B.C. in partnership with Glen Valley CSA and Food For Families Food Bank has developed an on-line farmers market, a buying club formed in the fall of 2008 to source seasonal, local, organic foods directly from small farms and processors. Customer groceries are delivered once a week to neighbourhood delivery depots.
- Blessed Bee Farm has started the first Community Supported Apiary using the CSA model. Members buy shares to support the apiary throughout the growing season and in return receive a healthy supply of honey and hive products.
- Coquitlam Farmers Market Society operates several pocket markets to encourage better access to fresh produce and to raise awareness around the benefits of a more localized food system.
- Richmond Food Security Society in partnership with the City of Richmond have developed the Richmond Food Security Guide, a listing of all the local farms, growers, community gardens, CSAs and farmers markets.

OTHER PROPOSED ACTIONS

- Implement zoning and bylaw changes that secure a location and services for seasonal and year round farmers markets.
- Streamline the process that allows small scale food producers the ability to market their meat products directly to consumers.
- Develop an agri-tourism strategy that identifies opportunities for producers to diversify their farm operations, create a brand, and to sell more products directly to consumers.

Strategy 2.4 Further develop value chains within the food sector

EXAMPLES OF CURRENT ACTIONS

- Investment Agriculture Foundation of B.C. with funding from federal and provincial governments, has developed the B.C. Value Chain Initiative, to encourage partnerships between producers, processors and marketers that will improve product quality, increase operational efficiencies or develop differentiated products to make all partners more profitable.
- Farm Folk City Folk, Local Food First and Get Local hosts Meet Your Maker events for producers, processors, distributors, retailers, and foodservices who are eager to do business with each other. Creating relationships between food businesses increase the viability of the local supply chain.
- Sysco and Gordon Food Services (Neptune) have developed contracts with local producers for restaurants who want to profile local foods.

OTHER PROPOSED ACTIONS

- Include Fraser Valley producers in discussion on how to improve the local food supply in the Lower Mainland.

Strategy 2.5 Review government policies and programs to ensure they enable the expansion of the local food sector

EXAMPLES OF CURRENT ACTIONS

- The Ministry of Community and Rural Development is reviewing farm tax policy to ensure that the assessment system is fair, equitable, enhances competitiveness and supports innovation.
- Municipalities have completed or are updating Agricultural Area Plans/Strategies to confirmed the role of agriculture in their local economies and identify policy options to support agriculture. Richmond, Surrey and Maple Ridge have completed plans, while in Delta and Langley, agricultural plans are in progress.
- Fraser Region Food Network has developed a Food Policy Tool Kit in partnership with the Surrey/White Rock Food Action Coalition to provide local organizations with simple ways to incorporate food policy guidelines into decision making. The tool kit addresses increasing local food sustainability, decreasing hunger through community capacity building, and improving nutritional health of community members.
- Community groups provide members a venue for discussing food system issues, developing food security projects and proposing policy solutions. Local groups include: Surrey/White Rock Food Action Coalition, Burnaby Food First Network, New Westminster Community Food Action Committee, Delta Food Coalition, Langley Food Action Coalition, Richmond Food Security Society, Maple Ridge, Pitt Meadows & Katzie Roundtable on Food Security, and the Vancouver Food Policy Council.
- The United Way is training organization leaders in the health and social service sectors to understand how governments make policy decisions and how to engage in the public policy process.

- The Provincial Health Services Authority has produced a series of publications that provide local governments with examples of policies to improve food security.

OTHER PROPOSED ACTIONS

- Participate in the development of a National Food Strategy being led by the Canadian Federation of Agriculture in collaboration with a range of groups involved in the food system.
- Develop avenues that enable inter-sectoral networking and planning that provide an ongoing mechanism to address emerging issues and priorities.
- Develop educational materials and tools for municipalities (particularly urban and suburban) on how they can contribute to the local food system.
- Establish a provincial food policy council in association with the Union of B.C. municipalities to advise provincial and federal governments on how their policies, programs and regulations impact local food systems.
- Langley Environmental Partners and Langley Eats Local offer a series of adult workshops on fruit tree care, canning, preserving, local food 101, composting and winter and salmon friendly gardening.
- Reach Community Health Centre in partnership with the Multicultural Family Centre have created the “We Love Veggies” program where doctors prescribe fresh vegetables to clients. Following a nutritional assessment, participants receive coupons redeemable at local retailers and veggie cooking classes are part of program to increase nutritional health and knowledge.
- Village Vancouver has developed the Transition Town Initiative that offers a range of workshops on gardening, permaculture, chicken and beekeeping and other neighbourhood networking activity.
- Whole Foods, Save-on Food, Choices and other grocery stores are providing free nutrition seminars and tours with registered dietitians and nutritionists. These sessions inform customers about ingredients contained in products and how to make the healthiest choices at the supermarket.

