



Surrey Agricultural Plan

October 1999

Surrey Agriculture Plan

Phase 2 Report

Key Issues and Recommended Actions

For

Enhancing Surrey Agriculture

Prepared for:

Planning and Development Department
City of Surrey
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EXECUTIVE SUMMARY

The City of Surrey is pursuing a course of action to maintain agricultural activities and enhance agricultural viability in Surrey. As approved in the Official Community Plan (1996), this report presents the results of a study to develop a Farm Community Plan. The study, funded by the Surrey Farmers' Institute, the BC Investment Agriculture Foundation and the City, has been undertaken by Zbeetnoff Agro-Environmental Consulting in association with Quadra Planning Consultants Ltd.

The purpose of this report is to provide a comprehensive framework for addressing agricultural development issues, resolving rural-urban conflicts, and ensuring the long-term viability of agriculture. In generating this information, various sources were consulted, including the Agricultural Advisory Committee, a workshop at which the public identified rural-urban issues, and an open house (September 22, 1999) at which the findings were presented to the public. Public feedback indicates that the majority of attendees were in favour of the agricultural plan presented at the open house.

Surrey is an important agricultural area in the province because of its mild climate, productive soils, and ability to produce a wide range of crops. In 1996, Surrey agriculture accounted for about 22% of total farm sales in the GVRD, amounting to \$107 million, annually, second only to Langley (30%) in terms of gross farm receipts. At a provincial level, Surrey generates 5.8% of gross farm receipts although representing less than 1% of BC's arable crop land. In addition, virtually all the celery and lettuce grown in BC is produced in City while Surrey's farmers grow approximately two-thirds of provincial carrot and onion production. Surrey agriculture generates in excess of \$65 million in related economic activity, creates over 1100 person years of on-farm employment, and employs another 500-800 person years in agriculture-related industry.

The significance of Surrey's agricultural land also includes the environmental and social values which the farming community provides. Agricultural lands support or contribute to a range of non-agricultural benefits which the general public does not often recognize. These values include:

- Absorption and storage of surface water run-off
- Maintenance of green space and aesthetically pleasing countryside
- Wildlife habitat
- Passive and active recreational opportunities
- "Green lung" effect
- Public education on agricultural matters
- Provincial food security considerations
- Fair pricing of agricultural produce.

It should be emphasized that Surrey has undertaken a number of initiatives in support of agriculture, which include the following:

- ❑ Adoption of policies in the Official Community Plan to maintain and enhance agricultural activity in the City
- ❑ Creation of development permit areas and guidelines for development adjacent to farming areas
- ❑ Establishment of an Agricultural Advisory Committee to provide advice to Council on agricultural issues and policy matters
- ❑ Implementation of the Serpentine Nicomekl Lowlands Flood Control project, yielding major drainage benefits for Surrey's most productive agricultural lands
- ❑ Promotion and assistance to farmers' markets in the City.

Nevertheless, the Surrey agricultural community is at continued risk from deterioration of conditions needed for continued agricultural viability. While physical loss of agricultural acreage to non-farming land uses has been slowed through the protection offered by the Agricultural Land Reserve (ALR), encroachment on the land base is occurring from other uses permitted in the ALR. The environment for practicing agriculture has been eroded by encroaching suburban development and the exodus of service infrastructure and allied industry upon which agriculture depends. Conditions are rapidly approaching a crisis stage as traditional farming practices are more aggressively challenged, needed agricultural services (such as water, gas, and sewer) are restricted or priced beyond agricultural means, and market access of local producers to local consumers declines.

Protection of the land base, while important to preserving a future for Surrey agriculture, is only one critical component of the necessary conditions for viable agriculture. At the same time that the City has made significant steps towards enhancing farming conditions, farmers have faced on their own the economic pressures of operating in the rural-urban fringe. Recent experience and research in other jurisdictions suggests that new approaches and innovative solutions are required if agriculture in the rural-urban zone is to have a long-term future.

This report strongly recommends action by the various stakeholders to facilitate agricultural development in the City. Most importantly, a pro-active stance toward agricultural development is advocated, whereby the City regards agriculture as an economic development vehicle and provides services, incentives and encouragement to the type and location of agricultural investments preferred. This requires the development of an agricultural strategy to implement the agricultural plan based on the concept of agricultural land use efficiency.

Secondly, where land use in the rural-urban fringe is creating conflicts, the report recommends actions by various stakeholders that would result in community investment

in problem solving, innovative funding schemes, and mechanisms to address damages from rural-urban and environmental pressures on farmers.

Finally, it is recommended that the City expand its role in promoting its agricultural products to its residents. Local consumers need to know that their produce demands can be met from local production occurring in the City. Surrey's citizens need to know that the preservation of farming and the ALR in Surrey depends on them and their food purchasing decisions.

The key action areas for maintaining and enhancing agriculture in Surrey fall into four main categories:

1. Requirements for continued agricultural viability
2. Encroachment on the agricultural land base
3. Encroachment on farming operations
4. Agricultural implementation strategy

Within each of these four broad categories, key issues have been identified and actions recommended for improving conditions for agriculture.

1. REQUIREMENTS FOR CONTINUED AGRICULTURAL VIABILITY

a) Agricultural Land Use Efficiency

Some agricultural areas of the City are not attaining their optimal land use because of a lack of servicing. There are opportunities to promote agricultural development based on the capability of the soils and climate, encourage the optimal location for agricultural activities and allied industry by providing infrastructure in desired areas, and plan to minimize the potential for future rural-urban conflicts.

b) Rural-Urban Conflicts

Continued and increased effort is required to protect and enhance agricultural operations in rural-urban zones and to develop solutions that eliminate the factors causing rural-urban conflicts. Recommended actions include real estate disclosure of proximity to agricultural operations, suburban buffering that is more sensitive to agricultural operations, adoption of less disruptive agricultural practices, and mechanisms to assist the transfer of feasible and affordable technology to farmers.

c) Demand for Local Agricultural Products

Increased local demand for local agricultural products is essential for enhancing the viability of Surrey farmers. While growth in food consumption is correlated with

population growth, attracting the value-added food processing industry would create new demand for local production. Currently, approximately 20 to 30% of off-grade fresh produce is discarded because it does not meet the high fresh quality fresh standards. A local market for off-grade processing product does not currently exist, but would significantly increase marketing options and economic returns for farmers.

d) Marketing of Local Agricultural Products

Effective marketing increases the demand for local products by increasing the local share of the regional consumer market. This issue should be addressed by differentiating Surrey products from “commodities” that they compete with, such as on the basis of quality, freshness, safeness and origin. Additional recommended actions are promotion of on-farm direct marketing, farmers markets, educational materials, a Surrey logo, and subscription marketing. These actions would be designed to strengthen the link between local production and local food consumption.

e) Agricultural Service Sector Support

Farmers cannot operate without the support of a service industry to provide fuel, seed and plants, fertilizer, plant protection products, machinery and equipment, building supplies, etc. While the size of the Surrey agricultural sector may not be sufficient to support all types of input suppliers, there is a strong rationale for providing conditions for the continuance of support services that complement the City’s production and value-added requirements. In addition, recommended actions include designating areas within Surrey to attract new support services and working with local governments to provide regional solutions to agricultural servicing requirements.

f) Farm Succession

Farmers with considerable farming expertise are retiring and selling farms to new entrants unfamiliar with local conditions. The development of mechanisms to fill gaps in the knowledge base of new operators would reduce sub-standard land use and increase agricultural productivity in Surrey. Recommended actions include farm operator apprenticeship initiatives and new entrant farm management skills training.

