



To: Public Works and Transportation

Date: November 29, 2010

From: Cecilia Achiam, MCIP, BCSLA
Interim Director Sustainability and District Energy
Senior Program Manager, CPMG

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Re: **City of Richmond Comments On Metro Vancouver's Draft Regional Food System Strategy**

Staff Recommendation

That the comments in Attachment 1 of this staff report from the Interim Director Sustainability and District Energy be endorsed and forwarded to MetroVancouver as input into the Draft Regional Food System Strategy.

Cecilia Achiam, MCIP, BCSLA
Interim Director Sustainability and District Energy
Senior Program Manager, CPMG

Att. 1

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Staff Report

Origin

Metro Vancouver has requested City input on the Draft Food System Strategy. This report addresses this request and the following Council Term Goals:

Council Term Goal #7: “ Sustainability and the Environment – *Demonstrate leadership in and significant advancement of the City's agenda for sustainability through the development and implementation of a comprehensive strategy that among other objectives includes incorporating sustainability into our City policies and bylaws*”.

The draft strategy can be found at:

<http://www.metrovancouver.org/planning/development/RegionalFoodSystems/Pages/default.aspx>.

Background

About the Regional Food Systems Strategy

The Draft Regional Food Systems Strategy (RFSS) is a new initiative undertaken by Metro Vancouver. The Strategy was launched in response to increasing prominence of food issues, including on-going concerns about how to protect agricultural land and increase food production.

The RFSS was developed over a 2-year time period and has incorporated input from private, public and non- governmental organizations. Metro Vancouver is envisioning the RFSS to be the first step towards creating a “sustainable, resilient and healthy food system that enhances the economic prosperity of the region and conserves natural systems while improving the health of all residents”.

The RFSS has been developed to the point that it includes 5 broad goals:

- Increased Capacity to Produce Food Close to Home
- Enhanced Role of Food Sector in the Regional Economy
- Healthy and Sustainable Food Choices
- Access to Healthy, Culturally Diverse and Affordable Food for Everybody
- A Food System Consistent with Ecological Health

Twenty strategies are developed under each of these goals. Examples of actions, including proposed priority actions for collaboration are also identified.

Upon Board approval of this first phase of the RFSS, Metro Vancouver will begin work in developing a focused Action Plan in Spring 2011 which will establish key action initiatives.

Analysis

Staff Assessment of the Draft Regional Food System Strategy

1. Systems-Based Approach is a Key Strength

A key strength of the Strategy is that it is seeking to consider the food system as a complete system, through production, distribution, services, waste management and nutrient recycling. In this respect the RFSS is looking at ensuring that the system is effective from seed to plate and

back to field. This systems-based approach means that all important factors can be considered. It also means that interconnections are considered, including interdependencies among social, economic and environmental factors. This complete systems-based approach means that investments into action are likely to yield substantially more effective results.

2. *Anchored by a Strong Understanding of the System*

The draft RFSS provides a well-considered context section that establishes a strong foundation for developing meaningful action initiatives. The strength of the context section arises from its completeness and level of detail. The strategy recognizes current strengths of the regional food system including:

- the success of the Agricultural Land Reserve (ALR) in enabling some of the richest farmland in Canada to still be actively farmed;
- the economic value of the regional's food system
 - although representing only 1.5% of the province's agricultural land base, regional farmland generates 28% of B.C.'s gross farm income from more than 130 different agricultural products
 - about one in eight jobs in Metro Vancouver are in the food sector; and,
- a growing public interest in purchasing local foods.

The context section also identifies key concerning trends, across social, economic and environmental dimensions, including:

- a growing number of people are being identified as "malnourished"¹;
- the amount of money being spent on food is being squeezed by the need to cover housing costs;
- about 38% of food available for retail sale is wasted with even more spoilage and waste occurring in homes; and,
- the food sector industry is highly dependent on non-renewable fossil fuels, is a relatively large generator of greenhouse gas emissions and uses over 7 units of energy to produce on unit of food energy.

A key finding of the RFSS is that despite being a basic human need, food is not an issue that resides within any one agency. Rather various components of the food system reside in a multitude of federal, provincial or local government agencies. This fragmented structure generates complexity and a major challenge in addressing the system in a cohesive and complete manner.

3. *Developed through Participatory Process*

The RFSS has engaged a wide range of stakeholders, seeking input from the food sector industry, governmental agencies, non-governmental organizations and the general public. Significant opportunities, including workshops, webinars and public consultation forums throughout the region, have been provided.

City staff have been providing input throughout the Strategy development process. Richmond Food Security Society have also been providing input.

¹ Malnourished means that individuals are either "over consuming foods that should be consumed in moderation or they are not consuming enough nutritious foods or both"

4. *Opportunities Exist for Strengthening*

The draft RFSS represents the first attempt to develop a collaborative-based pathway for advancing towards a more sustainable regional food system. The strategy is effective at defining the scope of the community need and this work has led to the development of 5 comprehensive goals. The strength in the current strategy is the comprehensiveness provided in the understanding the current situation and framing the approach to action based on a full systems view. However, opportunities exist to identify priorities to better ensure that resources are directed towards areas of highest need and benefit. A key challenge identified but not currently addressed in the strategy is the need to strengthen the current fragmented management system.

Greater effort is also needed to identify and evaluate alternative action initiatives and better ensure that resources are being directed towards action that yields greatest value (benefits for cost).

Further work is also needed to develop and manage an implementation program as achieving results and realizing the vision set by the strategy will ultimately depend upon effective implementation of the proposed action.

Comments by the Richmond Food Security Society

The Society has advised City staff that they are in general support of proposed draft Strategy. They have provided input to Metro Vancouver requesting that the issue of genetically modified foods be addressed.

Recommended City of Richmond Comments

Proposed comments, based on the assessment above, are provided in Attachment 1. In summary, these comments recommend:

- a greater focus be placed on identifying and advancing strategic priorities
- a greater focus be placed on addressing core institutional challenges
- clarification be provided in the strategy that a focused Action Plan (i.e., who and what will be done) is to be developed later
- commitment be made in the Strategy that evaluation of alternative action and development of an implementation program (i.e., how and when action will be done) will be conducted as part of the focused Action Plan
- the issue of genetically modified foods be considered in the strategy and the challenge of reducing the carbon footprint be re-titled to incorporate energy considerations directly (i.e., reducing the energy and carbon footprint of food).

Financial Impact

None

Conclusion

Metro Vancouver has developed a draft Regional Food System Strategy and has requested input from the City of Richmond. Staff have reviewed the strategy and have found it to be a strong start as a first strategy aimed at advancing towards a more sustainable regional food system. This report recommends that the City of Richmond provide general endorsement for the Strategy and submit comments provided in Attachment 1 as means for adding further value and strength to the initiative.



Margot Daykin, M.R.M.
Sustainability Manager
(4130)

City of Richmond - Recommended Comments on Metro Vancouver's Draft Regional Food System Strategy (RFSS)

1. General Support for RFSS

The City of Richmond considers a sustainable food system to be an essential element of a sustainable community and fully supports the development of the Regional Food System Strategy. The City of Richmond endorses efforts made to-date and commends MetroVancouver for adopting a complete systems-based approach – one that strives to consider all the processes involved in keeping the region fed (from seed to plate and back to field).

2. Recommendations

In order to achieve the vision set out in the RFSS, the City of Richmond recommends the following:

i. *Identification of Strategic Priorities*

The City of Richmond recognizes that not all fronts can be addressed simultaneously and that it is important that resources be directed towards areas of highest importance. As such, the City recommends that the draft RFSS be amended to adopt a stronger strategic approach, one that identifies priority areas of focus. These may include considerations such as system areas of focus (e.g., food bank supply, food production, food waste recovery, etc.) and/or population segments to be targeted.

The City also recommends that the relative need for action in the food security in consideration of other core sustainability objectives be articulated in the strategy. By considering food security as part of the larger overarching sustainability focus, organizations and individuals throughout the region will be better equipped to make strategic investment decisions to direct resources effectively across all important dimensions of sustainability.

ii. *Address Institutional Needs as a Core Goal Area*

The Strategy identifies that no one agency has the capacity to address food issues in an integrated and holistic manner and that to-date, food issues are generally dealt with in isolation of other issues and of the overall system. The fragmented nature of current management pertaining to food supply, distribution, consumption and waste management and nutrient recycling is identified as a key challenge

The Strategy is strong first step in connecting the various pieces together. However, the Strategy, alone, is not sufficient for addressing current institutional challenges and realizing cohesive, system-based action over time. As such, the City of Richmond recommends that a goal area pertaining to establishing an effective institutional system/governance model be included. In particular, the City recommends that an agency be identified as having responsibility for overall system coordination.

iii. *Clarification on Strategy and Action Plan Development*

The Food System Strategy currently contains examples of existing policies and initiatives and suggestions of potential action. It is understood that a detailed Action Plan will be developed following the completion of the Regional Food System Strategy. The City of Richmond recommends that this clarification on process be included in the Strategy.

iv. *Action Plan and Implementation Program Suggestions*

The City of Richmond recommends that greater comprehensiveness across the food system (from seed to plate to field) be applied during the action development phase. It is recommended that greater assessment be conducted to “map” current actions across the food system and key gap areas be identified.

In developing the action plan, the City of Richmond recommends that alternative action initiatives be evaluated based on their relative benefit/costs based on triple bottom line considerations (e.g., short/long-term environmental, economic and social). Focus should be placed on action that yields the greatest value.

The City also recommends that an implementation program be developed. This program should clearly identify timelines, funding mechanisms and roles and responsibilities, including overall lead for coordinating implementation. Most importantly, an implementation budget should be established to ensure that resources exist to advance selected action. One example would be to establish a collective fund based on a per capita rate (for example, \$0.10 per person annually). This budget could be used on a cost sharing manner with member municipalities.

v. *Incorporation of Genetically Modified Foods (GMF)*

Recently, more attention is being paid to the relative advantages and disadvantages of genetically modified foods. To address this cross-cutting complex issue effectively requires thoughtful response among multiple agencies and organizations. As the RFSS provides a mechanisms for advancing collaborative-based solutions efficiently, the City of Richmond recommends that this issue be included for consideration in the strategy.

vi. *The challenge of reducing the carbon footprint be re-titled to incorporate energy considerations directly (i.e., reducing the energy and carbon footprint of food).*

The strategy includes a section that articulates key challenges for realizing a sustainable food system for the region. Included in this section are a number of energy challenges facing the food system. Examples include the system’s current energy intensity, dependency on non-renewable energy sources, vulnerability on global conditions and generation of greenhouse gas emissions. These challenges are discussed under the heading of “Reducing the carbon footprint of food”. Given that the energy challenges are much broader in scope than that reflecting in the current title, the City of Richmond recommends that this title be renamed to more accurately reflect the breadth of energy considerations.

DRAFT

Regional Food System Strategy

SEPTEMBER 2010



metro vancouver

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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.

The Metro Vancouver Board decided to initiate a Regional Food System Strategy in 2008 as part of its commitment to build a sustainable region. Since then hundreds of residents have attended public forums to talk about agriculture and food issues. We heard about a wide array of problems but more importantly, many ideas on how to improve the well-being of residents, the economic viability of local business, as well as the ecological health of the region.

Our food system is complex. No government agency is responsible for ensuring that food is available to residents. Instead Metro Vancouver's food system is a product of trends in the global marketplace superimposed on a mosaic of local activities involving the private sector, community organizations, educational institutions as well as all levels of government. Adapting the regional food system to reflect today's concerns and values requires a concerted effort from groups that support a common vision and a plan to get there.

The Regional Food System Strategy is a first step to creating a sustainable, resilient and healthy food system that enhances the economic prosperity of the region and conserves natural systems while improving the health of all residents. 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 addressing some of the problems in the regional food system. Examples of these are

captured in this Strategy along with potential priority actions that will require greater collaboration among those involved in the regional food system.