Goal 3: People Make Healthy and Sustainable Food Choices

Strategy 3.1 Enable residents to make healthy food choices

EXAMPLES OF CURRENT ACTIONS

- The Public Health Association of B.C. created the Food Security Gateway, a website for individuals and community groups interested in promoting healthy eating and building food secure communities.
- The Canadian Diabetes Association offers educational programs that teach people about cooking, preserving seasonal food and preparing healthy meals such as Cooking for Life.
- Educate consumers about how to read food labels and calculate the nutritional benefits or limitations of packaged foods.
- Require better nutrition information on restaurant menus.
- Develop social marketing campaigns to reduce the intake of salt and sweeteners in daily diets.
- Regulate advertising and other marketing of junk food targeted at children.
- Ensure that new schools and hospitals, or those being retrofitted, have kitchen facilities to support preparation of healthy meals.
- Target education efforts at the increasing percentage of the population that have food allergies or may be vulnerable to food borne illness as a result of aging, immuno-suppressive diseases or medications.

- Distribute healthy eating information and educational materials through municipal services, events and activities.
- Put a tax on junk food.

Strategy 3.2 Communicate how food choices support sustainability

EXAMPLES OF CURRENT ACTIONS

- The Chef's Table Society of B.C. is active in promoting sustainable and local food choices among its members and with the public.
- The Centre for Sustainable Food System at U.B.C. Farm and the 100 Mile Diet society have produced an "Eat Carbon Smart" pocket guide and website that provides useful tips on how to make food choices for reducing the greenhouse gas emissions associated with the food system.
- SeaChoice is national program for consumers and chefs to identify the best seafood choices for sustaining domestic and global fisheries. The program was developed by Canadian Parks and Wilderness Society, the David Suzuki Foundation, Ecology Action Center, Living Oceans Society and Sierra Club British Columbia and now involves grocery chains like the Overwaitea Food Group.
- Vancouver Aquarium created Ocean Wise to help consumers access information about the sustainability of seafood and make ocean friendly decisions about the fish they eat at home or in restaurants. The Ocean Wise list is regularly updated and/or reclassified with the latest scientific information and provided to program participants.
- Edible Vancouver is a magazine devoted to educating consumers about how to select and prepare food grown and harvested in B.C.

OTHER PROPOSED ACTIONS

- Coordinate educational campaigns that promote and link between local foods and public benefits.

Strategy 3.3 Enhance food literacy and skills in schools

EXAMPLES OF CURRENT ACTIONS

- Agriculture in the Classroom Foundation hosts workshops for educators, provides high quality print and video resources and conducts programs for schools such as Spuds in Tubs and Take a Bite of B.C.
- Evergreen and the Environmental Youth Alliance are helping to establish edible schoolyard garden and provide educational materials for teachers.
- Act Now B.C. funds the B.C. Fruit and Vegetable Nutritional Program that provides students in elementary schools two servings of fruit and vegetables for fourteen weeks in the school year. Agriculture in the Classroom Foundation delivers this program with assistance from Save On Foods, B.C. Milk Producers, B.C. Dairy Foundation, Ministry of Agriculture and others.
- The Land & Food Systems Faculty at U.B.C. is leading the Think&Eat Green@School initiative that connects K–12 students to food and sustainability issues while reducing schools' ecological footprint and greenhouse gas emissions. This work could be applied to other school boards throughout B.C. Other partners include Vancouver School Board, U.B.C. Faculty of Education, Vancouver Coastal Health, Vancouver Food Policy Council, and other non-profit groups.