2. ENCROACHMENT ON THE AGRICULTURAL LAND BASE

a) Conversion of Land within the ALR for Non-Farming Purposes

Conversion of ALR land to non-farming purposes may occur for a variety of “special uses”, including utility and transportation right of ways. Conversion into “outright uses” permitted by the Agricultural Land Commission (ALC) also occurs (ecological reserves, reserves for wildlife habitat, park and recreation reserves) and can result in land being removed from existing or potential agricultural production. While special cases are subject to ALC review, new “outright uses” are not and often result in

impacts on adjacent agricultural properties through unwanted recreational and/or wildlife impacts. Non-agricultural demand for farmland also contributes to making farmland investment costs higher. Recommended actions include the use of an agricultural impact statement to evaluate any proposal for conversion and the adoption of a “no-net-agricultural-loss” criterion to minimize impact on Surrey agriculture.

b) Impact of Ownership of ALR Land by Non-Farmers

There are no restrictions on who may own ALR in Surrey and non-farmer ownership, by itself, does not necessarily mean that farming will not occur. Nevertheless, ownership of agricultural land by non-farmers has significant, negative effects on Surrey agriculture such as idle untended land, unsuitable and/or variable lease arrangements, and maintenance of a speculative component in the agricultural land market. Recommended actions to minimize the impact of non-farmer ownership include encouraging new owners to prepare farm plans for the continuance of farming, ensuring that leasing terms promote agricultural arrangements, and making non-farming land purchases “reviewable uses” under the Agricultural Land Commission Act.

c) Impact of Residential Development in the ALR

Surrey has small and intermediate sized parcels in the ALR for which there is a significant demand as rural estates. There is currently no limit as to the size of the residential “footprint” on these ALR properties, yet large new residences often renders the residual portion of the property un-farmable due to fragmentation. Recommended actions to reduce the impact of rural estates include requiring farm plans to accompany new residence building applications in the ALR and restrictions on the size and location of residences on ALR properties.

d) Conversion of Agricultural Land Outside the ALR for Non-Farming Purposes

A large number of farms and a substantial portion of utilized farm acreage in Surrey are located outside of the ALR on land that is zoned agricultural (A-1) and rural (RU). In many instances, the rural-urban interface and conflict zone lies between farms outside the ALR and adjacent residential development. Conversion of this buffer into non-agricultural uses has led to increased complaints about practices used by farmers in the ALR. Recommended actions to ensure that the rural-urban fringe is managed to prevent encroachment on the agricultural land base in the City include developing an inventory of agricultural land and operations outside the ALR, assessing the importance of these areas to Surrey agriculture, and ensuring that successful farming operations outside the ALR are protected in the rural-urban fringe.

3. ENCROACHMENT ON AGRICULTURAL OPERATIONS

a) Recreational Access

Considerable pressure has been brought to bear on farmers by the public use of lands in agricultural areas for recreation purposes. However, it is generally not recognized that all dykes in the ALR in Surrey are privately owned, with the City having only a drainage right of way. Moreover, it is often overlooked that these lands are used to earn livelihoods and that trespass, theft and vandalism cause direct economic losses to farmers. Recommended actions to complement the City's stated Official Community Plan policy of "limit(ing) recreational uses on agricultural land" include measures to avoid and mitigate the disruption of existing levels of recreation on farming activities. These measures could include establishing of a joint Agricultural Advisory Committee-Parks, Recreation and Culture Commission sub-committee to review recreation-agriculture issues, undertaking agricultural impact assessments in conjunction with proposed recreation facilities in agricultural areas, and developing a compensation fund for damages and liability claims resulting from vandalism and access.

b) Wildlife Depredation of Crops

Farmers whose fields provide habitat for wildlife provide a broader social benefit that is largely unrecognized by society. Surrey farmers are extremely concerned with the field damage, crop loss and potential contamination of water supply and livestock feed caused primarily by wintering waterfowl and starlings. Recommended actions to address current hardships facing farmers include providing financial assistance for wildlife-resistant equipment (e.g., netting), encouraging senior levels of government to establish crop insurance and compensation programs, developing programs to control pest wildlife, and being vigilant that food-safe production conditions are maintained in Surrey.

c) Drainage, Irrigation and Flood Control

The implementation of the Serpentine-Nicomekl Lowlands Flood Control (SNLFC) Project will have a major positive impact on increasing the productivity on Surrey's most productive farmland. In addition, a current initiative to monitor fill in the lowlands within the City's drainage program is expected to quickly identify local drainage problems caused by unauthorized fill placement. The major outstanding issue is the question of availability of high quality irrigation water for farming. Recommended actions include speedy completion of the SNLFC project (including Master Drainage Plans and integrated stormwater management strategies), development of water supply to agriculture from alternate sources, and research into improved irrigation technology.

d) Pesticide Drift and Chemical Usage

Although farmers are strictly regulated in pesticide use and application, use of pesticides is a growing public concern which is heightened in rural-urban areas due

to the potential for unwanted drift into residential developments and school grounds. Recommended actions to alleviate this real or perceived threat to human health and safety include supporting markets for local organic farm produce, encouraging farmers to adopt integrated pest management techniques, and encouraging pesticide free production practices in sensitive areas.

e) Fish Habitat Protection

Many of the ditches flowing through agricultural areas in Surrey are considered fish bearing streams. Agriculture has been identified as a potential contributor to fish habitat degradation through improper management of manure, nutrients, pesticide and drainage, and reduction of water availability for fish. There is a requirement to reduce impacts from farming operations and to balance the needs of the farming community with the needs of fish habitat protection. Recommended actions include continued on-farm implementation of the Code of Agricultural Practice for Waste Management, adoption of "common sense" approaches that are both feasible and effective for protecting fish and fish habitat, and development of compensation programs for sensitive agricultural lands lost or alienated for stream buffers and riparian setbacks.

f) Safe Farm Vehicle Movement

With increasing traffic volumes on many rural roads, farmers are faced with greater difficulty in safely moving farm vehicles and machinery. Congestion and roadside parking leads to greater risk of accidents and blocked access to fields. Recommended actions include improvement of roads needing attention by adding pull-outs and widening, enforcing speed and parking regulations on farm roads, and requiring farm vehicles to be properly identified with slow vehicle warning lights when using roads.

4. AGRICULTURAL IMPLEMENTATION STRATEGY

The most critical single component of this Agricultural Plan is the development of the Agricultural Implementation Strategy to incorporate the recommended actions as part of an overall program to enhance agricultural viability in Surrey. To fulfill the agricultural objectives of the Official Community Plan, Surrey must be committed to develop and implement the Strategy, based on the guiding principle of promoting agricultural land use efficiency in the City.

This requires the dedication a staff person within the City to coordinate and liaise on behalf of agriculture with other City Departments. The staff person, or Agricultural Program Manager (APM), must be capable of working one-on-one with farmers and the farming community, providing technical advice on agricultural development issues, and representing the best interests of agriculture.

The APM would be schooled in the economic opportunities presented by the Agricultural Plan and be able to communicate agriculture's potential for contributing to the City's overall economic development strategy. This person would also facilitate and coordinate linkages that would further the Agricultural Implementation Strategy, including liaising with the agricultural service and value-added industries and other government agencies.

The APM will use the Agricultural Advisory Committee as a sounding forum for agricultural issues and initiatives. Sub-committees may be struck as required to deal with agriculture-recreation, agriculture-transportation, agriculture-development, or agriculture-fish/wildlife issues, as required.

A priority listing of recommended actions is presented in the body of the report. The anticipated responsibilities of key stakeholders by issue area are also indicated.

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1.0 INTRODUCTION

In its Official Community Plan (OCP) the City of Surrey identified the need to prepare an agriculture plan as part of its commitment to ensuring a viable farm sector within the City. In February 1999 the City began work on an agriculture plan, organized through the Planning and Development Department under the direction of the City's Agricultural Advisory Committee. A Steering Committee was formed to provide ongoing direction and advice in preparing the plan. This Committee is chaired by the Chair of the Agricultural Advisory Committee and includes representatives from the Ministry of Agriculture and Food, Agricultural Land Commission and several City of Surrey Departments: Planning and Development, Parks, Recreation and Culture and Engineering.

The Steering Committee contracted the services of a consulting team, consisting of a professional agrologist and planner, which is the author of this plan. The cost to prepare the Agricultural Plan is being shared by the BC Investment Agriculture Foundation, the Surrey Farmers Institute and the City of Surrey.

In preparation for the Agricultural Plan, City staff completed a Farm Community Background Report in 1998 which identified several issues facing agriculture within the City, with particular emphasis on both identified and perceived issues along the urban-rural interface (also referred to as the urban-rural fringe area). Many of the issues were identified through a survey of the farming community.

Part of the impetus for an Agriculture Plan was the enactment of the ***Farm Practices Protection Act*** and consequential amendments to the ***Municipal Act*** and ***Land Title Act*** which provide local governments with opportunities and tools to plan for and implement policies with respect to agriculture. These provincial initiatives also provide a basis for encouraging partnerships between local governments, the province and the farming industry.

The Surrey Agriculture Plan was prepared within the spirit and intent of these initiatives. The investigation and analysis has recognized that ongoing dialogue and co-operation between the City, senior governments, the farming industry and those residents living along the urban-rural interface will be key factors in successful implementation of the Plan.