This Regional Food System Strategy is presented in three parts. The first part explores the context, 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 these goals, illustrative examples of actions, and current and proposed, priorities to implement the Strategy. The third section is an appendix containing a lengthier, more detailed list of actions. This section is entitled "Detailed, Dynamic Action Plan" because it is a work in progress that will develop and evolve as the collaborative process continues.

It is anticipated and intended that the second part of this will be amended frequently. Given the multi-party nature of the development and implementation of actions contained in this Strategy, this document is best viewed as a working document that will be periodically brought back for review by the participating agencies, organizations and the public to consider whether course corrections or new priorities are needed.

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 the City of Abbotsford, Village of Anmore, Village of Belcarra, Bowen Island Municipality, City of Burnaby, City of Coquitlam, Corporation of Delta, City of Langley, Township of Langley, Village of Lions Bay, District of Maple Ridge, City of New Westminster, City of North Vancouver, District of North Vancouver, City of Pitt Meadows, City of Port Coquitlam, City of Port Moody, City of Richmond, City of Surrey, Tsawwassen First Nation, City of Vancouver, District of West Vancouver, City of White Rock, and Electoral Area A (unincorporated area.)

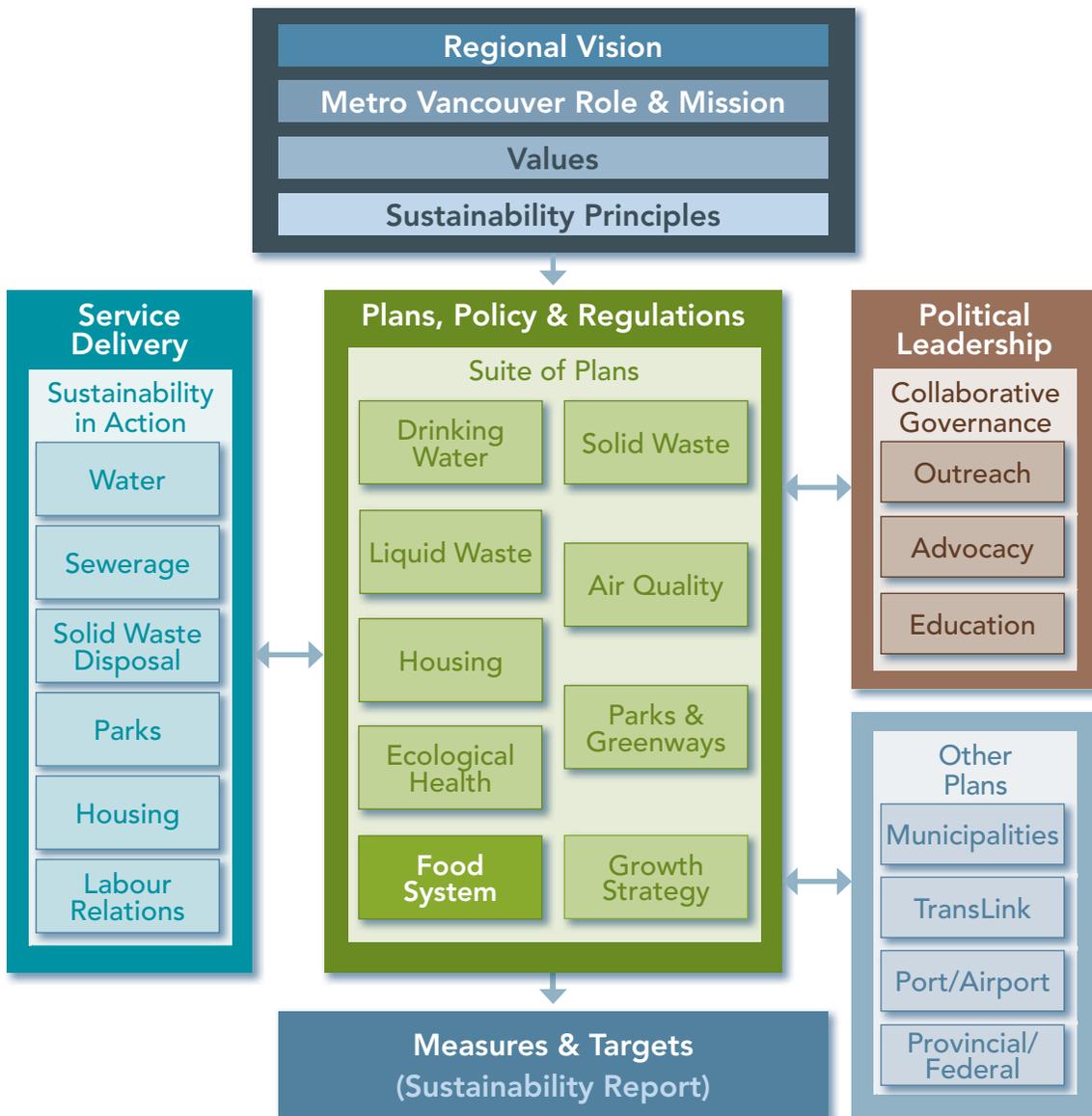
PART ONE: THE BIG PICTURE

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 has become known as the Sustainability Framework.

All of Metro Vancouver’s plans share a common nucleus, that is, the vision, mission, values, imperatives and principles as set out in the Sustainability Framework. This Regional Food System Strategy is one plan in a suite of Metro Vancouver plans.

Figure 1 Metro Vancouver’s Sustainability Framework



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 the 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.

Sustainability Imperatives and Principles

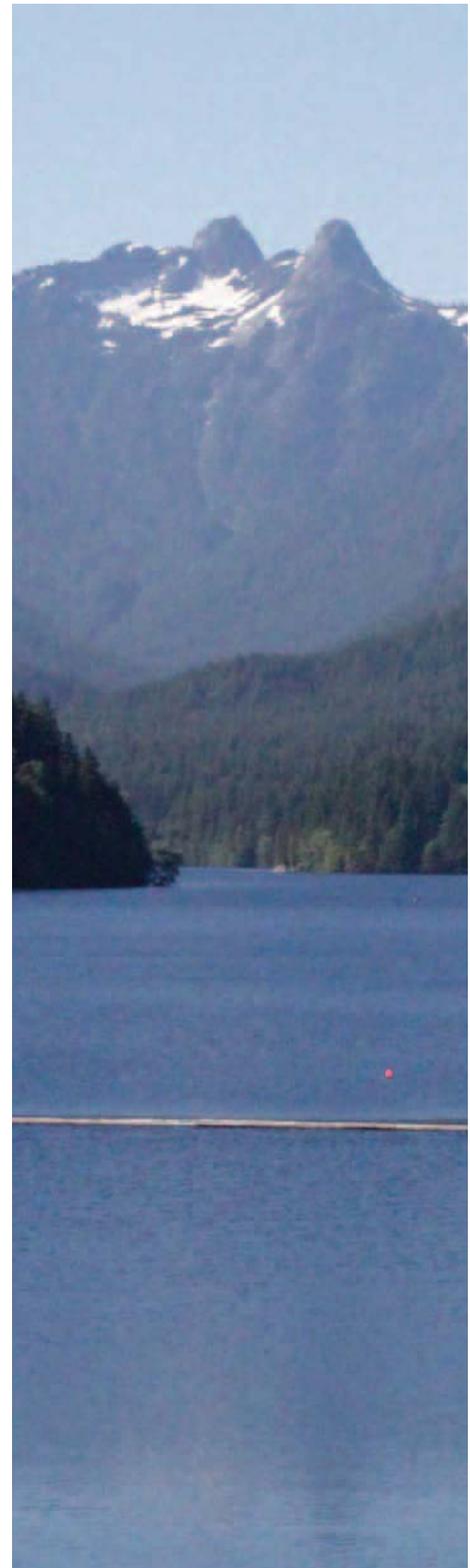
The Sustainability Framework is driven by the following overarching imperatives necessary for creating a sustainable future:

Have regard for both local and global consequences, and long term impacts;

- Recognize and reflect the interconnectedness and interdependence of systems;
- Be collaborative.

These lead to three sustainability principles for decision-making:

1. Protect and enhance the natural environment;
2. Provide for ongoing prosperity; and
3. Build community capacity and social cohesion.



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 contribute to creating:

a sustainable, resilient and healthy food system that enhances the economic prosperity of the region, and conserves natural systems while improving the health of all residents.

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 the ecological health of the region while taking actions that provide for ongoing profitability in the food sector and addressing inequities in food access. Residents and businesses spending a larger portion of their food budget on local foods will contribute to a stronger, more vital regional economy because the economic benefits of their spending are retained locally. In addition, policies and community-based programs designed to improve food access will contribute to greater cohesion and social well-being. Healthy, functioning ecosystems are important for the on-going provision of food from land and sea.

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 can be accomplished by increasing the production of local foods and ensuring that consumers are able to purchase local foods through a variety of venues including grocery stores, farmers markets and restaurants. At the same time, community-led initiatives addressing food and hunger issues will build networks that enhance the transfer of knowledge on a range of 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. This will be achieved by improving eating habits and healthier diets. Better eating habits can help reduce the risk of diet related diseases, including obesity, Type II diabetes, heart disease, certain cancers and osteoporosis.¹ Some vulnerable groups and low income households need improved access to nutritious food. In addition, preparing and sharing food results in positive experiences within families, among friends and within communities.

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



THE REGIONAL FOOD SYSTEM STRATEGY

Food is essential to life – we all need to eat – but it is also tied to our culture, values and family traditions. The growing, buying and preparing of food can help build communities and the sharing of a meal can build friendships and other relationships. Beyond the personal, the production and consumption of food is rooted to economic and ecological systems. Yet despite its importance, it is only recently that the public has started to ask questions about how we currently feed ourselves. Anticipated changes in oil prices, climatic conditions and fish populations, have now begun to raise concerns about how resilient our food system is.

Our regional food system is affected by global scale influences which are beyond the scope of this Strategy. However local policies and programs can also influence our regional food system and these are the focus of this Strategy. This Regional Food System 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 local capacity to produce food,
- improving financial viability of farmers and others in the food supply chain,
- encouraging people to eat healthier diets,
- ensuring a more equitable access to food,
- reducing waste in the food system, and
- protecting the ecological health of our region and surrounding waters.

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 disposal of food and associated packaging.

A food system operates within and is influenced by the cultural, societal, economic and environmental contexts in which it is situated. The food system in Metro Vancouver reflects the history of the first people

of the region and the subsequent waves of immigration. While the places we buy 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.