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- The Community Education on Environment and Development (CEED) Centre Society in partnership with School District 42 (Maple Ridge and Pitt Meadows) and the Aldridge Family has developed the Aldridge Acres Connex Project for kids at risk. Through experiential learning, high school students gain skills in agriculture, horticulture, livestock management and social enterprise as well as produce food for charitable distribution.
 - Langley Environmental Partners in partnership with Glorious Organics/Fraser Common Farm has developed the “Seed to Plate” local food series of workshops and field trips that look at the food system, from gardening and cooking to waste. The target is grades 4-7 but the program could be adapted to secondary schools.
 - The Centre for Sustainable Food Systems at U.B.C. Farm with partners and volunteers has created an intergenerational community learning initiative through a gardening based program that extends across school curriculum. It teaches food literacy to students in grades 4-6 and involves elders who share their knowledge with the children.
 - Grandview School has created the Grandview/Uuqinak’uuh Earth School Garden. This is a broad-based gardening, nutrition, and environmental education program that is integrated into the curriculum.
 - Earthwise Society in partnership with Delta School District has created “Sustainable Resources for High Schools Series”, an instructional program that provides educational options for high school students at different stages of their education.
 - Growing Chefs is a project where chef volunteers are paired with elementary school classrooms (grades 1-3) to give students hands-on experience growing and cooking their own food. The demand for this program exceeds resources as there are 50 schools on the wait list.
 - B.C. Chicken Growers’ Association has a “Poultry in Motion” mobile small scale poultry barn that is featured at fairs, schools and agriculture events around the province. The display shows two life stages of broiler chickens.
 - B.C. Dairy Foundation has developed a “Food for Us” kit for students (grades 2-3) to learn to classify foods into the four food groups and choose balanced meals and healthy snacks. The kit includes a teachers’ guide with classroom activities, student workbooks and food group posters.
 - Ministry of Education through Open School B.C., is developing grade 12 curriculum materials on agriculture.
 - The Vancouver School Board created a Food Garden Process document that outlines the process of planning, designing, implementing, maintaining and sustaining school and daycare food gardens to ensure their success over the long term.

OTHER PROPOSED ACTIONS

- Develop school board policies and creative school programs, such as edible school gardens that will engage students and their families to increase the amount of fruits and vegetables consumed.
- Develop a speaker program for schools featuring dietitians, nutritionists, chefs, farmers and other agri-food and health professionals who can provide a holistic picture of the food system.
- Establish community service programs where secondary school students work on food security issues with community organizations.
- Implement a comprehensive nutrition policy in schools that will provide and promote nutritious food choices for school lunch programs and cafeterias.

- Introduce seasonal, local foods into home economics programs and culinary teaching kitchens in high schools.
- Train youth leaders to maintain school gardens during the summer months or use these gardens as a basis for summer camps.

Strategy 3.4 Celebrate the taste of local foods and the diversity of cuisines

EXAMPLES OF CURRENT ACTIONS

- Examples of festivals and events that promote local food in the region include the following: Vancouver's Powell Street Festival, North Vancouver's Party at the Pier, Flavours of Surrey Festival, Steveston's Salmon Festival, BowFeast on Bowen Island, and Langley's Eat Local Festival.
- Municipalities in the Fraser Valley have created the Circle Farm Tours which identify local specialty farm-gate vendors, open air markets, eateries, heritage sites and fairs through self-guided tours.
- FarmFolk City Folk has created a Get Local Metro Vancouver website that provides information on how to find and choose local foods.
- Slow Food Vancouver in partnership with others hosts Summer Cycle Tours that encourage people to visit farms in the Fraser Valley on their bikes. This provides opportunities for farmers to sell their products while increasing awareness of the variety of farm products available locally.
- Small Scale Food Processor's Association in partnership with Act Now B.C. has developed a B.C. Specialty Food Directory that helps chefs, restaurateurs, and specialty food retailers find B.C. food companies.
- Gordon Food Service has a Best of B.C. Food Program that lists B.C. Products and Farm & Artisan Dairies for restaurants that want to feature local foods.
- The 100 Mile Diet Society has developed a foodshed mapping interactive website allows people to explore their foodshed (defined as a 100-mile radius around Metro Vancouver) by identifying various sources of fruits, vegetables, animals and seafood.