1.1 Purpose of Agriculture Plan

The Agriculture Plan is intended to provide a strategy to attain the following stated goals of the City with respect to agriculture, namely:

- to review and address agricultural development issues
- to provide options for resolving conflicts between agricultural use of the land base and other uses; and
- to ensure the long-term viability of agriculture in the City of Surrey.

1.2 Summary of Key Phase 1 Report Findings

The Phase 1 Report, *Analysis of Economic and Planning Issues Facing Agriculture in the City of Surrey* (Zbeetnoff Agro-Environmental Consulting and Quadra Planning Consultants Ltd., July 1999) provides a comprehensive background for identifying and assessing issues related to agriculture's protection, enhancement and promotion in Surrey. The issues were identified from several sources including, the City of Surrey's Farm Community Plan Background Report (February 1998), Stakeholder Workshop (March 1999), a questionnaire sent to neighbourhood associations in the rural-urban fringe, and the Agricultural Plan Steering Committee.

The report confirmed that the presence of agricultural land and activity has significant economic, environmental and social importance to the City of Surrey. Surrey agriculture is located on some of the best arable lands in Canada with a most favourable climate, generating a proportion of agricultural economic activity far in excess of the City's share of the provincial agricultural land base. Surrey also produces agricultural products that are generally not grown elsewhere in BC.

The Phase 1 Report examined agricultural trends in Surrey from a larger economic perspective. It found that the extent of Surrey's responsiveness to new agricultural opportunities would be influenced by initiatives to promote, develop and attract desired development as well as the regulatory framework under which it must operate. In order to be viable, agriculture in Surrey must have the ability to adapt to changing economic conditions and productively use the lands reserved for it.

Several key issue areas were identified in Phase 1, the treatment of which will have tremendous impact on the future direction of Surrey agriculture.

In general, as discussed above, the policy framework of Surrey is supportive of agriculture. Major improvements in infrastructure (e.g., the drainage and flood control strategy) are highly positive for the protection of the land capability and the promotion of a viable agricultural production zone. Based on its analysis of several issues, the Phase 1 report concluded that the following should be addressed to assist Surrey in achieving its agricultural goals and policies:

- Develop an agricultural strategy to encourage the location, density and servicing of future areas and types of agricultural growth based on soils capability, availability of water and other resources, protection of the conditions necessary for effective farming, and planning to deal with cross-impacts in the rural-urban interface.
- Develop mitigation models for the rural-urban interface which apply the rationale and intent of the agricultural strategy to the resolution of regulatory issues and recognize the costs borne by farmers from unwarranted constraints on their farming operations.
- Apply “benefit-cost to agriculture” analysis for approving conversions within and adjacent to the ALR that consider the impact of non-agricultural projects on agriculture.
- Make “outright” non-agricultural land uses in the ALR which do not require approval by the Agricultural Commission “reviewable uses”, where the impact on agriculture may be weighed in relation to the benefits for other purposes.
- Respond to the threat of wildlife depredation on the economic viability of farming operations by supporting measures to control pests, limit waterfowl access to agricultural fields, and reduce the safety risks created by overpopulation of wildlife in food production areas and to irrigation water.
- Increase the role of governments in assisting agriculture to find new local markets for agricultural products and making local agriculture “relevant” to local residents.
- Provide public and private incentives to encourage farmers in the rural-urban interface to make changes in their farming operations that are practical and sustainable.
- Anticipate the emerging importance of food safety in the 21st century by developing policies to protect food production zones from wildlife populations, unnecessary human and animal access, urban sources of pollution and human contamination.
- Recognize the integral role of the agricultural landowner in directing the impact of recreation adjacent to agricultural land and controlling the timing, location and density of potential access to private land.

Based on the Phase 1 Report findings, this report presents options for addressing key issue areas and presents recommendations as part of the agricultural plan and

implementation strategy. The key issues fall into three broad categories and are covered in the following sections:

- 3.1 Requirements for continued agricultural viability
- 3.2 Encroachment on the agricultural land base
- 3.3 Encroachment on agricultural operations

1.3 Report Organization

This report is organized into four sections:

- Section 1: Introduction
- Section 2: Background
- Section 3: Key Issues and Recommendations
- Section 4: Implementation Strategy

Section 2 includes a brief overview of the importance of agriculture in Surrey and key findings from the *Phase 1 Report: Investigation into Analyses Relating to Economic and Planning Issues Facing Agriculture in the City of Surrey*. It also outlines several of the current policies and initiatives that the City has taken to achieve its goals for agriculture.

Section 3 discusses key issues facing agriculture in Surrey that were identified *Phase 1 Report: Investigation into Analyses Relating to Economic and Planning Issues Facing Agriculture in the City of Surrey*. Recommended actions are proposed for dealing with each of the key issues as well as who is involved in implementing the recommendations. This Section also addresses financial implications.

Section 4 outlines an implementation strategy for the Plan, including general financial implications and time frame.

2.0 BACKGROUND

The City has long recognized the importance of farming as a key contributor to the economic base of the community as well as the quality of life of the City's citizens. The City has taken a number of steps to maintain a viable agricultural sector, including OCP policies, development permit area guidelines, the formation of an Agricultural Advisory Committee and specific programs designed to assist agriculture such as the Lowlands Drainage Program.

2.1 The Importance of Agriculture in Surrey

2.1.1 Surrey Agricultural Production

The Lower Mainland portion of BC accounts for only 3.6% of the land in the Agricultural Land Reserve, while representing almost half the farms and generating more than half of BC's farm revenue. In 1995, Surrey agriculture accounted for 22% of the total farm sales in the Greater Vancouver Regional District. The area is among the richest growing areas in Canada because of its favourable soils, mild climate and extended growing season.

Although Surrey represents only about 0.3% and 7.9% of the BC and Lower Mainland land bases, respectively, the area contributes significant proportions of key crops produced in the province. For vegetable crops such as celery and lettuce, Surrey production accounts for almost all of the provincial production. Approximately two thirds of BC carrot and onion production also occurs in the Surrey. Deterioration or loss of productivity of agricultural land would lead to a significant decline in provincial production of these crops unlikely to be replaced elsewhere in the province.

In addition, Surrey accounts for production of other crops, such as potatoes, blueberries, greenhouse and nursery crops, well in excess of its proportion of acreage in the provincial agricultural land base. The agro-climatic richness of the area is reflected in high yields, multiple cropping and diversity of agricultural production. These factors have helped to maintain agricultural enterprises in the face of escalating land prices and operational constraints.

In 1995, field and greenhouse crops were grown in Surrey on 13,732 acres. Major uses of improved farm land in Surrey were tame hay (37.4%), vegetables including potatoes (24.6%), berries (5.9%) and corn for silage (5.8%). Wheat, oats and barley combined for 15.4% of the land reported in crops, although the majority of this cereal cropping is believed to have been winter cover cropping.

Greenhouses (floriculture, vegetable, propagation and other) accounted for 80 acres of growing area in Surrey.

2.1.2 Economic Contribution of Surrey Agriculture

Surrey agriculture generated \$106.9 million in gross farm receipts in 1995, accounted for 5.8% of the total gross farm receipts produced in BC, generated from 3.4% of the farms and less than 1% of the provincial farm land in crops and summer fallow.

The greenhouse sector was the largest generator of agricultural revenues in Surrey in 1995 followed by the poultry and egg and vegetable sectors, with 32%, 21% and 18% of

total gross farm receipts (GFRs), respectively. Dairy also contributed positively to Surrey with 8% of GFRs in 1995.

In terms of numbers of farms, farms containing cattle rank first in farm types in Surrey. It would appear that most of the farms are hobby farms that contain low numbers of cattle to qualify as farms for federal income tax purposes.

In addition to direct farm income, Surrey agriculture generates significant economic activity. Surrey generates well in excess of \$65 million in related economic activity annually.

In terms of employment, Surrey agriculture employed, on average, just over 2 person years of labour per farm and an estimated 1,165 person years of employment in 1994¹.

Direct employment in Surrey (not including related agricultural services except for contract labour) is estimated to generate at least 500 person years of additional employment in the provincial economy and possibly as many as 800 person years of agriculture-related employment.

2.1.3 Environmental and Social Significance of Agriculture in Surrey

The prime agricultural lands of Surrey are located on the flood plains of the Nicomekl and Serpentine Rivers. Field crop agriculture is a well-suited land use, compared to uses requiring high levels of protection from flood events, because of its reduced susceptibility to the negative impacts associated with seasonal flooding. As well, substantial benefits in agricultural productivity are derived from marginal improvements in drainage, compared to the more extensive standards of drainage and flood protection that would need to be provided for industrialization and/or urbanization. It is for reasons of public safety and reducing risk of damage to property that governments generally prefer to discourage non-agricultural development in flood plains.