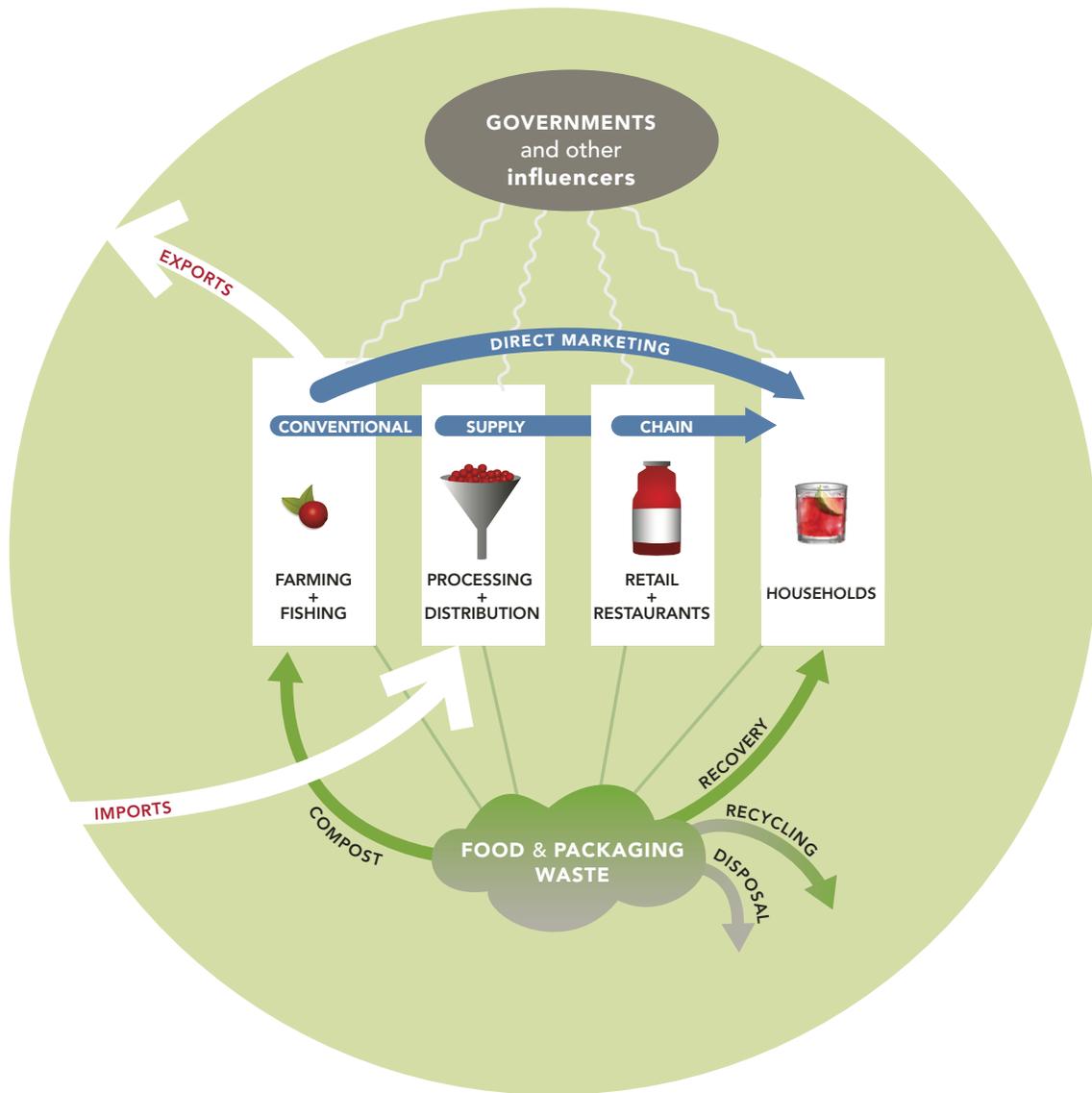
The key elements of the current food system are illustrated in Figure 2. The conventional supply chain begins with farmers, ranchers and fishermen who grow or harvest food and sell their products to wholesale distributors and processors. Firms then transform raw food into “shelf ready” products through sorting, grading, packaging and other processing activities. The finished products are warehoused for distribution to grocery stores, food markets, restaurants and other businesses who sell the food to the consumers. The conventional supply chain is supplemented by direct marketing. This occurs when farmers, fishermen or 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 per cent of food available for retail sale was wasted² with even more spoilage and waste occurring in homes. On farms, surplus crops and waste may just be recycled into the fields 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 exploring the opportunities to reduce the amount of food and packaging waste. This will involve expanding food recovery activities, increasing composting, 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. Because food is an essential need and because food production, distribution, and disposal has social, health and environmental implications, governments, at all levels, have assumed roles to address issues not remedied by market forces.

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

Figure 2 Elements of a Food System



These include issues like disparities in food access, loss of prime farmland, food safety and degradation of fish habitat. Other groups that have taken on roles to 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.

There are many factors influencing a household's food purchases. The price differential between similar food items may be important at the 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 for children.



Metro Vancouver's Food System

The current conditions for building a sustainable, resilient and healthy food system in Metro Vancouver are positive. The region has the land, water resources and expertise to produce more food. The private sector has the business capacity, innovation and entrepreneurial skills to enhance our food sectors. There is also a growing enthusiasm for making changes, both at the community level and within the food supply chain.

Metro Vancouver is the largest urban concentration in British Columbia, accounting for over 51 per cent of the population where 817,230 households spend almost \$5 billion annually on food.³ Most of the food we buy is not grown or caught here. The B.C. Ministry of Agriculture and Lands estimated that the 48 per cent 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.

Since the 1950's, productivity in the global food sector has surged while the prices paid for food has 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 benefitted from this situation, because food prices are low and the variety of food products has increased.

While the food system is now global, there is a highly productive and diversified agriculture industry in Metro Vancouver. The farm area in Metro Vancouver represents only 1.5 per cent of B.C.'s agricultural land base but generates 28 per cent of the province's gross farm income from more than 130 different agricultural products.⁵ (see Table 1)

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 Census of Agriculture. 2006. Statistics Canada.

Table 1 Range of farm products produced in Metro Vancouver

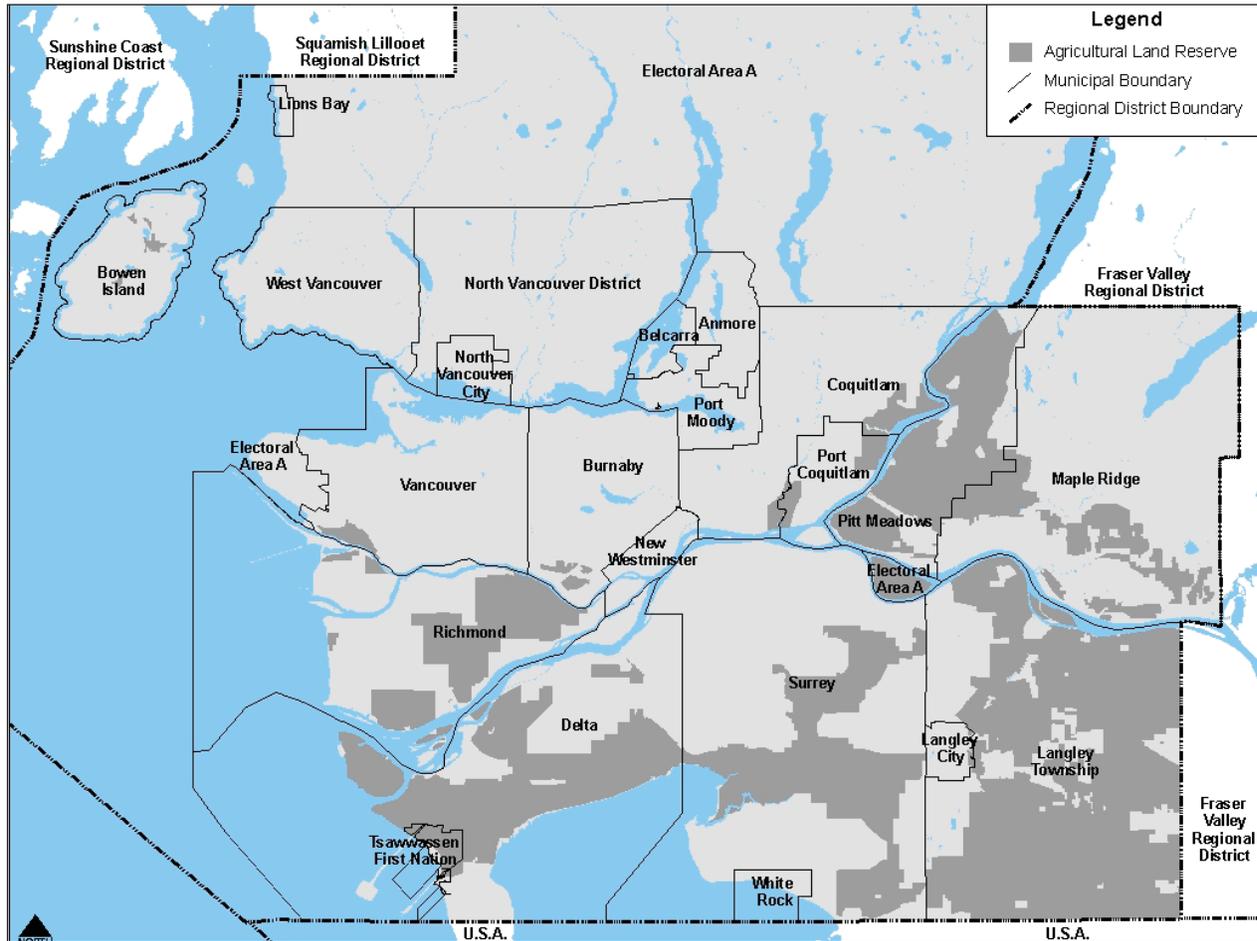
Livestock	number of animals
Hens and Chickens	4,075,408
Turkeys	332,397
Other Poultry	132,835
Cattle & Dairy Cows	29,433
Mink	157,248
Horses & Ponies	6,237
Sheep & Lambs	4,699
Pigs	3,832
Goats	1,234
Llamas & Alpacas	578
Colonies of Bees (for honey)	4,305
Fruit Crops	number of hectares
Blueberries	2,734
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

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



Farms in Metro Vancouver are relatively small in scale. 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 respectively⁶.

Profitable farm operations serve both export and local markets. Local growers are successfully selling blueberries, cranberries, greenhouse vegetables and other products to local and international markets. Farmers who produce poultry, eggs and dairy products under supply management boards are also 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 are finding alternative venues to sell their products directly to restaurants and consumers and are doing well. In addition there are local food processors that have developed niche and artisan food products that are experiencing increasing sales.

A critically important policy development in sustaining agriculture in Metro Vancouver was the provincial government's decision to protect agricultural lands in perpetuity. The creation of the Agricultural Land Reserve (ALR) in 1973 has meant that some of the richest farmland in Canada is still actively farmed within the region. Today there are approximately 61,346 hectares in the ALR in Metro Vancouver⁷ (Figure 3). Most of the high capability agricultural lands are located along the river delta in Richmond, Delta, Surrey and Pitt

⁶ 2006 Census Bulletin #2 Census of Agriculture. Issued August 2007. Metro Vancouver.

⁷ Source: Agricultural Land Commission as of January 2008.

Table 2 Distribution of Agricultural Land Reserve (ALR) in Metro Vancouver Municipalities

Municipality	Total Municipal Land (ha)	Municipal Land in the ALR* (ha)	% of Municipal Land in the ALR
Anmore	799	--	--
Belcarra	1,003	--	--
Bowen Island	5,050	183	<1%
Burnaby & Vancouver	21,232	522	2.5%
Coquitlam	12,074	822	6%
Delta	18,109	9,967	56%
Electoral Area A (Barnston Is)	86,533	618	<1%
Langley City	1,018	44	4%
Langley Township	30,851	23,318	76%
Lions Bay	212	--	--
Maple Ridge	25,709	3,814	13%
New Westminster	1,533	--	--
North Vancouver City	1,139	--	--
North Vancouver District	16,237	--	--
Pitt Meadows	8,005	6,881	85%
Port Coquitlam	2,946	587	22%
Port Moody	2,657	--	--
Richmond	13,325	5,187	37%
Surrey	32,569	9,286	29%
West Vancouver	8,956	--	--
White Rock	505	--	--
Metro Vancouver Total	290,462	61,228	21%

* Metro Vancouver ALR land as of May 2008

Meadows or in the uplands of Langley, and Maple Ridge (Table 2). Before the ALR was created, the conversion of farmland to urban use was rapid. Despite ongoing efforts to convert farmland to residential development, business parks, and industrial lands as well as right of ways for highways and utilities, public support for the ALR remains strong.

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.

The food sector is also an important employer in the region. About one in eight jobs in Metro Vancouver are in food production, processing, distribution, marketing, retail and services. Total revenue for the B.C. food industry is estimated to be over \$35 billion dollars⁸ – a significant portion is located in Metro Vancouver.

⁸ BC Ministry of Agriculture and Lands (2006). Fast Stats: Agriculture, Aquaculture and Food 2006. BC 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.

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, artisanal farm products like cheese, 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.

At the same time, there are many people in Metro Vancouver who, due to low income or other factors, have few or no opportunities to learn about or access fresh and healthy foods. In celebrating the positive trends, it is important to not be blind to the fact that some households could be much better served by the regional food system and are less likely to have benefitted from the changes made so far.