OTHER PROPOSED ACTIONS

- Promote local food at community events throughout the growing season to highlight in-season produce and educate the public about the value of local food.
- Promote events that profile local foods and the multi-culture cuisine of Metro Vancouver in community arts and culture calendar.
- Explore the agriculture theme as the part of "Experience the Fraser" planning project to foster public awareness and appreciation of local foods.
- Feature seasonal local foods in groceries and supermarkets through signage and special events.
- Develop a regional brand and label for food produced in Metro Vancouver.
- Increase the outreach of buy local campaigns by targeting new immigrant audiences in their own languages.
- Review and update food safety standards for small business as current regulations are designed for large scale food operations and the "one size fits all" approach is having unintended effects of constraining small scale, community-building, food-focused events and activities that are critical to regional food sustainability.

Goal 4: Access to Healthy, Culturally Diverse and Affordable Food for Everybody

Strategy 4.1 Improve access to nutritious food among vulnerable groups

EXAMPLES OF CURRENT ACTIONS

- Vancouver Coastal Health has a variety of programs and initiatives addressing food access issues for low income and high nutritional risk clients, including Meals to You and food security networks which enable residents to take action on local food access issues including establishing community gardens and kitchens.
- The United Way of the Lower Mainland has a food security grant stream that provides funding to support community organizations' ability to improve access to food for vulnerable children and seniors.
- Fraser Valley Region Food Network have organized the Fraser Region Harvest Box program providing households in Aldergrove, Delta, Langley, Maple Ridge, Pitt Meadows, Surrey and White Rock the opportunity to buy fresh local produce at an affordable prices (when available).
- The Westside Food Security Collective in Vancouver has organized small farmers pocket markets in community facilities to help ensure that low income seniors have access to nutritious and fresh foods.
- Hollyburn North Shore Youth Safe House has a 550 square foot urban garden for youth living in the safe house and for homeless youth on the North Shore. Surplus produce is donated to the Harvest Project. The garden is supported by Vancouver Coastal Health, District of North Van and community volunteers.
- The Golden Ears Food Education and Action Strategy Table (FEAST) in partnership with the Family Education and Support Centre has developed Seniors Food for All, a resource guide listing affordable food and low cost meals. They also have other outreach initiatives to address senior food access issues.
- Greater Vancouver Food Bank Society with support from others hosts Fresh Choice Kitchens which brings people together to cook and learn leadership training, food preparation and handling skills, and teach people how to run a community kitchen.
- The Salvation Army provides a Cook Training Program for the unemployed. During the 20 week period the participants learn valuable skills, train for a career in the food service sector which can provide meaningful employment. Scholarship program needed to help fill the demand.
- Potluck Café & Catering with support from others runs the Potluck Café, a catering business and café that employs local residents and provides the community with healthy, affordable meals. Revenue is directly invested back into its five community social programs that are integrated into its daily operations.
- The Burnaby Food First Empty Bowls Project is a fundraising event with food prepared by Burnaby chefs. Patrons buy ceramic bowls created by Burnaby Potters as a reminder of the need to fill "Empty Bowls". Funds raised support numerous local community food projects.
- The Kla-how-eya Aboriginal Centre of the Surrey Aboriginal Cultural Society has a Culinary Arts Program Pre-apprentice Program for First Nations, Aboriginal, Metis and other low income clientele. The program teaches basic culinary techniques, uniquely integrated with traditional Aboriginal cooking methods, ingredients and practices. Prepares graduates for entry level food service careers or further education in the Chef Training program at Vancouver Community College.

- Downtown Eastside Neighbourhood House and their sister agencies have a Nutritional Outreach Healthy food and nutritional education program. This unique delivery models puts dignity back into food delivery and uses food to remind people of their deservedness by providing healthy food in welfare cheque line-ups and other outreach locations.
- Trout Lake Cedar Cottage Food Security Network Society provides pocket market coupons to participants who pay \$8 up front for eight coupons. They exchange coupons for \$12-\$15 worth of fresh organic fruit and veggies at monthly pocket market. This is supported by B.C. Housing, Helping Spirit Lodge, and the Cedar Cottage Neighbourhood House.
- The Super Chefs Program recruits youth from low income households to participate in summer camps that focus on how to select and prepare foods for a nutritious diet.
- Evaluate how access to affordable food links to poverty reduction and other social determinants of health including education and social inclusion.