In comparison to wetlands, ecological areas and other types of green spaces, agricultural lands provide many similar types of benefits, although necessarily not as intensively since agricultural activities are based on use of the renewable resources of the land. However, the economic contribution of agriculture is clearly substantial and should be expected to outweigh the overall social benefits associated with managing the lowlands for other dedicated uses with lower revenue generating potential.

Agricultural lands support or contribute to a range of non-agricultural benefits and/or values in the lower mainland of BC which improve the liveability of the region, such as:

¹ See the background Phase 1 Report in this study by Zbeetnoff Agro-Environmental Consulting and Quadra Planning Consultants Ltd. entitled "Analysis of Economic and Planning Issues facing Agriculture in the City of Surrey", July, 1999.

- Absorption and storage of surface water run-off
- Maintenance of green space and aesthetically pleasing countryside
- Wildlife habitat
- Passive and active recreational opportunities
- “Green lung” effect
- Public education on agricultural matters
- Provincial food security considerations
- Fair pricing of agricultural produce.

While it is not realistic to expect agricultural land use to provide optimal benefits in all of the above categories, it should also be recognized that agricultural production on prime agricultural lands in itself constitutes an efficiency benefit to society. Substituting lower-quality lands in other areas for prime agricultural lands in urban-centred regions has been shown to lead to increased costs associated with land development, energy and transportation per unit of food replaced, and greater overall impacts on other land uses such as wildlife, fish habitat and forestry.

In addition, farmers provide social values at a cost that the general public does not often recognize. Recreation opportunities in, and adjacent to, agricultural areas often create situations where the public may randomly influence the timing and location of farming activities that needed to be carried out at critically important times in the absence of people. Rural-urban land use conflicts may result in conditions or bylaws that result in extra costs to farming activities that cannot be recovered in the agricultural marketplace. Demands of non-agricultural residents for urban definitions of aesthetically pleasing countryside may result in policy² that restricts agricultural operations or prevents farmers from responding to new or changing economic opportunities.

2.2 Current Surrey Agricultural Policies and Initiatives

2.2.1 Official Community Plan Policies

In its Official Community Plan (OCP) the City has adopted several key policies which provide guiding principles for the development of agriculture in Surrey. The City recognizes the importance of agriculture to the local economy and is committed to enhancing agriculture on farmlands within the agriculturally designated areas, ensuring farm viability, strengthening the farm community and maintaining agricultural boundaries. To achieve this, the City will:

² Certain types of agriculture may be discouraged in the rural-urban fringe in favour of operations with minimal sights, smells and sounds. Similarly, greenhouse operations may be resisted to preserve green space and sight lines for urban residential development.

- Protect farmland as a resource for agriculture, a source of heritage and a distinct landscape
- Establish guidelines to enable compatible uses along the urban fringe
- Address farm viability issues through a Farm Community Plan

There are six key future directions outlined in the OCP for protecting agricultural areas and enhancing farming in Surrey:

1. Promote Compatibility Between Agricultural and Non-Agricultural Land Uses

- Encourage the development of effective buffers along the boundary of agriculturally designated land
- Encourage adjacent land uses to be compatible with existing farm use and ensure that the impacts (e.g., water runoff from upland areas) on agricultural lands will be minimized
- Discourage, whenever possible, linear developments (e.g., hydro corridors, highways, pipelines, parks) through the ALR
- Limit recreational uses on agricultural lands

2. Maintain Agricultural Activities

- Limit subdivision of agricultural land and encourage the amalgamation of lots in agricultural areas
- Maintain the integrity of the ALR and its existing boundaries
- Support agricultural practices in the City of Surrey in accordance with the intent of such legislation in the *Agricultural Commission Act* and the *Farm Practices Protection Act*
- Ensure that all land uses within the ALR conform to the policies and regulations of the *Agricultural Land Commission Act* and the *Farm Practices Protection Act*
- Support the Agricultural Advisory Committee and its undertakings
- Support and implement the guidelines and policies developed in the Farm Community Plan

3. Enhance Agricultural Viability

- Support and encourage agricultural, livestock and horticultural uses in the City and the processing, production, distribution and sale of locally grown products
- Support the Agricultural Land Commission policy for farm retail operations in the Agricultural Land Reserve to encourage a moderate level of retail activity associated with farms for the direct sales of farm products
- Support and encourage the growth of the greenhouse sector and its importance to the agricultural economy of the City
- Support and encourage agricultural practices (e.g., on-farm processing) developed as a result of the changing agricultural economy

4. Co-ordinate Farming and Environmental Protection

- Support sound environmental farm practices in accordance with the Ministry of Agriculture and Food's Environmental Guidelines
- Encourage wildlife management and habitat protection practices to minimize impact on agricultural lands without jeopardizing habitat and wildlife resources

5. Manage Water Use and Drainage

- Encourage the creation and implementation of an overall watershed management plan for the Serpentine-Nicomekl River watershed
- Manage stormwater runoff from upland development to reduce water quality degradation and flooding of farmlands in the Serpentine-Nicomekl lowlands to a standard of protection that is compatible with agricultural activity
- Assist agricultural producers in securing an adequate supply of irrigation water
- Minimize negative impacts on water quality by upland developments for both agricultural and environmental concerns

6. Increase Agricultural Awareness and Community Involvement

- Increase public awareness of farming practices and the importance of agriculture

As a basis for implementing the OCP policies, the City has designated land for agricultural use within its OCP, established Agricultural Zones within its Zoning By-law and designated areas along the urban-rural interface as a Development Permit Area.

2.2.2 Development Permit Areas and Guidelines

Surrey was the first local government in BC to use the new provisions of the Municipal Act and designate a development permit area (DPA) for the protection of farming within the 1996 Official Community Plan. Parcels of land outside of the agriculturally designated areas, but adjacent to it are within the designated development permit area.

These are mostly areas designated for suburban uses. Specific guidelines apply within the DPA to assist in *minimizing conflicts between urban uses and farming activities*. For example, there are guidelines relating to the setback of buildings from the boundary of the agricultural land and to provide landscaping between any development and the agricultural land. The guidelines have been applied through Neighbourhood Concept Plans in some areas of the City.

2.2.3 Agricultural Advisory Committee

An Agricultural Advisory Committee (AAC) was appointed by City Council in 1995. The AAC provides advice to Council on agricultural issues and policy matters. It is comprised of 8 members representing the farming community and one councillor. A staff member from each of the Ministry of Agriculture and Food, the Agricultural Land Commission, Surrey Planning and Development Department, and Surrey Engineering Department attend AAC meetings and serve as liaison with their respective organizations.

The AAC plays an important role within the City in advising Council on the desirability and/or anticipated impact of developments affecting agriculture in the City. The AAC also receives information from the City on proposed projects and public concerns regarding agriculture.

2.2.4 Surrey Lowlands Drainage and Flood Control Plan

Surrey adopted the lowlands drainage and flood control strategy in 1997, following more than two years of investigation and analysis. A large part of the justification for the drainage and flood control plan was the estimate of additional agricultural benefits that would accrue to Surrey with the project. The hydrotechnical modelling indicated that implementing the desired flood control works would not only offset the impact of future and past urbanization, but also give major improvement in the drainage standard over the situation prior to urbanization of the uplands since the 1950's.

A full-time project manager was hired and the project is being aggressively implemented. The importance of Surrey's commitment to the project for the protection and enhancement of Surrey agriculture cannot be over-emphasized.

2.2 Roles and Responsibilities

While the three levels of government have played roles in promoting agriculture, governmental responsibilities in agricultural development have been traditionally defined in terms of whose actions are creating impacts and the segment(s) of society that benefit. That is, agricultural impacts caused by governmental actions are generally the responsibility of the governmental level causing the impact. Similarly, responsibilities for investments creating wide-ranging provincial and national benefits are seen to be primarily the responsibility of governments with the corresponding jurisdictions. Cost-sharing programs often allocate costs based on formulae intended to reflect this distribution of benefits.

Land use is an example of an area in which all three levels of government have significant roles and responsibilities, often overlapping. Local government adopts bylaws and policies to channel growth and development on its lands for the betterment of its residents. Since much of the land base for new industrial and residential growth tends to come from the conversion of lands currently used for agricultural purposes outside the ALR, local planning in the rural-urban interface is critical to orderly, compatible growth.