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 40 per cent 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.

For the purposes of the development of a Regional Food System Strategy, local food is defined as being grown and harvested in the Metro Vancouver region.



Challenges

The Metro Vancouver food system operates within a much broader national and global context where changes in climate and other environmental conditions, economic forces and cultural trends affect the availability and type of food we eat. Through collaborative actions the Regional Food System Strategy will aim to address the following challenges:

Creating opportunities for local food businesses

The general trend in the food system has been towards increasing corporate concentration that has resulted in the relocation of processing and warehousing facilities that previously served local food markets. For many regions, including Metro Vancouver, this has resulted in the loss of value-added and distribution operations in the food supply chain. For food producers who can supply large volumes of farm commodities year round at competitive prices this has not been a problem. But many medium and small scale farm and fishing operations that characterize the region find it difficult to sell their products into the conventional supply chain. Minimal amounts of processing, like freezing, coupled with storage would extend the shelf life of seasonally available foods while more extensive processing facilities would create new jobs and other economic benefits.

Enabling a healthier population

In relatively prosperous regions, like Metro Vancouver, a disturbing dichotomy has emerged. In the midst of an abundance of relatively cheap food, more people have unhealthy diets and the incidence of food related chronic diseases has increased. A growing number of people are labeled 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.⁹ There are a number of factors behind this trend. People are spending less time preparing healthy meals and are losing knowledge about cooking well-balanced, nutritious meals. For vulnerable groups the food that is most easily accessible and relatively cheap has high

calories and low nutritional value often with large amounts of sweeteners, fats and salt. This is a particular problem for low income households in Metro Vancouver where the amount of money spent on food is constantly being squeezed by the need to cover housing costs.

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 7.3 units of energy to produce one unit of food energy.¹⁰ 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 and food prices will follow. The use of fossil fuels for energy for production and transportation means the food sector is a relatively large source of global greenhouse gas emissions. Governments interested in effective climate change mitigation strategies will have to find the means to reduce the carbon footprint of food.

Preparing for uncertainty in the global food system

A growing world population and the emergence of more affluent middle-classes in countries like China and India coupled with the negative trend in key ecological indicators are leading to greater uncertainty in terms of global food supply. 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 demand¹¹. At the same time, stocks of wild fish 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.

Working across multiple jurisdictions

Despite being a basic human need, food is not an issue that resides within one agency, department, or level of government. Instead, various components of the food system reside with federal, provincial or local

⁹ Food, Health and Well-being in British Columbia. Provincial Health Officer's Annual Report 2005, page xvii.

¹⁰ Centre for Sustainable Systems, University of Michigan. 2009. “U.S. Food System Factsheet”. Pub. No. CSS01-06.

¹¹ Brown, Lester (2009). Could food shortages bring down civilization? Scientific American Magazine, April 22, 2009.



government agencies adding complexity to the policy and regulatory environment. The conventional practice has been to deal with each food issue in isolation, for example, to develop policies to address food safety regulations without considering the impact on different scales of business operations. There are also lost opportunities for synergies in developing more environmentally sound practices. This situation reflects the mosaic of agency mandates as well as the specialized knowledge of experts, scientists and government staff. As a result, no one agency has the capacity or ability to address food issues in an integrated and holistic manner without better collaboration.

This Regional Food System Strategy aims to address these 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 thinking about policies, identifying resources, building commitment to work collaboratively and engaging stakeholders and the public in the process. Stronger connections between and among the private sector, governments, educational institutions and community organizations can enhance our ability to build capacity in the food sectors and revitalize the regional food system.

Roles and Responsibilities

The private sector, government agencies, other groups and the public play important roles in the regional food system.

Private sector

The structure of the food system and the variety of firms involved reflect broader market trends, the history of the region, and the entrepreneurship of individuals. Business is the foundation of a regional food system. Decision-making in this sector is guided by a need to be financially viable in the face of fluctuations in market demand, production costs, competition, regulation, the changing structure of the industry and other factors. Within this context there are many in the food sector who see opportunities to address consumer interests for greater sustainability and health.

Exports will continue to be important for some in the agriculture, fishing and food processing sector in the region. But for the vast number of small scale producers and processors, developing more and secured venues for selling locally is critical because they are unable to produce in the volumes required to operate within the global supply chains.

Innovation is the key to improving productivity and business success in the private sector and this relies on investment in research and development. The private

sector will have to take the lead on this but because there are broader economic and social benefits associated with stronger food sector, governments and educational institutions can also make important contributions.

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 is responsible for regulating food products, packaging and labeling as well as food safety emergencies, testing products for chemical residues, 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 and Lands is responsible for providing a balanced approach that will promote economic and social development objectives with those of environmental sustainability for the agriculture, aquaculture and food sectors in the B.C. The Ministry

leads the development of strategic public policy for the sustainable use of Crown land and other resources. In addition, the Ministry funds the Agricultural Land Commission and the B.C. Farm Industry Review Board.

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. The Ministry of Healthy Living and Sport is responsible for promoting health and reducing the risk of chronic disease conditions. Regional Health Authorities provide a range of services from hospital care, to community-based residential, home health, mental health and public health services. In Metro Vancouver, Vancouver Coastal Health delivers services to the City of Vancouver, Richmond, the North Shore and surrounding areas, while Fraser Health provides services to municipalities east from Burnaby to Abbotsford.

The Ministry of Education integrates family and community needs with early learning initiatives and educational services. It sets standards for Boards of Education including nutritional requirements for school food.

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, B.C.'s comprehensive water plan. The Ministry also works on strategies to manage waste, recover resources, reduce toxins and emissions and conserve wildlife and marine species and habitats.

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.

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
- 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
- the provision of potable water and associated infrastructure
- collecting and treating liquid waste (sewage) and promoting best practices for stormwater management
- the regulation of air quality – this affects individual food producers and processors and overall air quality affects crop production
- the plans and operations of regional parks which include some ALR lands
- 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 maintain the rural character. The more urban municipalities usually 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
- developing plans for municipal infrastructure, buildings and properties like composting facilities, community centres and parks that can be utilized to support community food security
- responsibility for 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
- public education as a means for addressing the range of health and social problems that confront their constituencies
- community engagement to involve citizens in developing food policies and initiatives.

Non-governmental Organizations and Community Groups

Some non-governmental organizations (NGOs) have been working to improve 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 the 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 are also providing critical community services for vulnerable groups. At the same time, the number of community groups working on food issues at the grassroots level has significantly increased. These groups are primarily volunteer based where members are engaged in a variety of projects such as building community gardens and teaching growing, preserving and food preparation skills.

Educational Institutions

Schools, universities and colleges are sites for creative initiatives, important research and teaching that support and influence changes in the regional 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. At the same time, 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 new innovations in the food system.

Consumers and the Public

Consumer demand can be a powerful force in the food system. Over the past few decades the demand for convenience foods and the popularity of dining out has increased reflecting changes in personal and family lifestyles. At the same time, consumers are expressing an interest in purchasing foods that reflect their values. Consumers are asking about where and how our food is produced along with questions about the working conditions and incomes of farmers, fishermen and workers. In response, changes have been made in the existing supply chain and markets for new products have emerged, for instance “fair trade” products, organics, and the labeling of local 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 per cent reduction in greenhouse gas emissions by 2020 and a 80 per cent 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.

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.

Coordinating with other Metro Vancouver Plans

The Sustainability Framework provides a mechanism for linking the Regional Food System Strategy with other Metro Vancouver plans to make the best use of society's resources and minimize the region's impact on the environment.

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, Liquid Waste Management Plan, Air Quality Management Plan and the Parks and Greenways Plan.

PART TWO: THE STRATEGIC ACTION PLAN

GOALS, STRATEGIES and SAMPLE ACTIONS

Metro Vancouver's Food System Strategy encompasses five goals and twenty strategies. Examples of actions currently undertaken by the private sector, community organizations, educational institutions and different levels of government are provided under each strategy. A full list of actions is appended to the Strategy and this is a dynamic document that will evolve and be further developed over time in collaboration with partners engaged in ongoing process.

Proposed priority actions for collaboration are identified for each goal that could build momentum or leverage important changes in the Metro Vancouver food system. Proposed actions for Metro Vancouver are also presented for review.

Goal 1: Increased Capacity to Produce Food Close to Home

A strong regional food system in Metro Vancouver can only be built if there are viable business opportunities for engaging in farming and fishing. For agriculture, expanding capacity requires a secure land base, reliable access to labour and affordable water, and a community setting that supports farming. For the fishing industry a commitment to management practices that will rebuild fish populations and habitat is important. Equally important is investing in the next generation of food producers. In the more urbanized neighbourhoods of Metro Vancouver there is the potential to produce more

fresh food, build social capital and connectivity among residents interested in growing their own food.

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 creates ongoing pressure to exclude lands from the Agricultural Land Reserve (ALR) for urban development. Perhaps a greater threat to farmland in Metro Vancouver is 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 for dumping fill and truck parking. Prime farmland is a limited resource and is essential for ensuring resiliency in the regional food system.

EXAMPLES OF CURRENT ACTIONS

- The Ministry of Agriculture and Lands is developing farm homeplate standards to limit the size and location of the residential footprint on farm lands. The Corporation of Delta already has a bylaw limiting the size of residences on farmland.
- The draft 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 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 land in the ALR.

Strategy 1.2 Restore fish habitat and protect sustainable sources of seafood

Dramatic fluctuations in salmon populations coupled with declines in other fish species have been attributed to management policies and practices that did not adequately take into account the complexity of forces affecting the health of fish populations including changing climatic regimes affecting ocean ecosystems. Attempt-

ing to rebuild salmon populations to a consistent abundance is a complex undertaking involving many partners and actions. Within the Metro Vancouver region, our contribution to this effort involves protecting and restoring salmon spawning and rearing habitat in the network of urban streams in the region. Poor land use decisions combined with storm and rainwater management that have led to pollution and drainage issues that have contributed to the degradation of habitat. Fish, including salmon, and other seafood will benefit from a reduction in contaminant loadings in streams, rivers and the ocean.

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.
- Metro Vancouver and the Kwikwetlem First Nation are conducting a three-year study of lake ecology and potential drinking water quality impacts associated with the reintroduction of sockeye to the Coquitlam Reservoirs.
- Municipalities have completed over 22 Integrated Stormwater Management Plans (ISMPs) that will improve the health of urban streams. It is anticipated that most of the region's watersheds will have ISMPs by 2014.

Strategy 1.3 Increase commercial food production

Land for farmers and habitat for fish are essential, but are not the only conditions necessary for increasing commercial food production in the region. To produce more food locally, farmers need access to sufficient volumes of water of appropriate quality at affordable prices. Likewise the success of salmon runs is dependent on maintaining sufficient stream flows. 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 operations in the region are to expand.

Labour is another critical input for food production. Given the seasonality of fish runs and farm production in the region, the demand for labour is particularly high during harvest time. This creates swings in the demand for labour over the course of a year.