Strategy 4.2 Encourage urban agriculture

EXAMPLES OF CURRENT ACTIONS

OTHER PROPOSED ACTIONS

- Support the development of community food centres like Toronto's "The Stop". It is a place where community members share and learn skills, including growing and cooking fresh foods and how to advocate for improved access to good food.
- Build social capacity by funding community facilitators to help residents in underserved neighbourhoods to identify their food needs and improve their skills and ability to access nutritious food.
- Reinstate funding support for the B.C. Association of Farmers' Markets Nutrition and Coupon Program which provided vouchers to low income families with children for purchases at farmers markets.
- Develop guidelines for including community gardens, appropriate kitchen facilities and other programs that will improve food access and diets among households living in social housing.
- The EcoUrbia Network is building community farms on abandoned or underutilized tracts of land in the North Shore, hiring farmers to grow local organic food for sale and then using a portion of the proceeds to actively engage residents of the North Shore on food issues.
- The Union of B.C. Municipalities commissioned and distributed an extensive manual – called Dig It! – to support municipalities in the creation of community gardens. Many local municipalities are providing parcels of land for the creation of community gardens.
- The City of Vancouver is developing policies to expand healthy food access in underserved areas of the city and has established a Community Urban Agriculture Fund to support neighbourhood food security groups.
- Environmental Youth Alliance has developed the Community Nursery Program that trains at-risk high school students in plant propagation and greenhouse management. The vegetable seedlings are distributed to marginalized groups including the Strathcona Community Garden Association and the Greater Vancouver Food Banks.
- The Edible Garden Project has created "Growing Food Gardens" where volunteer gardeners cultivate gardens of people who have unused garden space and local residents who have gardens grow extra produce to make harvest donations to food charities.

- The City of Richmond has developed zoning that permits community gardens, rooftop farming, fruit trees and other edible landscapes in suitable urban locations.
- Fraserside Community Services has created the “Biggest Little Garden”, a tiered garden box with trellis provided free of charge to New Westminster residents living in apartments or town homes to enables vegetable gardening for low income and mobility challenged residents. The program was so successful that group has developed a “social franchise” so that the produce could be sold and the profits go back into the program.
- Robert Lee Y.M.C.A. Intercultural Community has created a Gardens Project Community garden program on roof top of St. Paul’s Hospital that provides a socially inclusive place for training in anti-racism, anti-homophobia, inclusive group governance, intercultural communication; organic food growing; sharing of cultural food traditions.
- Farmers on 57th Avenue in Vancouver, in conjunction with multiple groups created the Community Integrated Gardens, a fully accessible community garden with a therapeutic garden program for those with severe disabilities (assisted) or low incomes. Provides an alternative to food banks and encourages the consumption of fresh foods.
- Canadian Diabetes Association has created the Food Skills for Families, a hands-on six-session weekly cooking program uniquely designed to teach healthy eating, shopping and cooking skills to Aboriginals, new immigrant, Punjabi and low income families.
- The U.B.C. Farm in partnership with native groups enables “Traditional Indigenous Food Knowledge” by providing farm space, forest space, kitchen space and linking urban and rural aboriginal communities in shared learning space that celebrates traditional foods and supports indigenous food sovereignty.

OTHER PROPOSED ACTIONS

- Develop land use inventories of public lands, including parks, boulevards, right of ways, and rooftops that could be used for urban agriculture.
- Establish neighbourhood facilities for urban agriculture for storing shared tools and equipment for canning and dehydration.
- Develop and implement zoning that permits community gardens, rooftop farming, fruit trees and other edible landscapes in suitable urban locations.
- Create demonstration food gardens in parks.
- Create a regional network of community gardeners to provide support and a sharing of best practices and information.
- Involve ethnic and immigrant communities in the development of urban agriculture initiatives and food access programs to ensure that the foods they are familiar with are available.

Strategy 4.3 Enable non-profit organizations to rescue nutritious food

EXAMPLES OF CURRENT ACTIONS

- The Richmond Fruit Tree Sharing Project, Vancouver Fruit Tree Project, North Shore Fruit Tree Project and the Surrey Food Bank’s Gleaning Project organize volunteers to harvest healthy produce from private residences, farms and trees on public lands to redistribute to charitable organizations.
- Quest Outreach Society hosts B.C.’s largest food exchange program. Using volunteers it collects quality food, including overstock, mislabelled, or near-expired products that would otherwise go to waste, and redistributes it to those in need. Over 300 social service agencies refer clients to their low cost shop.