Provincial jurisdiction over agricultural land use within municipalities is represented in the roles and responsibilities of the Agricultural Land Commission (ALC) and the BC Ministry of Agriculture and Food (BCMAF). Essentially, while local government governs land use within its jurisdiction, it must do so with the consent of the ALC, whose mandate is to preserve the provincial agricultural land resource, and the BCMAF, whose mandate is to implement the intent of the Farm Practices Protection Act. In addition, the federal government has influenced local land use by means of entering into cost-shared regional agricultural development incentives in the national interest, such as drainage improvements and soil and water conservation programs

In fisheries and migratory wildlife management, the roles and responsibilities of the federal government are paramount. While the BC Ministry of Environment, Lands and Parks has administrative jurisdiction over inland waters and manages other inland fisheries, Fisheries and Oceans Canada has the right of regulation of salmon fisheries in BC's tidal and inland (Fisheries Act). In addition, federal jurisdiction is exercised by Environment Canada in water management (Canada Water Act), management of wildlife (Canada Wildlife Act, Migratory Birds Convention Act) and protection of public health and safety (e.g., drinking water standards, Health and Welfare Canada).

BC ownership of water is enshrined in the Water Act, administered by the BC Ministry of Environment, Lands and Parks (MELP), whose responsibilities also include regulation of consumptive water use, flood control, stream protection, recreational fisheries management, wildlife management, and protection of air, water and soil quality. Under the Wildlife Act, the province manages wildlife and regulates consumptive use, e.g., hunting, commercial guiding and outfitting, and trapping.

Provincial responsibilities for the protection of water quality are administered by MELP (under the Waste Management Act) and the Ministry of Health (under the Health Act, relating to the public need for safe community and private drinking water and sanitation facilities). BC Ministry of Transportation and Highways (MOTH) is responsible for traffic regulation and provincial highways, although a number of regional arteries have recently reverted back to local municipal jurisdiction.

Traditional frameworks should not be considered the only avenues for action, although there is the danger that precedents could lead to downloading of responsibilities from one level of government to another. Recently, the City of Surrey committed to a

massive Flood Control and Drainage Strategy, funding it through a drainage utility that might have been cost-shared in the past with provincial and federal governments. This example indicates that budgetary cutbacks and ongoing needs are changing traditional roles in land/water use planning. Our investigation has also indicated that innovative location-specific approaches may be required to address the challenges and implement the changes that agriculture faces in the rural-urban zone.

3.0 KEY ISSUES AND RECOMMENDED ACTIONS

The key issues are briefly described in the following tables, followed by a summary of issue context and key impacts, recommended actions and stakeholder roles and responsibilities.

The recommended actions, which may represent different approaches toward addressing the issues, may not always be mutually exclusive.

The anticipated financial implications for the City of Surrey are presented in each key issue area.

3.1 Requirements for Continued Agricultural Viability

Key issue relating to agricultural viability in Surrey fall into six major areas:

- 3.1.1 Agricultural land use efficiency
- 3.1.2 Rural-urban conflicts
- 3.1.3 Demand for local agricultural products
- 3.1.4 Marketing of local agricultural products
- 3.1.5 Agricultural service industry support
- 3.1.6 Farm succession

3.1.1 Agricultural Land Use Efficiency

DISCUSSION

Some agricultural areas in the City are not attaining their optimal land use because of a lack of servicing. For example, the greenhouse industry has tremendous opportunity to expand in the Hazelmere Valley if only services such as water and natural gas were available.

The encouragement and integration of agricultural land use, services and support industry should be based on the capability of the soils and climate, siting considerations to enhance agricultural activities and connections, and planning to minimize the potential for new rural-urban conflicts. Agricultural enterprises in the City can also benefit from the identification and adoption of activities or techniques that improve productivity.

Farmers who pursue new crop and market opportunities in the City face uncertainties associated with increasing rural-urban conflict, more regulation and additional production costs. The resulting climate makes business decisions about farming in the City more risky and encourages investment elsewhere.

OBJECTIVES

- Increase new agricultural investment and development
- Increase efficiency in land use, servicing and investment costs
- Improve agricultural resource use and productivity along the rural-urban fringe

RECOMMENDED ACTIONS

AGRICULTURAL ADVISORY COMMITTEE

- Provide advice to the City on agricultural requirements, opportunities, costs of adoption of new farming techniques/equipment, and feasibility of possible solutions

CITY

- Develop an agricultural development strategy for Surrey
- Provide incentives, such as water and natural gas, for locating new intensive agricultural development in preferred areas
- Encourage non-soil bound agricultural operations on less productive soils
- Explore the use of farm bylaws to plan agricultural development in Surrey
- Provide incentives to encourage desired types of agricultural development in preferred development areas
- Provide centralized servicing incentives, possibly coordinated regionally, to preferred agricultural development locations
- Investigate opportunities to attract agricultural research facilities with projects applicable to Surrey agriculture

Financial Implication

- Agricultural utilities pre-servicing, recoverable over time
- Incentives to facilitate working relationships between developers and the farming community

PROVINCE

- Encourage and promote agricultural practices and production environment that respond to consumer demands for safe food and environmental sustainability
- Encourage and promote agricultural activities based on a strategy to supply their demand for limited support resources, such as water
- Provide incentives to existing agricultural developments to increase efficiency in use of support resources, such as water, where appropriate
- Encourage and enhance agricultural activities so that they can coexist with demands from conservation and recreation interests

3.1.2 Rural-Urban Conflicts

DISCUSSION

The impacts of type and siting of farming operations in the City are complicated by the proximity of suburban and urban development. Many suburbanites object to intensive farming operations in areas where “green space” and pastoral settings are regarded as significant aesthetic values. While farmers in the ALR are entitled under the Farm Practices Protection Act to use their properties in the pursuit of agriculture, operations using good agricultural practices are vulnerable to unwarranted public criticism of their activity. Agricultural enterprises are also generally unprotected from by-products of urban and suburban activity, such as trespass, theft, vandalism and littering.

Intensive livestock, mushroom, nursery, blueberry and greenhouse operations often receive the brunt of criticisms from suburban residents because of associated sights, smells and sounds. While the Farm Practices Protection Act provides farmers the right to conduct these farming operations within the ALR under generally accepted agricultural practices, the continuing harassment and animosity do not provide an environment conducive to the enhancement of the agricultural sector.

Considerable effort has been made by the Farm Practices Board under the Farm Practices Protection Act to reduce the impact from the operation of propane cannons in agricultural areas. In May 1999, guidelines were released covering the hours of operation, numbers and orientation of cannons along with a plan to manage wildlife depredation for use by farmers. Nevertheless, it is generally acknowledged that the underlying problem is uncontrolled pest populations and the absence of affordable or effective alternatives.

For farmers, these on-going rural-urban concerns can constrain their operations, disrupt normal farming practices and lead to potential conflicts with residents in adjacent urban areas. For non-farmers, these issues can disrupt their quality of life.

OBJECTIVES

- Promote rural-urban compatibility
- Minimize unfounded nuisance complaints about farming operations
- Protect and enhance operating conditions for agricultural enterprises

RECOMMENDED ACTIONS

AGRICULTURAL ADVISORY COMMITTEE

- Create a Rural-Urban Sub-Committee to deal with rural-urban issues
- Identify sensitive areas and develop a working relationship among affected parties

CITY

- Provide incentives to develop and adopt components of “urban friendly” production, where appropriate, such as alternatives to pest scare devices and low odour waste management solutions
- Promote and encourage practical measures which would help decrease land use conflict in the rural-urban fringe. These measures could include City, private and developer contributions to the research, development and acquisition of techniques/equipment which could reduce the cross-impacts of farming activities on adjacent landowners
- Require developers to enter into agricultural disclosure agreements with prospective purchasers to minimize the potential that new property owners are unaware of the presence and implications of nearby agricultural activity
- Require a restrictive covenant on suburban property titles to minimize the potential that new property owners are unaware of the presence and implications of nearby agricultural activity
- Inform residential and farming landowners of anticipated impacts and concessions related to residing adjacent to each other through information bulletins sent with annual tax notices to current property owners
- Improve consistency between noise by-law and Farm Practices Protection Act regarding use of bird scare devices such as propane fired cannons
- Require landscaping and noise baffling measures in new urban development or re-developments to decrease noise and sight impacts
- Required increased buffers between residential areas and farming areas
- Consider a farm bylaw for requiring appropriate farm management techniques

Financial Implication

- Lead role in improving relations between the farming and non-farming communities
- Provide administrative resources to the Rural-Urban Sub-Committee
- Staff may be required to undertake bylaw changes

PROVINCE

- Encourage use of nets and raptors to protect berry crops
- Work with wildlife agencies to encourage raptor populations on farmland
- Increase setbacks of proposed intensive farming operations (e.g., greenhouses) and manure storage from residential areas. This could potentially restrict farming operations
- Monitor the effectiveness of current setbacks in reducing impacts of noise, sites and odours on adjacent urban areas
- Encourage farmers to adopt best management practices for manure storage and handling
- Promote adoption by farmers of the Code of Agricultural Practice for Waste Management under the BC Waste Management Act

3.1.3 Demand for Local Agricultural Products

DISCUSSION

Because Surrey is a relatively higher cost source of fresh agricultural products, producers often have difficulty in competing strictly on a price basis with products sourced from other locations, particularly the US. Yet, there is market opportunity to increase the quantity and diversity of demand for local agricultural products by attracting businesses that would consume local production and introduce new ideas resulting in growth of the value-added agricultural industry.