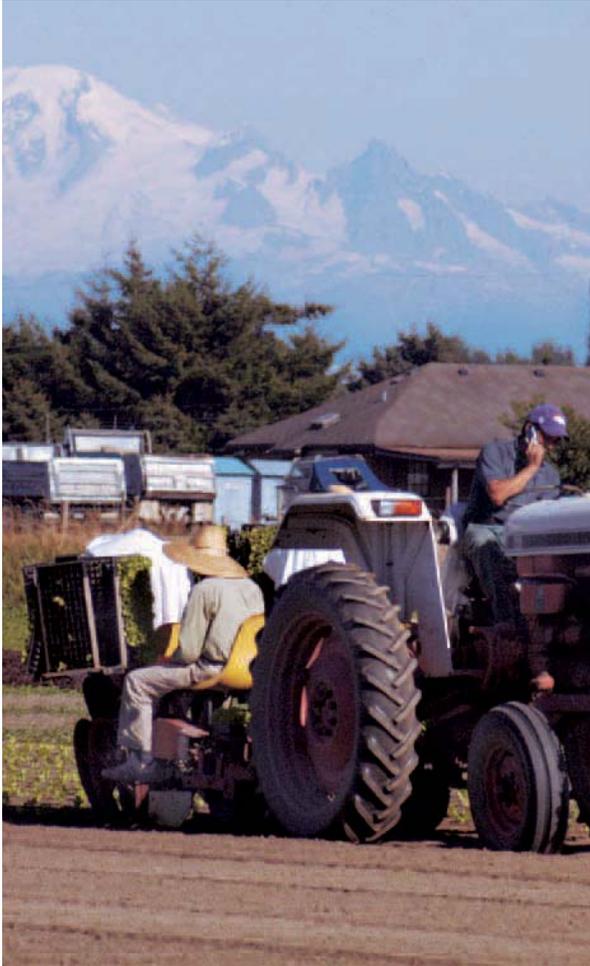
Also important to increasing commercial food production is continual management of the tensions that can arise when urban neighbourhoods or rural residential properties abut agricultural operations. Conflicts that arise between farming and urban land use can be better managed through policies that anticipate contentious and difficult to resolve issues.

EXAMPLES OF CURRENT ACTIONS

- The City of Pitt Meadows is making improvements to the rural drainage system to enhance the supply of irrigation water for agriculture.
- The Farm Industry Review Board determines normal farm practices, in relation to complaints by adjacent neighbours, about nuisance issues on farms.
- Metro Vancouver is embarking on water use plans for the Capilano and Seymour watersheds that will explicitly consider water flows required for fish stocks.

Strategy 1.4 Invest in a new generation of food producers

The high cost of agricultural land in the region coupled with the uncertain profit margins associated with small scale farming has meant few young people choose farming as a career. This is true for those new to the profession, and farmers immigrating from other regions as well as those who stand to inherit a family farm. Innovative policies are needed to attract and retain new entrants into farming while keeping current farms viable. Prospects for success can be improved with better access to land and applied research into sustainable farming practices.



EXAMPLES OF CURRENT ACTIONS

- Kwantlen Polytechnic University has developed a training program that provides practical knowledge, farm skills, apprenticeship and land leasing opportunities for new farmers through their new Farm School in Richmond.
- The Fraser Valley Direct Marketing Association has developed a Former Farmer to Farmer mentorship program.
- BC Agriculture Council established BC 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.

Strategy 1.5 Encourage urban agriculture

In addition to rural agriculture, there are opportunities to increase food production on private and public lands in urbanized areas. Community gardens and urban farms are using public lands to cultivate food while some enterprising individuals are farming networks of private gardens. The yields of these projects are either sold or used personally. Some community groups are using urban gardens as a means to teach disadvantaged groups how to produce and eat healthy foods. 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 neighborhoods and contributes to the ecological health of the region.

EXAMPLES OF CURRENT ACTIONS

- The City of Vancouver is leading several urban agriculture initiatives including the establishment of numerous community gardens on city land, allowing people to raise chickens in their backyards, and continuing to host the City Farmer information hub and demonstration garden.
- The City of Richmond has developed zoning that permits community gardens, rooftop farming, fruit trees and other edible landscapes in suitable urban locations.
- The EcoUrbia Network is building community farms on abandoned or underutilized tracts of land on the North Shore, hiring farmers to grow local organic food for sale and then using a portion of the proceeds to actively engage residents on food issues.

Goal 1 Proposed Actions

GOAL 1 PROPOSED PRIORITY ACTIONS FOR COLLABORATION

- Reduce agricultural land speculation by applying value capture mechanisms for the benefit and compensation of agriculture when ALR land is converted to non farm use.
- Create a Regional Farmland Trust that could be used to purchase farmland for sale, in or out of the ALR, to lease to farmers, especially young ones, who cannot afford the purchase price. The Trust could be arranged by the pooling of private and public resources.
- Determine avenues to make water more affordable and accessible to agriculture.
- Develop land use inventories of public lands, including parks, boulevards, right-of-ways, and rooftops that could be used for urban agriculture and follow with an assessment of how to balance agricultural and conservational values. In the case of parks, recreational values will also need to be considered.

GOAL 1 PROPOSED METRO VANCOUVER ACTIONS

- Monitor and maintain indicators and other measures related to trends in agricultural land and food production in the region and publish the results.



Goal 2:

Enhanced Role of Food Sector in the Regional Economy

The food sector is an important pillar of the regional economy, but it is not generally recognized as such. One out of eight jobs in Metro Vancouver is related to the production and processing of local foods or in the food service sector. The economic contribution of the food sector could be strengthened with a supportive policy framework and strategic collaboration in filling the weak spots in the regional supply chain. Expanding the local component of the food sector will contribute to the economic prosperity of the region (see sidebar). The potential to grow the regional food economy requires building the capacity, including new or renewed infrastructure, for more value added production, storage and distribution in the region.

The Multiplier Effect

Every time money is spent on food produced locally, as opposed to spending on food imported from elsewhere, it boosts local incomes and economic activity. This is because a locally owned business is more likely to purchase what it needs from local suppliers who will then also have more to spend locally. When more consumers buy locally this creates new jobs, higher incomes 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 per cent of food dollars into “locally directed spending” would inject nearly \$1 billion into the 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.¹²

Strategy 2.1 Address the capacity of processing, warehousing and distributing local foods

The agriculture and fishing sectors in the region are characterized by smaller scale operations that are unable to deliver the volume of products required by buyers in the export markets. To sell more of their produce locally and more of it year round, 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

¹² Sonntag, V. (2008) Why Local Linkages Matter: Findings from the Local Food Economy Study. Seattle, Washington. Sustainable Seattle.

collaboration between the public and private sector to develop the networks and the financial tools necessary to attract new investment in the development of infrastructure. Even with the facilities in place, processes and protocols will have to be developed to assure the safety and the ability to trace sources of food products and ingredients when handling the diversified farm and fish products coming from the small to medium size operations in the region.

EXAMPLES OF CURRENT ACTIONS

- Local Food First is leading a multi-party initiative to build the New City Market which will serve as a commercial hub for storage, processing and selling of local foods in Vancouver.
- Several government, private sector and educational institutions are partnering to create a virtual B.C. Agri Food Centre website that provides food businesses with access to research and expertise on new production technologies, product development, marketing and operational management.

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.

Strategy 2.2 Secure markets for local foods through institutional purchasing decisions

The local component of the region's food supply is relatively small. Establishing preferences for locally produced and processed foods in the procurement policies of large institutional buyers of food, like hospitals, universities, schools and local governments can help establish secure markets for local foods. Purchasing more local food will involve collaboration among purchasers, food distributors and local producers in identifying existing capacities and opportunities for expansion. This will be an interactive process but doing so will assure potential investors, from the private or social enterprise sectors, that investment in local food businesses and infrastructure is financially sound. The implementation of local food procurement policies will have to respect various trade agreements including the North American Free Trade Agreement (NAFTA) and the Trade, Investment, Labour Mobility Agreement (TILMA).



Photo: Ministry of Agriculture and Lands

Strategy 2.3 Increase opportunities for direct marketing of local foods

Another venue for small scale food producers and processors to sell their products is direct marketing. Expanding the opportunities for direct marketing involves policy changes that enable on-farm activities, like processing and sales, agri-tourism, as well as commitments to multi-vendor sites like farmers markets. Other initiatives such as community supported agriculture (CSAs) help reduce the risk for participating farmers. Direct marketing is an opportunity to connect urban residents with those that grow and harvest their foods. In addition to providing a venue for selling more local food products, direct marketing offers a means for urban residents to become more familiar with the people who produce their foods.

EXAMPLES OF CURRENT ACTIONS

- The Fraser Valley Farm Direct Marketing Association distributes a Farm Fresh Guide which lists farms that sell directly to consumers.
- Community groups working with local farmers and processors have established farmers markets in West Vancouver, Burnaby, Coquitlam, Maple Ridge, Delta, Langley City, New Westminster, North Vancouver, Port Coquitlam, Port Moody, Surrey, Vancouver, Richmond and White Rock.
- Metro Vancouver and Simon Fraser University allow pocket farmers markets to operate within their premises, to provide employees and others the opportunity to buy farm fresh produce and locally produced food products while introducing new market venues for food producers and processors.

Strategy 2.4 Further develop value chains within the food sector

A value chain refers to a collaborative approach in bringing a product among producers, processors, distributors or retailers to bring a product to market. A value chain produces a food item that responds to the ethical and environmental values of consumers, such as an 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. So the creation of a value chain may be in response to perceived niche markets or to increase the efficiencies among small scale firms. The effect is to reduce some of the risk of each firm while improving 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.

EXAMPLES OF CURRENT ACTION

- Investment Agriculture Foundation of B.C. is supporting the development of value chains for differentiated products in the food sector through the B.C. Value Chain Initiative.
- Sysco and Gordon Food Services (Neptune) have developed contracts with local producers for restaurants who want to profile local foods.

Strategy 2.5 Expand the opportunities to experience local foods and the diversity of cuisines

Experiencing local food is one of the best ways to develop a passion for it. Through festivals celebrating harvests from the land and sea and different cuisines, we learn about the seasonality of local foods, new and healthier ways to prepare foods and the joy of sharing a meal. Creating and promoting these events build new networks in the regional food system, among farmers, fishermen, chefs, community groups, media and local governments. Once familiar with how to prepare local foods or committed to using more local products, consumers want to be able to find these products where they shop so they want to be clearly labeled in supermarkets and restaurants.

EXAMPLES OF CURRENT ACTIONS

- Municipalities in the Fraser Valley have created the Circle Farm Tours which are maps of local specialty farm-gate vendors, open air markets, eateries, heritage sites and fairs. These are self-guided tours.
- 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 are a short list of the variety of food festivals in the region.
- A wide number of grocers are identifying local foods through labels, in store signs and displays.
- Get Local Metro Vancouver has a website that provides information on how to find and choose local foods.



Goal 2 Proposed Actions

GOAL 2 PROPOSED PRIORITY ACTIONS FOR COLLABORATION

- Establish a Centre of Excellence for Food Technology similar to what exists in other provinces.
- Create cooperative service centres that provide business planning, marketing and administrative support to new businesses in the food sector.
- Develop a regional brand and label for food produced in Metro Vancouver.
- Support the development of a BC food terminal to enhance the opportunities for local farmers to get their produce into the conventional supply chain.

GOAL 2 PROPOSED METRO VANCOUVER ACTIONS

- Investigate options to create a regional fund for food system infrastructure improvements related to irrigation/drainage or capital investments in the local food value chain.
- Work with municipalities to identify Agricultural Enterprise Zones, outside the ALR, where revitalization tax exemptions and comprehensive zoning could be used to encourage the co-location of agriculture related businesses and services, including agricultural support services and value-added production.
- Create special events in regional parks throughout the growing season to highlight in-season produce and provide opportunities for direct marketing of local foods.



Goal 3: 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. Making better food choices is key to reversing this trend. Healthier 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. Improving consumer information about local and imported foods, expanding education opportunities and supporting community engagement activities can 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 of how to prepare healthy meals from scratch. 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.

EXAMPLES OF CURRENT ACTIONS

- Provincial Health Authority of BC has produced a Food Security Gateway, website for individuals and community groups interested in making “healthy eating the easy choice” and building food secure communities.
- The Canadian Diabetes Association and other health organizations offer educational programs that teach people about cooking, preserving seasonal food and preparing healthy meals such as Cooking Food for Families, Food Skills for Families and Cooking for Life.
- The Super Chef program recruits youth from low income households to participate in summer camps that focus on how to select and prepare food for a nutritious diet.

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. Buying food grown or harvested locally will contribute to the viability of local food producers and the prosperity of the regional economy. Support for local food products also builds resiliency of our food supplies in the face of pressures on the global food system, including rising energy prices, climate change and declining fish stocks.