- B.C. Food Processor Association’s “Giving Back Program” rewards philanthropy in the food system. Members donate any surplus products and are formally acknowledged for encouraging food recovery and redistribution, and helping those in need through the Lookout Emergency Aid Society and Union Gospel Mission.

OTHER PROPOSED ACTIONS

- Address barriers related to food safety regulations and requirements that will enable the redistribution of safe, nutritious and edible foods.
- Initiate a program through an on-line bulletin board that links producers and community groups to field crops available for harvesting (or gleaning) for redistribution to charitable food organizations.
- Dispel perceptions about the liability associated with food donations by targeting education and awareness about food recovery to grocery stores, restaurants, hotels and other large food related events.

Goal 5: A Food System Consistent with Ecological Health

Strategy 5.1 Protect and enhance ecosystem goods and services

EXAMPLES OF CURRENT ACTIONS

- Simon Fraser University and the Ministry of Agriculture have investigated the public perspective on public amenity benefits and ecological goods provided by farmland.
- Environmental Youth Alliance has created habitat to maintain and expand native pollinator populations on urban and rural lands.

- The Delta Farmland and Wildlife Trust administers stewardship programs that share the cost of land management practices that contribute to soil and wildlife conservation.
- Earthwise Society and the Delta Chamber of Commerce have initiated “Feed the Bees”, a campaign to raise awareness about decline of bee and pollinator populations and encourage home owners and businesses to grow plants that attract pollinators.

OTHER PROPOSED ACTIONS

- Encourage gardening practices that will maintain and expand native pollinator populations on both urban and rural lands.
- Develop a policy approach and programming to compensate farmers for the public ecological goods and services provided by farmland.
- Provide compensation to farmers for protecting environmentally sensitive areas and/or providing drainage services for urban communities.
- Develop management tools and programs that will support the sustainable harvesting of wild foods like honey, berries and mushrooms.

Strategy 5.2 Reduce waste in the food system

EXAMPLES OF CURRENT ACTIONS

- Municipalities throughout the region are establishing curbside collection of residential food waste for composting.
- Quest’s Zero Waste project aims to reduce all food wastage to zero, not only by collecting and redistributing useable food, but by turning what is already spoiled or expired into compost or animal feed.

- Farm Folk/City Folk and iWasteNot Systems have created a website, Shared Harvest B.C., an online local food hub where farmers, retailers, fishers, restaurants, charities, schools, and community members source and list food and agricultural products for sale or donation. This service helps keep food out of the waste stream and enables 24 hour access for food recovery.
- Vancouver School Board is testing Earth Tub Composting, a mid-scale composting system set up at three Vancouver high schools. These automated composters will process food waste and can be integrated with existing gardening/food programs. The test sites include Windermere, David Thompson and Grandview schools.
- North Shore Recycling has a composting program uniquely designed for areas frequented by bears. The program includes workshops, backyard garden parties, brochure, web support and community outreach and is done in partnership with the North Shore Black Bear Society and Bear Aware.
- North Shore Recycling and Metro Vancouver has developed Zero Waste Stations with up to 10 collection frames and accompanying signage are available on loan to residents for small community events.
- City Farmer hosts a Compost Hotline, a regional service that answers questions on composting and waterwise gardening. City Farmer also runs the Vancouver Compost Demonstration Garden interacting with approximately 16,000 people a year, including school children, seniors and the disabled.
- Metro Vancouver has a Smart Step program that provides information, technical assistance and waste assessments to help businesses identify actions that can reduce their waste materials and energy costs.

OTHER PROPOSED ACTIONS

- Communicate to restaurants and food service establishment their limited liability when customers use their own containers to take away food.
- Define packaging that is biodegradable and suitable for composting in backyards to reduce the amount of food containers that end up in the municipal collections system.
- Provide information to consumers about food date labels (for instance, best before, sell by) to prevent confusion resulting in edible food being thrown out in the garbage.
- Develop a best practices tool kit for event organizers to implement waste minimization and recycling at community festivals, sporting events, conferences and trade shows.