A local production and processing industry, sustained by an attractive investment climate, offers the advantages of low transport costs from farm to processor and a large consumer population in close proximity to location of production. The lower mainland population represents an ethnic mix favourable to product innovation and differentiation.

Diversification of demand would strengthen the agricultural viability of local operations by attracting demand not only for the highest quality fresh product, but also for off-grade production. Currently, Surrey farmers have a limited to non-existent market for produce that does not meet the highest fresh market standards and must be discarded. This situation has resulted in reduced local marketing opportunities for local farmers and increased dependence on continental demand for and pricing of their products.

Local consumers are likely to take less interest in supporting local farming activities that are not consciously associated with their food needs or employment prospects. The tie-in of local food production to local food demand is considered key to the long-term preservation of the ALR in Surrey.

OBJECTIVES

- Increase local demand for local agricultural products
- Attract business to the City and Lower Mainland that would use local agricultural products as raw materials in value-added processing
- Assist in developing new markets for locally produced agricultural products

RECOMMENDED ACTIONS

CITY

- Assist wholesale buyers who source local agricultural products
- Attract business which would utilize local agricultural products, such as value-added further processing
- Encourage and promote the use of local products by governmental agencies situated in Surrey, wherever feasible
- Designate agricultural parks for value-added business opportunities, e.g., such as the area where BC Hothouse and the Cloverdale Lettuce and Vegetable Co.-operative are currently located

- Attract industry into areas adjacent to the ALR with centralized servicing, streamlined business development procedures and transportation links to markets
- Identify potential service sector opportunities and attract servicing that would complement the City's production and value-added requirements
- Co-ordinate with other municipalities to develop regional value-added solutions

Financial Implication

- Cost of pre-servicing value-added industry recovered through development charges, taxes and economic spin-offs from new business activity

PROVINCE

- Encourage agricultural growth to provide agricultural products with strong demand characteristics and economic advantages, e.g., freshness, safeness, quality, competitiveness
- Support growth of food production systems which respond to public concerns about environmental sustainability, food safety and resource conservation
- Provide support to new value-added business development

3.1.4 Marketing of Local Agricultural Products

DISCUSSION

The population of Surrey consumes the types of agricultural products produced in Surrey. Local agricultural products compete daily and/or seasonally with similar imported products in local markets. Often, local consumers purchase agricultural products without any idea of their origin.

The proportion of agricultural products consumed in Surrey that is obtained by major retailers from locations outside of the City is increasing. With the advent of centralized purchasing, the two major food retailers in BC have procurement policies, based primarily on lowest price, which may source fresh produce from anywhere in North America.

This situation forces Surrey producers to compete at an international level in “commodity” markets, i.e., where categories of agricultural products are regarded as essentially similar. BC agricultural producers are being increasingly restricted in their access to local markets. Local market channels are largely undeveloped when viewed in relation to the quantities of agricultural produce marketed in the Lower Mainland.

OBJECTIVES

- Educate local consumers about the quality characteristics of locally produced agricultural products
- Increase the share of Surrey agricultural products in the regional market

RECOMMENDED ACTIONS

CITY

- Assist farmers in developing attractive on-farm direct marketing facilities
- Assist farmers in developing subscription marketing, i.e., with pre-planned seasonal outlets for their produce, and U-pick operations
- Support and expand the relationship between the BC Farm Direct Marketing Association and Surrey farmers
- Encourage and promote links among farmers, farm marketing associations and consumers, by assisting in the growth of subscription marketing and community gardening
- Assist in getting the word out on local produce characteristics such as production methods, quality, freshness
- Educate local consumers about the quality characteristics of locally produced agricultural products
- Publish educational and promotional materials and directories on the locations, timing, quality and characteristics of Surrey’s fresh produce
- Consider the feasibility of developing a Surrey logo for Surrey fresh produce
- Provide permanent locations for farmers’ markets at venues that attract customers

- Provide permanently covered structures for direct marketing operations
- Consider developing heritage information and materials to promote local agricultural history and assist in attracting consumers to on-farm market stands
- Provide incentives and measures, such as signage, to improve the attractiveness of farm stands and accompanying advertising

Financial Implication

- Cost of developing marketing aids and promotional materials
- Administrative requirement to facilitate the development of a farmer-to-consumer direct marketing network

PROVINCE

- Assist farmers in developing direct marketing plans
- Advertise that urban residents have an active role in supporting the Agricultural Land Reserve
- Continue to support the Buy BC program

3.1.5 Agricultural Service Industry Support

DISCUSSION

Agriculture in Surrey depends on inputs and services from various suppliers. Due to the small size of the Surrey agricultural service sector, it is not feasible to expect that all these inputs can be supplied from within Surrey itself. The needs of the Surrey agricultural sector, such as fuel, seed and plants, plant protection products, fertilizers, equipment dealerships, building supplies, research, storage facilities, and the trades, are likely to be met most effectively through coordinated action with other local jurisdictions with agricultural needs and supply capability. In general, agriculture in Surrey obtains the bulk of its purchased agricultural inputs from outside the City. This situation represents lost local economic opportunity, especially in view of the fact that new agricultural investment is occurring and new services are being required.

Without support services to agriculture, farmers cannot continue to operate. Threshold volumes and levels of revenue generation by businesses that provide inputs to the farm are required to support the agricultural service industry. Without provisions for their location and appropriate conditions for continued operation, the viability of Surrey agriculture is threatened.

OBJECTIVES

- Ensure that essential agricultural support services located in Surrey are encouraged to stay
- Encourage essential agricultural support services to locate in Surrey
- Coordinate promotion of support services with the anticipated requirements of Surrey agricultural strategy and preferred agricultural growth areas
- Promote a regional solution to agricultural servicing needs

RECOMMENDED ACTIONS

CITY

- Undertake an inventory analysis of the City's current and anticipated servicing requirements and obtain indication of how they are likely to be supplied
- Provide conditions for the continuance of support services in existing locations
- Consider incentives to keep existing agricultural support services within Surrey
- Designate an area for new support services
- Evaluate specific business proposals in relation to regional opportunity and local advantages
- Promote linkages between Surrey agricultural production and servicing requirements
- Identify potential service sector opportunities and attract servicing that would complement the City's production and value-added requirements
- Attract service industry into areas adjacent to the ALR with centralized servicing and streamlined business development procedures

Financial Implication

- Surrey may be able to access provincial programs to undertake its strategic planning with regard to agricultural servicing. The City should expect to recover pre-servicing costs related to agricultural park development through taxes and new business economic activity.

PROVINCE

- Consult with other local jurisdictions to identify the types of support services required and to identify and implement regional solutions to service industry opportunities
- Co-ordinate agricultural servicing locations within the GVRD regional agricultural planning framework, regional transportation and industrial development plans

3.1.6 Farm Succession

DISCUSSION

Surrey is experiencing significant changes in agricultural land ownership and farm operators as land is bought and sold. Farmers familiar with Surrey production conditions are retiring as new farmers unfamiliar with local conditions move in. In some cases, there are significant gaps in the knowledge base of new operators on how to carry out agricultural development or how to cope with the weather conditions in the City. Inefficiency in farming practices leads to sub-standard land use, higher production costs and lowers revenues. Financial stress can result in operators discontinuing operations or converting agricultural land to less intensive uses, both of which are undesirable in terms of productive agricultural land use.

Incentives to facilitate farm transition in the City may be expected to result in the continual improvement of farm management capability and environmental stewardship, shorter gaps in production during farm transfer and passing on of rural codes of conduct.