EXAMPLES OF CURRENT ACTIONS

- Through the *Ocean Wise* or *Sea Choice* programs consumers can access information about the sustainability of seafood available locally to make informed decisions about the fish they eat at home or in restaurants.
- The Chef's Table Society of BC is active in promoting sustainable and local food choices among its members.
- Overwaitea Food Group and Loblaws have developed their own sustainable seafood policies that incorporates scientific research on fish stocks.



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 that 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.

EXAMPLES OF CURRENT ACTIONS

- UBC is conducting research that enriches a student's experience in connecting food, health and the environment through the Think & Eat Green@ School Program.
- Agriculture in the Classroom Foundation hosts workshops for educators, provides teachers with high quality print and video resources and conducts programs for schools such as Spuds in Tubs and Take a Bite of BC.
- Evergreen and the Environmental Youth Alliance are helping to establish edible schoolyard gardens and provide educational materials for teachers.

Goal 3 Proposed Actions

GOAL 3 PROPOSED PRIORITY ACTIONS FOR COLLABORATION

- Develop common messaging that links consumption of local foods to the viability of agriculture, fisheries and food processing businesses in the region.
- Provide better nutritional quality information on packaged and prepared foods through labeling or other innovative technologies.
- Develop creative school programs that will engage students and their families about the health benefits of increasing the amount of fruits and vegetables consumed.

GOAL 3 PROPOSED METRO VANCOUVER ACTIONS

- Continue to feature different aspects of the food system in video documentaries produced by Greater Vancouver TV.
- Continue the annual Agriculture Awareness funding grant program for non profit organizations.



Goal 4:

Access to Healthy, Culturally Diverse and Affordable Food for Everybody

Within Metro Vancouver there are people who do not have access to healthy food. For low income households, the challenge is paying for the high cost of housing and having enough disposable income to purchase the food necessary for a healthy diet. Incorporating a food perspective into community planning can begin to address physical barriers to accessing food while addressing hunger associated with poverty, low incomes and high housing costs will require a renewed commitment of senior levels of government to provide resources and policy support. In the meantime, community groups across the region are involved in innovative and effective projects to improve food access at the neighborhood level. Addressing food access will have to take into account varying individual preferences as well as cultural norms and religious requirements related to food. This is particularly important in a region where most of the new population growth will come from immigration.

Strategy 4.1 Improve food access through policy and community design

Developing food friendly neighborhoods are important in developing complete and healthy communities. Ensuring that there are adequate venues to buy nutritious foods, gardens and fruit trees, local food festivals and celebrations are important for building stronger and more vibrant neighbourhoods. In addition, community centres can become important hubs for learning about canning, preserving and cooking as well as food issues. These planning initiatives can also be supplemented by policies that expand the access to healthier foods.

EXAMPLES OF CURRENT ACTIONS

- The Fraser Valley Food Network has developed a Food Policy Toolkit to provide local organizations with simple ways to incorporate food policy guidelines into decision making. It addresses increasing local food sustainability, decreasing hunger through community capacity building, and improving nutritional health of community members.
- The 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 provide a community forum for discussing food system issues, developing local projects and proposing policy solutions.
- 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.
- The Provincial Health Services Authority produced “A Seat at the Table” to provide local governments with examples of policies to improve food security.

Strategy 4.2 Improve access to nutritious food among vulnerable groups

Vulnerable groups include the homeless, low income households, and seniors with low fixed incomes. Research links hunger and poverty 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.

Region-wide 26 per cent of all households have an annual income below \$30,000¹³. While addressing the roots of poverty are beyond the scope of this Strategy, 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. Building food self-reliance in vulnerable neighbourhoods will generate personal and community benefits.

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 (subsidized Meals on Wheels) and Food Security Networks which enable residents to take action on local food access issues including establishing community gardens and kitchens.
- The Golden Ears Food Education and Action Strategy Table (FEAST) is developing a senior's food resource guide and outreach initiatives to address seniors' food access issues in Maple Ridge and Pitt Meadows.
- The Greater Vancouver Food Bank Society funds Fresh Choices Kitchen which provides leadership training, workshops on topics like canning, and courses for food handlers.

Strategy 4.3 Enable non profit organizations to recover nutritious food

Food banks, the Salvation Army, Meals on Wheels and others have been feeding the homeless and economically challenged 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. Food recovery entails the collection of edible and safe food for distribution to vulnerable populations. It 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 food safety could improve the diets of people dependent on food programs.

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 households in need.
- Quest Outreach Society is British Columbia'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.
- The BC Food Processor Association publicly recognizes philanthropy in the food system through their Giving Back Program.

¹³ Metro Vancouver Housing Data Book, February 2010. Data from Statistics Canada.

Goal 4 Proposed Actions

GOAL 4 PROPOSED PRIORITY ACTIONS FOR COLLABORATION

- 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.
- Address barriers related to food safety regulations and requirements that will enable the redistribution of safe, nutritious and edible foods.
- 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.

GOAL 4 PROPOSED METRO VANCOUVER ACTIONS

- Continue to work with tenant associations in Metro Vancouver Housing Corporation complexes to establish kitchen facilities and community gardens.
- Co-host a workshop to share information on best practices in municipal food policy.



Goal 5: A Food System Consistent with Ecological Health

Producing food from agricultural lands and harvesting fish and seafood from the marine and freshwaters of the region is dependent on healthy and functioning ecosystems. Yet some conventional practices used in the food sector undermine the ecological health of the region and require better environmentally sustainable practices.

Taking a proactive approach to reducing waste in the food system can significantly reduce the demand for water, materials and energy resources. Equally important is to address greenhouse gas emissions and the impacts of global warming on the regional food system. Acting on a commitment to sustaining the environment should be publicized as it will appeal to consumers locally and abroad.

Strategy 5.1 Enhance ecosystem goods and services from, and for, food production systems

We derive benefits from healthy functioning ecosystems, called ecosystem services which include the provision of food, natural water purification, clean air, nutrient cycling, climate regulation, pollination, and wildlife habitat. Because these services are generally not recognized in the market system they are susceptible to unintentional negative impacts associated with population growth and economic development. From the perspective of the Regional Food System Strategy, it is particularly important to enhance the ecosystem goods and services provided by, and for, farmland and waterbodies through tools and incentives that reward private stewardship.

EXAMPLES OF CURRENT ACTIONS

- Simon Fraser University and the Ministry of Agriculture and Lands have initiated work 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.



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 it can be reduced. The generation of food waste occurs all along the food system – from the farm to the kitchen. In addition, “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 have economic and environmental benefits as do programs to improve recycling, reuse and the recovery of materials and energy from the remaining waste stream.

EXAMPLES OF CURRENT ACTIONS

- Quest’s Zero Waste project aims to reduce 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.
- Municipalities throughout the region are establishing curbside collection of residential food waste for composting.
- Metro Vancouver will continue to work with event organizers to implement waste minimization and recycling at community festivals, sporting events, conferences and trade shows. Best practices will be documented in a tool kit.

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 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 pesticide but also due to a dramatic expansion of meat production worldwide. Recognizing their role in sustainability, the private sector is investigating and adopting practices that reduce their carbon footprint and limit other negative impacts on the environment. Their efforts should be supported with applied research, education and policy reform.

EXAMPLES OF CURRENT ACTIONS

- The Green Table Network of restaurants and foodservice outlets are committed to eco-efficiency, energy and water conservation, beneficial waste management and reducing their carbon footprint.
- The Ministry of Agriculture and Lands and the BC Agriculture Council are working with local farmers to complete and implement Environmental Farm Plans.
- BC Hydro is assisting food businesses to develop a customized sustainable energy management plan by providing expertise on potential energy savings.



Strategy 5.4 Prepare for the impacts of climate change

Observed and projected climate change risks for Metro Vancouver include higher temperatures, increased precipitation, more intense storm events, a decline in snowpack, and sea level rise.¹⁴ The variability of annual and seasonal precipitation can have a dramatic impact on agricultural operations and fisheries. In addition, local farmland requiring drainage infrastructure will be affected by sea level rise¹⁵. 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 global warming already being experienced and those additional impacts that are anticipated.

¹⁴Black Shield Preparedness Solutions. 2010. In "Adapting to Climate Change: A Risk-based Guide for Local Governments in British Columbia".

¹⁵ David Whiting and Clarence Lai. 2008. Climate Variable Mapping and Agriculture – Metro Vancouver. Prepared for Metro Vancouver, December 2008.

EXAMPLES OF CURRENT ACTIONS

- BC Agriculture Council has developed a BC Agriculture and Food Climate Action Plan and provides information on adaptation measures to agricultural producers and food processors.
- Municipalities maintain dikes to protect urban and agricultural lands.
- Ministry of Agriculture and Lands works with local governments to prepare emergency plans and response for agriculture-related lands.



Goal 5 Proposed Actions

GOAL 5 PROPOSED PRIORITY ACTIONS FOR COLLABORATION

- Explore the possibilities of a program to compensate farmers for the public goods and ecological goods and services that agricultural land provides.
- Define food packaging requirements that meet food safety regulations, maintain product quality and reduce the amount of waste in municipal collections systems.

GOAL 5 PROPOSED METRO VANCOUVER ACTIONS

- Develop a Sustainable Food Production Academy at Colony Farm Regional Park to further research and training in sustainable agriculture and aquaculture.
- Initiate pilot projects to reduce the use of disposable take-out food and beverage packaging, plastic and disposable bags in the commercial sector.
- Develop and monitor indicators of fish habitat health in the region.



Photo: Ministry of Agriculture and Lands

PERFORMANCE MEASURES

Goal 1: Increased Capacity to Produce Food Close to Home

- 1.1 Total hectares of land in the ALR in Metro Vancouver (ALC)
 - 1.1.1 Annual number of hectares excluded from the ALR
 - 1.1.2 Annual number of hectares included into the ALR
 - 1.1.3 Annual number of hectares approved for non-farm use in the ALR
- 1.2 Total hectares of land categorized as farm use (BCAA)
- 1.3 Estimate of the amount of actively farmed land in Metro Vancouver (Agricultural land use inventories)
- 1.4 Average age of farmers in Metro Vancouver (Census)
- 1.5 Number of fish bearing streams in the region

Goal 2: Enhanced Role of the Food Sector in the Regional Economy

- 2.1 Total number of jobs in the food sector. (BC Stats)
- 2.2 Food sector jobs as a per cent of total regional employment (BC Stats)
- 2.3 Ratio of farm business gross receipts to operating expenses (Census)
- 2.4 Number of farmers markets (BC Farmers Markets Association – BCFMA)
- 2.5 Annual Gross Receipts for farmers markets (BCFMA)
- 2.6 Value of production per hectare of agricultural land
- 2.7 Total receipts from fishing and fish processing

Goal 3: Healthy and Sustainable Food Choices

- 3.1 Proportion of Metro Vancouver residents that eat fruits and vegetables 5 or more times per day (Provincial Health Services Authority – PHSA)
- 3.2 Proportion of Metro Vancouver residents with an overweight or obese self-reported BMI (PHSA)
- 3.3 Proportion of Metro Vancouver residents with Type II Diabetes (PHSA)
- 3.4 Number of schools in Metro Vancouver participating in “Agriculture in the Schools” program

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

- 4.1 Annual cost of a nutritious food basket as a proportion of median income for a two parent family in Metro Vancouver (PHSA)
- 4.2 Annual cost of a nutritious food basket as a proportion of after tax Low Income Cut-Off for single parent families with 2 children in Metro Vancouver (PHSA)

Goal 5: A Food System Consistent with Ecological Health

- 5.1 Number of farmers participating with Environmental Farm Plans in Metro Vancouver
- 5.2 Fish habitat health indicator
- 5.3 Number of organic farms
- 5.4 Percentage of food waste diverted from disposal (Metro Vancouver)

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 provided normally by a government agency.

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 cook 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) CSA members 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 coupled. 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 refers to the basics of life that provided by natural systems and biodiversity. For instance, the food we eat is a service of nature. It could be the result of the healthy functioning of ocean food

chains or the product of the complex interactions of the genetic material of plants or animals, soils, water, air quality, climate, and pollinators.