Strategy 5.3 Facilitate adoption of environmentally sustainable practices

EXAMPLES OF CURRENT ACTIONS

- Metro Vancouver has initiated a joint water-use planning process for the Capilano and Seymour watersheds that will explicitly consider water flows required for fish stocks.
- The B.C. Agriculture Council works with local farmers to complete Environmental Farm Plans and implement improvements with funding assistance from the federal and provincial governments.
- B.C. Hydro is assisting food businesses to develop a customized sustainable energy management plan by providing expertise on potential energy savings.
- The Land and Food Systems Faculty at U.B.C. teaches agro-ecology food production practices that enhances natural ecosystems and reduces reliance on fossil fuel inputs.
- Langley Environmental Partners operates an Agricultural Stewardship Program that provides support to agricultural landowners on best practices, stream livestock, manure management and invasive weed control. The program targets equestrian and small farmers that do not qualify for the Environmental Farm Program.
- Swift Aquaculture has developed a land-based Coho salmon farm. The waste solids and waste water are used to fertilizer crops and produce algae that are used as a source of feed. This operation produces around 3,000 salmon a year and it is one of only two salmon stocks in Canada to be health certified by the Fisheries and Oceans Canada.
- The Land Conservancy of B.C. recognizes leading farmers and ranchers through their Conservation Partners label for farm products and the farm gate. Those awarded the label are recognized to protect, enhance or restore natural systems, including pollinator habitats, grasslands and riparian areas. Participating farms include: Glen Valley Organic Farm, Hazelmere Organic Farm, Helmers' Organic Farm Nicomekl Community Organic Farm, Langley Township, U.B.C. Farm, and Westham Island Apiary.
- The Green Table Network promotes Sustainability Solutions for Food Service by aligning the food industry with a set of green principles that cover solid waste, water and energy conservation, pollution prevention, and more earth friendly purchasing. The service is one to one, on-site, customized, collaborative process and tailored for specific business.
- Canadian Cancer Society B.C./Yukon with support from eight B.C. medical and health organizations are calling on the provincial government to enact province-wide legislation banning the sale and use of cosmetic pesticides. Numerous Canadian communities have already successfully supported the ban through local bylaws.

OTHER PROPOSED ACTIONS

- Revisit the business case for recapturing phosphorous from sewage treatment systems and evaluate as a nutrient source for food production.
- Promote energy recovery and lower greenhouse gas emissions through guidelines, pilot projects and incentives for food production and processing businesses.
- Promote water conservation practices and new efficiency technologies throughout the food sector.
- Expand agricultural extension and education programs that provide information on how waste management, soil conservation, and environmental protection can support farm viability.

Strategy 5.4 Prepare for the impacts of climate change

EXAMPLES OF CURRENT ACTIONS

- B.C. Agriculture Council has created the Climate Action Initiative to identify climate change mitigation and adaptation projects for the agriculture through the B.C. Agriculture and Food Climate Action Plan.
- B.C. Food Processor Association and B.C. Hydro Power Smart developed the Energy Manager Program where processing facilities are assigned fully funded energy managers to show them how to cut costs through smart energy management, streamlined procedures, and technology upgrades.

OTHER PROPOSED ACTIONS

- Conduct applied research through test plots and variety field trials on new crop varieties that are resilient to changing climate conditions.
- Create seed banks to provide farmers with a diversity of seeds to choose from including heritage strains.
- Develop quantification protocols to measure carbon sequestration on agricultural lands and certification standards.
- Identify production and business practices that would increase the resiliency of local agriculture and fisheries to climate change.

APPENDIX B: Agencies and Organizations Contributing to the Region's Food System (Partial List)

100 Mile Diet Society	Canadian Agri-Food Policy Institute
Agriculture and Agri-Food Canada	Canadian Cancer Society BC/Yukon
Agriculture in the Classroom Foundation	Canadian Centre for Policy Alternatives
Agricultural Land Commission	Canadian Council of Grocery Distributors
Aids Vancouver	Canadian Diabetes Association
Barnston Island Conservation Society	Canadian Food Inspection Agency
Bowen Agricultural Alliance	Canadian Federation of Agriculture
Bowen Island Municipality	Canadian Federation of Independent Grocers
BC Agriculture Council	CEED Centre
BC Agriculture Tourism Alliance	Centre for Sustainable Food System at UBC Farm
BC Association of Farmers Markets	Certified Organic Associations of BC
BC Chicken Growers Association	Chefs Table Society of British Columbia
BC Cooperative Association	City of Abbotsford
BC Dairy Foundation	City Farmer
BC Dieticians & Nutritionists Association	City of Burnaby
BC Food Processors Association	City of Coquitlam
BC Food Protection Association	City of Langley
BC Food Security Network	City of New Westminster
BC Farm Animal Care Council	City of North Vancouver
BC Farmers Markets Association	City of Pitt Meadows
BC Greenhouse Growers Association	City of Port Coquitlam
BC Hydro	City of Port Moody
BC Institute of Technology	City of Richmond
BC Milk Producers	City of Surrey
BC Recycling Council	City of Vancouver
BC Restaurant and Food Services Association	City of White Rock
BC Vegetable Marketing Commission	Colony Farm Community Gardens
BC Young Farmers	Community Nutritionists Council of BC
Burnaby Food First Network	