OBJECTIVES

- Ensure continued productivity from the agricultural land base during changes in land ownership

RECOMMENDED ACTIONS

SURREY FARMERS INSTITUTE

- Encourage retiring farmers to apprentice potential new entrants

CITY

- Facilitate agricultural apprenticeship initiatives for new agricultural property owners
- Provide incentives to experienced farmers to take on potential purchasers in an apprenticeship capacity
- Identify new entrants to the Surrey Farmers Institute
- Work with the Agricultural Advisory Committee and the GVRD

Financial Implication

- To the extent that program funding may be accessed, Surrey costs could be minimal
- There would appear to be potential to cost-share with other local jurisdictions experiencing similar agricultural ownership and transfer patterns

PROVINCE

- Develop agricultural apprenticeship initiatives for new agricultural property owners
- Provide additional tax breaks to encourage farm family succession and continuance of farming
- Assist new farmers in selecting good agricultural practices

- Assist new entrants in learning and applying management skills

3.2 Encroachment on the Agricultural Land Base

Key issues relating to encroachment on the agricultural land base fall into four major areas:

- 3.2.1 Conversion of land within the ALR for non-farming purposes
- 3.2.2 Impact of ownership of ALR land by non-farmers
- 3.2.3 Impact of residential development within the ALR
- 3.2.4 Conversion of agricultural land outside the ALR for non-farming purposes

3.2.1 Conversion of Land within the ALR for Non-farming Purposes

DISCUSSION

Various interests, such as ultra-light facilities, City of Surrey, Ducks Unlimited, the provincial government and golf courses, have acquired parcels of ALR land for wildlife, recreation and other non-farming purposes. Any organization could acquire ALR land for purposes currently allowed under the ALC Act. Those land uses that do not require ALC review are permitted as “outright uses” and include ecological reserves, reserves for wildlife habitat, parks and recreation reserves.

This practice generally consists of conversion of land into uses permitted by the Agricultural Land Commission, but which results in land being removed from existing or potential agricultural production. The conversions reduce the land pool available for farming by taking land out of production. They may also cause unwanted recreational and/or wildlife impacts on adjacent farm properties and create a higher non-agricultural market value for farmland, which makes farmland investment costs higher.

OBJECTIVES

- Reduce the loss of ALR land to non-farming purposes
- Reduce the perception of public finances competing with farmers for agricultural land
- Encourage non-farm owners to make land available for agriculture, where possible
- Ensure that bylaw provisions that affect the use of non-farmed land within the ALR are consistent with agricultural guidelines regarding these bylaws
- Mitigate adverse impacts on agriculture from recreational and wildlife projects within the ALR

RECOMMENDED ACTIONS

CITY

- Require an agricultural impact statement to accompany any conversion within the ALR to non-agricultural use
- Lobby the ALC to make current non-agricultural “outright uses” in the ALR “conditional uses” and subject to permit approval by the ALC
- The City could adopt a bylaw requiring that conversions of agricultural land meet the “no-net-agricultural-loss” criterion. If this provision is inadequate to protect ALR land base from encroachment, the ALC (i.e., province) could consider more formal measures to protect farm land from non-farming uses
- Agricultural impact assessments (AIAs) implies the need for an agricultural impact assessment evaluation function, probably handled by an agricultural planner employed by the City. The Agricultural Advisory Committee may be a suitable body to review the importance of agricultural impacts

Financial Implication

- This provision would require a prospective purchaser of ALR land to undertake an agricultural impact assessment, at additional cost, as part of Surrey’s development approval process. AIAs may be expected to increase developer costs of development.
- The City would need to develop the human resource capability to evaluate the agricultural impacts and assess the feasibility of measures to address adverse impacts

AGRICULTURAL LAND COMMISSION

- Amend the Agricultural Land Commission Act to make currently permitted non-agricultural uses subject to ALC review and approval
- Would require development of a review policy to deal with non-agricultural withdrawals within the ALR
- Establish a mitigation policy within the ALR of “no-net-agricultural-loss”, which would require that agricultural compensation and or mitigation be arranged, if necessary, before a conversion is approved

3.2.2 Impact of Ownership of ALR Land by Non-Farmers

DISCUSSION

Institutions and private individuals have purchased parcels of ALR land from time to time for unspecified purposes. Those purchases do not require ALC review or approval. There are no restrictions on who may own ALR land in Surrey.

Surrey has acquired ALR land that it intends to offer for lease to farmers. Similarly, absentee owners have bought ALR farmland for unknown reasons, where the land has even been leased back to previous owners. As such, non-farmer ownership, in and of itself, does not necessarily mean that farming will not occur.

Nevertheless, purchase of ALR land by non-farming individuals and organizations has a more subtle, but significant, negative effect on Surrey agriculture. These impacts include unsuitable and/or variable lease arrangements, maintenance of an unnecessary speculative component in the agricultural land market, and disincentives toward capital improvements on leased holdings. In addition, leasing modifies the financial structure of farming operations from higher capital investment/lower variable cost to lower capital cost/higher variable cost production systems, that tend to be more susceptible to financial stress from production risk.

OBJECTIVES

- Ensure that ALR land held by non-farmers is made available for farming

RECOMMENDED ACTIONS

CITY

- Require local governmental owners of ALR land held for non-specified purposes to account for property taxes in their annual budgets
- Provide an incentive to local government land managers to promote farming by making their discretionary budget dependent on recovery of the “foregone tax expenditure” component if farming occurs
- Encourage non-farming purchasers of ALR lands held for unspecified purposes to prepare farm plans for the continuance of farming

AGRICULTURAL LAND COMMISSION

- Make non-farming land purchases in the ALR a “reviewable use” and subject to permit approval by the ALC
- Make amendments to the ALC Act, as per No. 5 Road assembly use in Richmond, so that agricultural farm plans for the farmable portion and impacts on adjacent properties are considered by the ALC in permitting development
- Consider an agricultural performance bond to accompany application for ALR land purchase

PROVINCE

- Provide guidance to non-farming owners on leasing arrangements that assist agricultural operations in land rental relationships
- Make expertise available to the City to evaluate farm plans
- Consider higher differential tax rates on ALR land which is not farmed

3.2.3 Impact of Residential Development in the ALR

DISCUSSION

Surrey has small and intermediate sized parcels in the ALR for which there is a significant demand for rural estates. There is currently no limit as to the size of the residential “footprint” on these ALR properties. The residential density of these properties is currently governed largely by septic system regulations administered by the Ministry of Health. Large new residences on smaller ALR properties often render the residual portion of the property non-farmable due to fragmentation. The converted property use often becomes an intrusion on adjacent farming operations.

Surrey and the ALC are encouraging the legal consolidation of small parcels in the ALR as a condition for rural residential development. The policy is considered beneficial to agriculture in the longer term since it will retain more land in agricultural production than without consolidation.

While the City has the authority to require landowners to meet specific building codes and requirements, subdivision within the ALR is regulated by the ALC, and the Ministry of Health controls septic system development based on parcel size.

OBJECTIVES

- Minimize the impact of new residences in the ALR on farming potential

RECOMMENDED ACTIONS

CITY

- Encourage agricultural farm plans to accompany applications for new residential developments in the ALR
- Lobby the ALC to make amendments to the ALC Act to address rural residential impacts
- Consider development of a farm bylaw to regulate agriculturally disruptive rural residential development
- Consider a zoning bylaw to limit residential size in the ALR
- Make suburban development in the A-1 zone adjacent to the ALR a “conditional use” subject to “agricultural plan compatibility” assessment

Financial Implication

- Surrey is not likely to face increased development costs for additional rural residence and subdivision regulation unless the Province downloads some of the administrative function. To date, the City has resisted taking over the septic system program of the Ministry of Health. It may be anticipated that the City would also prefer that the ALC retain any expanded role to assess and approve subdivision and rural residential development in the ALR

AGRICULTURAL LAND COMMISSION

- Require non-farming property owners to maximize land available for farming on residual portions of the property
- Consider lot siting guidelines to minimize the impact of residential development on the farmable portion
- Develop maximum residential “footprint” guidelines within the ALR
- Increase minimum lot subdivision criteria based on “economic” farm size criterion
- Permit residence construction or lot subdivision only as accessory to farm development, such as Delta is currently considering in its farm bylaw

PROVINCE

- Make available agricultural specialists who could be called upon to assess or evaluate farm plans submitted by prospective purchasers

3.2.4 Conversion of Agricultural Land Outside of the ALR for Non-Farming Purposes

DISCUSSION

A large number of the agricultural census farmers and a substantial portion of the utilized farm acreage in Surrey are located outside of the ALR on land that is zoned agricultural (A-1) or rural (RA). Much of this land is in the rural-urban fringe and acts as a buffer between suburban residential developments and commercial agriculture. Conversion of this buffer into non-agricultural uses has led to increased complaints about practices by farmers in the ALR. Experience in other jurisdictions suggests that separation of agricultural uses from non-farm, and particularly residential, land uses is the most effective means of dealing with rural-urban interface problems.