Edible landscapes are in urban areas where the food producing and attractive plants are used in place of plants with only ornamental value.

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 land uses 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.

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 which 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, preparation, and stored in ways that prevent contamination 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, agriculture and fishing, 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 Metro Vancouver.

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 scaled down versions of a farmers market where a community organization purchases locally grown food from farmers and products from small scale, local processors to sell to the public.

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 tend to drive firms 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 a 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:

DETAILED, DYNAMIC ACTION PLAN

(subject to ongoing revision and refinement)

Goal 1: Increased Capacity to Produce Food Close to Home

Strategy 1.1 Protect agricultural land for food production

EXAMPLES OF CURRENT ACTIONS

- The Ministry of Agriculture and Lands is developing farm homeplate standards to limit the size and location of the residential footprint on farm lands. The Corporation of Delta already has a bylaw limiting the size of residences on farmland.
- The draft 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 bylaw infractions on ALR land designated for agriculture such as illegal fill and truck parking – yet more local enforcement resources 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 land in the ALR.
- Metro Vancouver and the Ministry of Agriculture and Lands are updating 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 under different climate scenarios.
- The Ministry of Communities and Rural Development is reviewing farm tax policy to identify incentives for increasing agricultural production on ALR and non-ALR lands.

PROPOSED METRO VANCOUVER ACTIONS

- Metro Vancouver will monitor and maintain indicators and other measures related to trends in agricultural land and food production in the region and publicize the results.

OTHER PROPOSED ACTIONS

- Reduce agricultural land speculation by applying value capture mechanisms for the benefit and

compensation of agriculture when ALR land is converted to non farm use.

- Create a Regional Farmland Trust that could be used to purchase farmland for sale, in or out of the ALR, to lease to farmers, especially young ones, who cannot afford the purchase price. The Trust could be arranged by the pooling of private and public resources.
- Reduce the area of exclusions from the Agricultural Land Reserve (ALR) and area approved for non-farm use.

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.
- Metro Vancouver and the Kwikwetlem First Nation are conducting a three-year study of lake ecology and potential drinking water quality impacts associated with the reintroduction of sockeye to the Coquitlam Reservoirs.
- Hatcheries on the Capilano River, Tynehead Park, Kanaka Creek, Noons Creek, Seymour River and Hyde Creek increase the freshwater survival of salmon in the region.
- Metro Vancouver and municipalities are involved in the development of over 22 Integrated Stormwater Management Plans that will improve the health of urban streams. It is anticipated that most of the region's watersheds will be completed by 2014.
- Metro Vancouver continues to promote water conservation in the region and maintain flows from the drinking water reservoirs to ensure adequate stream flows for salmon runs.
- Metro Vancouver will contribute to the health of the Burrard Inlet and Fraser River estuary by upgrading the Lion's Gate and Iona Wastewater Treatment Plants to secondary treatment and strengthening source controls on toxics disposed in sanitary sewers.

OTHER PROPOSED ACTIONS

- Encourage the adoption of on-site rainwater management which will promote more infiltration that will recharge aquifers and flows in streams through urban and rural areas.
- Reintroduce rural extension and business development officers and services for farmers in Metro Vancouver.

Strategy 1.3 Increase commercial food production

EXAMPLES OF CURRENT ACTIONS

- Through the process to modernize the B.C. Water Act, the Ministry of Environment is developing water policies and licenses that protect wild fish populations and ensure 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 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.
- The Farm Industry Review Board determines normal farm practices, in relation to complaints by adjacent neighbours, about nuisance issues on farms.
- Metro Vancouver is embarking on water use plans for the Capilano and Seymour watersheds that will explicitly consider water flows required for fish stocks.
- Most municipalities manage the interface between agriculture and urban neighbours through development permit areas that direct the siting and buffering of urban development in the ALR. The City of Richmond requires that the buffer be located on the urban side.
- Municipalities have confirmed the role of agriculture in their local economies through Agricultural Area Plans and/or Economic Development Strategies.

OTHER PROPOSED ACTIONS

- Determine avenues to make water more affordable and accessible to agriculture.
- Implement Development Permit Areas through permit conditions that require edge planning on urban land adjacent to farmland.
- Expand agricultural extension and education programs that promote the viability of farming while providing information on waste management, soil conservation, and environmental protection.
- Promote the introduction of new crop varieties and techniques to extend the growing season.
- Support efforts of farmers in developing alternative water sources, including recycled water, for irrigation.
- Reinstatement of the National Water Supply Expansion Program that provides infrastructure to secure a long term water supply for agriculture without compromising ecosystem health.
- Ensure safe working conditions and fair compensation for farm labour along with proper monitoring and enforcement of regulations.
- Develop management tools and programs that will support the sustainable harvesting of wild foods like honey, berries and mushrooms.
- Create a Regional Agricultural Fund through new regional fees to support irrigation and drainage infrastructure of agricultural lands.

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 has developed a training program that provides practical knowledge, farm skills, apprenticeship and land leasing opportunities for new farmers through their new Farm School in Richmond.

- Earthwise Society offers a variety of courses and workshops on farming and gardening. Programs include an “on farm” apprenticeship for future 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.
- BC Agriculture Council established BC 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.

OTHER PROPOSED ACTIONS

- Create new loan and grant programs for new farmers to secure land, farm buildings or equipment for food production.
- Facilitate the creation of cooperative farms.
- 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 Encourage urban agriculture

EXAMPLES OF CURRENT ACTIONS

- The City of Vancouver is leading several urban agriculture initiatives including the establishment of numerous community gardens on city land, allowing people to raise chickens in their backyards, and continuing to host the City Farmer information hub and demonstration garden.

- The City of Richmond has developed zoning that permits community gardens, rooftop farming, fruit trees and other edible landscapes in suitable urban locations.
- The UBC Farm has provided a meeting place and growing space for an urban 4-H club.
- The EcoUrbia Network is building community farms on abandoned or underutilized tracts of land on 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 Township of Langley has dedicated two parcels of land for the creation of community gardens.
- The Union of BC Municipalities commissioned and distributed an extensive manual – called Dig It! – to support municipalities in the creation of community gardens.

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 and then follow with an assessment of how to balance agricultural and conservational values. In the case of parks, recreational values will also need to be considered.
- Establish neighbourhood facilities for urban agriculture for storing shared tools and equipment for canning and dehydration.
- Create a regional network of community gardeners to provide support and a sharing of best practices and information
- Create a Metro Urban Agriculture Committee to advise Metro Vancouver and local governments on ways to support urban agriculture initiatives.
- Develop and implement zoning that permits community gardens, rooftop farming, fruit trees and other edible landscapes in suitable urban locations.

Goal 2: Enhanced Role of Food Sector in the Regional Economy

Strategy 2.1 Address the capacity for processing, warehousing and distributing 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 commercial hub for storage, processing and selling of local foods in Vancouver.
- Several government, private sector and educational institutions are partnering to create a virtual B.C. Agri Food Centre website that provides food businesses with access to research and expertise on new production technologies, product development, marketing and operational management.
- The Small Scale Food Processor's Association is exploring the opportunities for a cooperative insurance package for its members.

PROPOSED METRO VANCOUVER ACTIONS

- Work with municipalities to identify Agricultural Enterprise Zones, outside the ALR, where revitalization tax exemptions and comprehensive zoning could be used to encourage the co-location of agriculture related businesses and services including support services and value-added production.

OTHER PROPOSED ACTIONS

- Establish a Centre of Excellence for Food Technology similar to what exists in other provinces.
- Create cooperative service centres that provide business planning, marketing and administrative support to new businesses in the food sector.
- Support the development of a BC food terminal to enhance the opportunities for local farmers, fishermen, and processors to get their products into the conventional supply chain.

- Develop the financial instruments that will enable local entrepreneurs to address gaps in the current food infrastructure.
- Provide the research, technological and venue support for building a food cluster in Metro Vancouver that would develop partnerships among food businesses and governments to raise the profile of the sector and expand its capacity for expansion, including into new products associated with the fish and farm products of the region.
- Develop incentives and a policy framework for expanding co-packing and other options for sharing existing processing facilities.
- Create a Regional Food System Fund through new regional fees or compensation funds to build a Metro Vancouver Food Business Incubator to support a wider range of start-up, diverse and artisanal food entrepreneurs.
- Establish food hubs in strategic locations throughout the region to facilitate the distribution and marketing of local foods.

Strategy 2.2 Secure markets for local foods through institutional purchasing decisions

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.

Strategy 2.3 Increase opportunities for direct marketing of local foods

EXAMPLES OF CURRENT ACTIONS

- The Fraser Valley Farm Direct Marketing Association distributes a Farm Fresh Guide which lists farms that selling directly to consumers.
- Community groups working with local farmers and processors have established farmers markets in West Vancouver, Burnaby, Coquitlam, Maple Ridge, Delta, Langley City, New Westminster, North Vancouver, Port Coquitlam, Port Moody, Surrey, Vancouver, Richmond and White Rock.
- Farm Folk/City Folk have organized a website, Shared Harvest BC, where farmers, fishermen, retailers, restaurants, charities, schools and community members can list and source food products for sale or donation.
- 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.
- Vancouver Farmers Markets is producing a manual for municipalities and farmers markets societies on best practices for creating and growing the number and size of farmers markets.
- Metro Vancouver and Simon Fraser University allow pocket farmers markets to operate within their premises, to provide employees and others the opportunity to buy farm fresh produce and locally produced food products while introducing new market venues for food producers and processors.

OTHER PROPOSED ACTIONS

- Streamline the process that allows small scale food producers the option 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.
- Implement zoning and by-law changes conducive for the start-up and operation of farmers markets year round.

Strategy 2.4 Further develop value chains within the food sector

EXAMPLES OF CURRENT ACTION

- Investment Agriculture Foundation of B.C. is supporting the development of value chains for differentiated products in the food sector through the B.C. Value Chain Initiative.
- Sysco and Gordon Food Services (Neptune) have developed contracts with local producers for restaurants who want to profile local foods.

OTHER PROPOSED ACTIONS

- Support shared service cooperative networks for small producers based on the Heritage Food Service Co-op model for facilities such as certified commercial grade kitchens.
- Increase marketing quota on specialty food products in relation to market growth; i.e., free range and organic eggs.

Strategy 2.5 Expand the opportunities to experience local foods and the diversity of cuisines

EXAMPLES OF CURRENT ACTIONS

- Municipalities in the Fraser Valley have created the Circle Farm Tours which are maps of local specialty farm-gate vendors, open air markets, eateries, heritage sites and fairs. These are self-guided tours.
- 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 are a short list of the variety of food festivals in the region.
- A wide number of grocers are identifying local foods through labels, in store signs and displays.
- Get Local Metro Vancouver has a website that provides information on how to find and choose local foods.
- Slow Food Vancouver's summer cycle tours provide opportunities for famers to market their products while increasing awareness of the variety of farm products available locally.

PROPOSED METRO VANCOUVER ACTIONS

- Create special events in regional parks throughout the growing season to highlight in-season produce and provide opportunities for direct marketing of local foods.
- Promote events that profile local foods and the multi-culture cuisine of Metro Vancouver in the community arts and culture calendar.
- Develop an agriculture theme as the part of “Experience the Fraser” program to build public awareness of local foods through opportunities to taste, eat and purchase them.

OTHER PROPOSED ACTIONS

- Feature seasonal foods in groceries and supermarkets through signature and special events.
- Develop a regional brand and label for food produced in Metro Vancouver.
- Create “local market days” in supermarkets and grocery stores that profile local produce in season.
- Increase the outreach of “buy local” campaigns by targeting new immigrant audiences in their own languages.