Corporation of Delta	Grandview School
Coquitlam Farmers Market Society	Greater Vancouver Food Bank
David Suzuki Foundation	Growing Chefs
Delta Chamber of Commerce	Health Canada
Delta Farmland and Wildlife Trust	Hollyburn North Shore Youth Safe House
Delta Food Coalition	Investment Agriculture Foundation of BC
District of Maple Ridge	Kla-how-eya Aboriginal Centre of SACS
District of North Vancouver	Kwantlen Polytechnic University, Institute for Sustainable Horticulture
District of West Vancouver	Kwikwetlem First Nation
Downtown Eastside Neighbourhood House	Langley Environmental Partners
Earthwise Society	Langley Food Action Coalition
Edible Garden Project	Langley Sustainable Agriculture Foundation
Electoral Area A (unincorporated area)	Living Oceans Society
Environmental Youth Alliance	Local Food First
Evergreen	Local Food Plus
Family Services of Greater Vancouver	Lookout Emergency Aid Society
Farm Credit Corporation	Lower Mainland Independent Grocers Association
Farm Industry Review Board	Maple Ridge/Pitt Meadows/Katzie Community Network
FarmFolk/City Folk	Ministry of Agriculture
Food For Families Food Bank	Ministry of Children and Family Development
Fraser Basin Council	Ministry of Community, Sport & Cultural Development
Fraser Health Authority	Ministry of Environment
Fraser Region Food Network	Ministry of Education
Fraserside Community Services	Ministry of Health Services
Fraser Valley Farm Direct Marketing Association	Metro Vancouver
Fraser Valley Regional District	
Garden City Lands Coalition	
Golden Ears Food Education	

New Westminster Community Food Action Committee	Surrey Environmental Partners
North Shore Fruit Tree Project	Surrey Food Bank
North Shore Neighbourhood House, City of North Vancouver	Surrey Urban Farmers Market
North Shore Recycling	Surrey/Whiterock Food Action Coalition
Pacific Agriculture Research Centre	The 100 Mile Diet Society
Pacific Institute of Culinary Arts	The EcoUrbia Network
Pacific Streamkeepers Federation	The Green Table Network
Potluck Café & Catering	The Land Conservancy of BC
Provincial Health Services Authority	The Salvation Army
Public Health Agency of Canada	The Super Chefs Program
Public Health Association of British Columbia	The United Way
Quest Outreach Society	Trinity Western University
Reach Community Health Centre	Township of Langley
Real Estate Foundation	Trout Lake Cedar Cottage
Richmond Food Security Society	Food Security Network Society
Richmond Fruit Tree Sharing Project	Tsawwassen First Nation
Robert Lee YMCA Intercultural Community	Union Gospel Mission
Sapperton Fish & Game Club	United We Can
Sierra Club British Columbia	United Way of the Lower Mainland
SFU Centre for Dialogue	UBC Faculty of Land & Food Systems
SFU Centre for Sustainable Community Development	Union of British Columbia Municipalities
SFU Local Food Project	Van City Community Foundation
Slow Food Vancouver	Vancouver Aquarium
Small Scale Food Processor Association	Vancouver Community Agriculture Network
Smart Growth BC	Vancouver Community College
Social Planning and Research Council of BC	Vancouver Economic Development Commission
	Vancouver Coastal Health Authority
	Vancouver Farmers Markets
	Vancouver Food Policy Council

Vancouver Foundation

Vancouver Fruit Tree Project

Vancouver School Board

Village of Anmore

Village of Belcarra

Village of Lions Bay

Village Vancouver

Westside Food Security Collective

Zero Waste Vancouver