Goal 3: Healthy and Sustainable Food Choices

Strategy 3.1 Enable residents to make healthy food choices

EXAMPLES OF CURRENT ACTIONS

- The Food Security Gateway, produced by the Provincial Health Authority of BC, is a website for individuals and community groups interested in making “healthy eating the easy choice” and building food secure communities.
- The Canadian Diabetes Association and other health organizations offer educational programs that teach people about cooking, preserving seasonal food and preparing healthy meals such as Cooking Food for Families, Food Skills for Families and Cooking for Life.
- Langley Environmental Partners Society offers workshops on canning and the Seed to Plate program.
- The Super Chefs Program recruits youth from low income household to participate in summer camps that focus on how to select and prepare foods for a nutritious diet.
- Save-On Foods has dieticians that lead tours of the stores and discuss the value of healthy eating.
- Act Now BC, in conjunction with funding from several provincial ministries, has organized the B.C. Fruit and Vegetable Nutritional Program. It provides students in elementary schools two servings of fruit and vegetables for fourteen weeks in the school year.

OTHER PROPOSED ACTIONS

- Provide better nutritional quality information on packaged and prepared foods through labeling or other innovative technologies.
- Develop prenatal programs that will improve diets of women while they are pregnant through information and food access. This early investment and ongoing support should improve the diets of their children.

- Develop school policies that provide and promote nutritious food choices for school lunch programs and cafeterias.
- Require better nutrition information on restaurant menus.
- Participate in the Provincial Health Services Authority’s new obesity reduction strategy.
- Develop social marketing campaigns to communicate the need to reduce the intake of salt and sweeteners in our daily diet.
- Advocate for regulating advertising and other marketing of non-nutritious foods targeted at children.
- Ensure that new schools and hospitals, or those being retrofitted, have kitchen facilities to support preparation of healthy meals.

Strategy 3.2 Communicate how food choices support sustainability

EXAMPLES OF CURRENT ACTIONS

- Through the *Ocean Wise* or *Sea Choice* programs consumers can access information about the sustainability of seafood available locally to make informed decisions about the fish they eat at home or in restaurants.
- Overwaitea Food Group and Loblaws have developed their own sustainable seafood policies that incorporates scientific research on fish stocks.
- *Edible Vancouver* is a magazine devoted to educating consumers about how to select and prepare food grown and harvested in the province.
- The Chef’s Table Society of BC is active in promoting sustainable and local food choices among its members.
- UBC Farm and 100 Mile Diet have produced “Eat Carbon Smart” a pocket guide and website that provides useful tips on how to make food choices that reduce the greenhouse gas emissions associated with the food system.

PROPOSED METRO VANCOUVER ACTIONS

- Continue to feature different aspects of the food system in video documentaries produced by Greater Vancouver TV.
- Continue the annual Agriculture Awareness funding grant program for non profit organizations.

OTHER PROPOSED ACTIONS

- Develop common messaging that links consumption of local foods to the viability of agriculture, fisheries and food processing businesses in the region.

Strategy 3.3 Enhance food literacy and skills in schools

EXAMPLES OF CURRENT ACTIONS

- Ministry of Education (Open School BC) is developing grade 12 curriculum materials on agriculture.
- UBC is conducting research that enriches a student's experience in connecting food, health and the environment through the Think & Eat Green@ School Program.
- The Vancouver School Board Food "Garden Process" document outlines the process of planning, designing, implementing, maintaining and sustaining school and daycare food gardens to ensure their success over the long term
- Agriculture in the Classroom Foundation hosts workshops for educators, provides teachers with high quality print and video resources and conducts programs for schools such as Spuds in Tubs and Take a Bite of BC.
- Evergreen and the Environmental Youth Alliance are helping to establish edible schoolyard garden and provide educational materials for teachers.

- Farm to School and Growing Chefs are just a few of the innovative programs being offered in schools to educate children about healthy eating and sustainable food production.
- The Langley School Board passed a policy on nutrition to foster health eating in schools.

OTHER PROPOSED ACTIONS

- Develop creative and engaging school programs about increasing the amount of fruits and vegetables consumed that will engage students and their families.
- Develop school board policies that are supportive of edible school gardens and programs.
- Develop a speaker program for schools featuring dietitians, nutritionists, chefs, farmers and other food and health professionals who can provide a holistic picture of the food system.
- Establish community service programs where secondary school students work on local farms.
- Provide more training in cooking principles and fundamental for the public and in high schools.
- Implement a comprehensive nutrition policy in schools that will assist students in attaining their full educational potential and contribute to the wellness of the community.
- 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.

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

Strategy 4.1 Improve food access through policy and community design

EXAMPLES OF CURRENT ACTIONS

- 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 Vancouver Food Policy Council provide community members a venue for discussing food system issues, developing local food security projects and proposing policy solutions.
- The Fraser Valley Food Network has developed a Food Policy Toolkit to provide local organizations with simple ways to incorporate food policy guidelines into decision making. It addresses increasing local food sustainability, decreasing hunger through community capacity building, and improving nutritional health of community members.
- 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.
- The Provincial Health Services Authority produced “A Seat at the Table” to provide local governments with examples of policies to improve food access.

PROPOSED METRO VANCOUVER ACTIONS

- Co-host a workshop to share information on best practices in municipal food policy.
- Continue to work with tenant associations in Metro Vancouver Housing Authority complexes to establish community kitchen facilities and community gardens.

OTHER PROPOSED ACTIONS

- Host a conference to identify the most viable ways to improve food access in the region.
- 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.
- Establish a regional food policy council to advise government agencies on issues related to food access.

Strategy 4.2 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 (subsidized Meals on Wheels) and Food Security Networks which enable residents to take action on local food access issues including establishing community gardens and kitchens.
- Members of the Fraser Valley Food Network have organized the Fraser Region Harvest Box program providing households in Aldergrove, Delta, Langley, Maple Ridge, Pitt Meadows, Surrey and Whiterock the opportunity to buy fresh, and when available, local produce at an affordable prices.
- The Golden Ears Food Education and Action Strategy Table (FEAST) is developing a senior’s food resource guide and outreach initiatives to address senior food access issues in Maple Ridge and Pitt Meadows.
- The Westside Food Security Collective in Vancouver has organized small farmers pocket markets in community facilities to provide low income seniors to ensure their access to nutritious and fresh foods.
- The Greater Vancouver Food Bank Society funds Fresh Choices Kitchen which provides leadership training, workshops on topics like canning, and courses for food handlers.

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- Hollyburn North Shore Youth Safe House (NSYSH) has a 400 square foot garden to grow nutritious vegetables and strawberries for youth living in the House. When the garden produces more than can be used by NSYSH, the surplus is shared with youth at risk and their families.

PROPOSED METRO VANCOUVER ACTIONS

- Continue to work with tenant associations in Metro Vancouver Housing Authority complexes to establish kitchen facilities and community gardens.

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.
- Fund community food facilitators to help residents in underserved neighbourhoods to identify their food needs and the means, including skills, facilities and policies, to fill the gaps.
- Investigate needed support for seniors and the aging population in accessing nutritious food
- Work with ActNowBC to reinstate funding support for the BC Association of Farmers' Markets Nutrition and Coupon Program. This provided vouchers to low income families with children for purchases at farmers and pocket 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.

Strategy 4.3 Enable non profit organizations to recover nutritious food

EXAMPLES OF CURRENT ACTIONS

- Community and school gardens are donating surplus fruits and vegetables to charitable organizations.
- 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 households in need.
- The BC Food Processor Association publicly recognizes philanthropy in the food system through their Giving Back Program.
- Quest Outreach Society is British Columbia'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.

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.

Goal 5: A Food System Consistent with Ecological Health

Strategy 5.1 Enhance ecosystem goods and services from, and for, food production systems

EXAMPLES OF CURRENT ACTIONS

- Simon Fraser University and the Ministry of Agriculture and Lands have initiated work 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.

PROPOSED METRO VANCOUVER ACTIONS

- Metro Vancouver will develop and monitor indicators of fish habitat health in the region.

OTHER PROPOSED ACTIONS

- Develop a policy approach and programming to compensate farmers for the public goods and ecological goods and services that agricultural land provides.
- Protect all significant wetlands, including riparian areas and streams, to support fish populations.
- Provide compensation to farmers for protecting environmentally sensitive areas and/or providing drainage services for urban communities.
- 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.
- Continue to collect data on the public amenity benefits and ecological goods provided by farmland.
- Create habitat to maintain and expand native pollinator populations on urban and rural lands.

- Provide payments to farmers for protecting environmentally sensitive areas and/or providing drainage services for urban communities.
- Pilot a research project identifying the variety of wildlife on agricultural lands and their conservation status.

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.
- The City of Surrey has partnered with Metro Vancouver to establish a biofuel plant adjacent to the Surrey Transfer Station.
- 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.
- Metro Vancouver will continue to work with event organizers to implement waste minimization and recycling at community festivals, sporting events, conferences and trade shows. Best practices will be captured in a tool kit.

PROPOSED METRO VANCOUVER ACTIONS

- Initiate pilot projects to reduce the use of disposable take-out food and beverage packaging, plastic and disposable bags in the commercial sector.

OTHER PROPOSED ACTIONS

- Define food packaging requirements that meet food safety regulations, maintain product quality and reduce the amount of waste in municipal collections systems.
- Provide information to consumers about food date labels (i.e. best before, sell by) to prevent confusion resulting in edible food being thrown out in the garbage.

Strategy 5.3 Facilitate adoption of environmentally sustainable practices

EXAMPLES OF CURRENT ACTIONS

- The Green Table Network of restaurants and foodservice outlets are committed to eco-efficiency, energy and water conservation, beneficial waste management and reducing their carbon footprint.
- The Ministry of Agriculture and Lands works with local farmers to complete Environmental Farm Plans and implement improvements with some assistance.
- BC Agriculture Council has developed a BC Agriculture and Food Climate Action Plan and provides information to agricultural producers and food processors through the Climate Action Initiative.
- BC Hydro is assisting food businesses to develop a customized sustainable energy management plan by providing expertise on potential energy savings.
- Faculty of Land and Food Systems at UBC teaches agro-ecology food production practices that would reduce reliance on fossil fuel inputs.

PROPOSED METRO VANCOUVER ACTIONS

- Continue the Smart Step program that provides information, technical assistance and waste assessments to help business identify actions that can reduce their waste materials and energy costs.
- Develop a Sustainable Food Production Academy at Colony Farm Regional Park to further research and training in sustainable agriculture and aquaculture.
- Revisit the business model for recapturing phosphorous from sewage treatment systems and evaluate as a nutrient source for food production.

OTHER PROPOSED ACTIONS

- Provide incentives to explore opportunities for recovering energy and other resources on farms through pilot projects.
- Continue to research appropriate manure and compost application rates that can recycle nutrients and build soil carbon.

- Support through research and policy the better nutrient control on agricultural lands. Research has established that the amount of nitrogen related to global agricultural activities has exceeded the 'safe' planetary boundaries.
- Promote energy recovery and lower GHG emissions through guidelines and regulatory reform for food production and processing businesses.
- Distribute information about and promote water conservation practices and new efficiency technologies within the food sectors.

Strategy 5.4 Prepare for the impacts of climate change

EXAMPLES OF CURRENT ACTIONS

- Municipalities maintain dikes to protect urban and agricultural lands.
- Ministry of Agriculture and Lands works with local governments to prepare emergency plans and response for agriculture-related lands.

OTHER PROPOSED ACTIONS

- Conduct applied research on crop varieties suitable for the region through test plots and variety field trials.
- Create seed banks to provide farmers a diversity of seeds to choose from including heritage strains.
- Communicate the priority actions from BC Agriculture and Food Climate Action Plan and report on the progress of the Plan.
- 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.

Actions that do not fit into existing Regional Food System Strategy

- Provide input, from the Metro Vancouver perspective, into the National Food Strategy. This Strategy is being developed by the Canadian Federation of Agriculture in collaboration with representatives from all parts of the agri-food sectors – from producers to consumers. The plan is designed to develop an overarching vision for the Canadian food system for the next 15 years.
- Engage key regional decision-makers in study tours to learn about the visioning, planning and partnerships that have contributed to strong local food economies in other countries.
- Increase funding for the work of the Ministry of Agriculture and Lands in accordance with the economic benefits associated with agriculture in B.C.