It is to Surrey's credit that there is a Development Permit system in place that is intended to minimize land use conflicts between agriculturally designated lands and development in the rural-urban fringe. However, the role and importance of agricultural land outside the ALR has often been overlooked or viewed as merely a transition zone between the ALR and urban/suburban uses.

Maintaining agricultural operations in the ALR fringe can provide a zone for development of supporting agricultural services and a buffer to the ALR. These areas have local and regional importance to Surrey agriculture, as well as contribute to public aesthetic and green space values.

OBJECTIVES

- Maintain farming outside the ALR boundary to provide an effective transition between agricultural and urban/suburban development

RECOMMENDED ACTIONS

CITY

- Develop a detailed inventory of agricultural land outside of the ALR, including its location, uses, and issues. These parcels should be identified in terms of continuance, termination or expansion of operations and assessed for implications on the agriculture within the ALR
- Re-assess the importance of agricultural areas outside the ALR for their local and regional importance to Surrey agriculture, as well as for their contribution to public aesthetic and green space values.
- Consider retaining land uses in the ALR fringe which complement farming operations
- Require developers to plan for and dedicate land for more effective buffering of farming operations outside the ALR from residential development
- Ensure that by-law provisions that affect the land outside of the ALR maintain successful agricultural operations in the ALR fringe

PROVINCE

- Provide guidance to non-farming owners on leasing arrangements that assist agricultural operations in land rental
- Assist in the creation and retention of small-lot agriculture, including community gardens, in areas where existing parcel configuration, human and wildlife population densities preclude traditional agricultural operations

3.3 Encroachment on Agricultural Operations

Key issues relating to encroachment on agricultural operations fall into seven major areas:

- 3.3.1 Recreational access
- 3.3.2 Wildlife depredation of crops
- 3.3.3 Drainage, irrigation and flood control
- 3.3.4 Pesticide drift and chemical usage
- 3.3.5 Fish habitat protection
- 3.3.6 Safe farm vehicle movement

3.3.1 Recreational Access

DISCUSSION

As Surrey and the region grow there is more pressure for access to outdoor recreational opportunities. This has in increased numbers of people coming into close contact with farming operations through increased use of dykes, trails, parks and rivers adjacent to farms. Some people believe they have a “right to roam” and are also using farm fields for walking, pet exercise, ice-skating and bird watching.

Bringing people into agricultural areas increases the risk of littering, trespass, vandalism and property damage. Food safety is another concern. Farmers also face disruption of farming activities and increased liability. There are direct costs to farmers as well as impacts on wildlife. Farmers are often required to install additional fencing and increase surveillance. Recreationists sometimes park on narrow rural roads restricting farm equipment movement. Farmers may be restricted in the use of pesticides because of the potential threat to adjacent recreational uses.

All dykes in the ALR in Surrey are privately owned, with the City only having a drainage right-of-way. However, unauthorized access regularly occurs even when the landowner has not granted access. Ineffective communication of where recreation is allowed and spillover from adjacent public areas are considered contributing factors.

OBJECTIVES

- Continue to implement the OCP policy, “Limit recreational uses on agricultural lands”
- Avoid or mitigate the disruption of farming activities and property damage from recreational access and activities
- Increase public awareness and education about the potential impacts of recreation on farming

RECOMMENDED ACTIONS

AGRICULTURAL ADVISORY COMMITTEE

- Form a subcommittee composed of representatives from the Agricultural Advisory Committee and Parks, Recreation and Culture Commission to review agricultural-recreation issues, and establish a protocol for reviewing and managing such issues
- Explore opportunities for user-pay and guided passive recreational uses on agricultural land (e.g., hiking, bird watching, etc.). Guided tours could also be extended to schools interested in seeing how agricultural operations work

CITY

- In parks and recreational planning and neighbourhood planning, take care to avoid locating recreational amenities on agricultural land or creating situations where there is a potential for conflict between recreation and agricultural activities

- Consider undertaking agricultural impact assessment of proposed recreational use on or adjacent to agricultural lands when park acquisition or dedication is being considered. The impact assessment should address potential impacts and measures to avoid or mitigate adverse effects. This would apply to Surrey and other jurisdictions which control recreational access on or near farm land in the City (e.g., GVRD, Ducks Unlimited)
- Involve farmers whose properties and activities are affected in decisions on the location, timing and duration of public access in recreational areas adjacent to farms
- Explore opportunities to mitigate current conflicts such as landscaping, fencing, ditching, and timing of recreational use (e.g., restrictions on dyke access during pesticide spraying), and by-law enforcement of parking on local roads, and dogs roaming freely on farm fields
- Investigate opportunities to assist farmers with increased surveillance and security especially in those areas where trespass and property damage from the use of adjacent recreational facilities are on-going concerns.
- Extend park watch or current VIP programs to existing dyke and trail systems adjacent to farm operations
- Should any recreation opportunities be developed on agricultural lands, develop a compensation system for paying participating farmers for the foregone production value represented by the provision of public access to private lands
- Examine the feasibility of establishing a fund to pay for damages and liability claims resulting from vandalism and access
- Further develop an education strategy to inform recreationists about agricultural operations and how their activities may affect farms (e.g., signs, brochures, a "recreationist code of ethics")
- Investigate opportunities to work with the local media, established recreation clubs in the City and organizations such as the Outdoor Recreation Council to create a public awareness about agricultural concerns
- Through the proposed Agricultural Advisory Committee-Parks, Recreation and Culture Commission subcommittee, produce a code of good tourist practice

Financial Implication

- Some reallocation of City resources would be required to administer the sub-committee; although it would likely only meet when necessary.
- Some staff time will be required to prepare impact assessment guidelines
- There are costs associated with funds, compensation systems and mitigation of agricultural impacts
- Increased regulation in existing recreational access trouble spots may require more enforcement

AGRICULTURAL LAND COMMISSION

- Require assessment of adequacy of septic disposal and parking
- Make approval of agri-tourism operations conditional on an approved plan for mitigating impacts on adjacent farms

PROVINCE

- Prepare educational materials for agri-tourism operators (e.g., bed and breakfast) to assist in avoiding or mitigating potential conflicts such as roaming of their clients on adjacent farm fields, leaving gates open, blocking local roads with parked cars, etc.
- Work with the GVRD to identify practical and feasible programs to protect farming operations from the impacts of recreational access

3.3.2 Wildlife Depredation of Crops

DISCUSSION

Farmers are very concerned with field damage and crop loss caused primarily by wintering waterfowl and starlings. Soil can also become compacted due to the massing impact of birds foraging on forage crops. There is recognition that this is a difficult issue to address as Surrey is part of the international Pacific Flyway that provides habitat for migrating birds. On the other hand, starlings are non-indigenous pests that also create problems for native wildlife.

There is a direct loss to farmers who have crops damaged or lost due to wildlife. Existing remedies for reducing bird depredation, such as propane cannons, are not totally effective and create noise problems for adjacent residential dwellers. Farmers whose fields provide habitat for wildlife provide a broader social benefit that is largely unrecognized by society. Bird droppings also have the potential to contaminate crops and livestock feeds.

Wildlife management is primarily a federal and provincial responsibility. The City needs to involve these levels of government in addressing wildlife pest issues.

OBJECTIVES

- Reduce crop damage and loss
- Compensate farmers for crop damages and losses
- Promote the development of viable environmentally friendly agricultural production systems

RECOMMENDED ACTIONS

PRIVATE INDIVIDUALS AND ORGANIZATIONS

- Provide financial assistance to farmers for netting
- Purchase easements on agricultural land for wildlife use

AGRICULTURAL ADVISORY COMMITTEE

- Canvass the farming community and wildlife interests to determine if there is sufficient interest in forming a farm-wildlife group that works toward resolving wildlife issues on farmland. The Delta Farmland and Wildlife Trust is an example of one such group as is the Trumpeter Swan Management Project in the Comox Valley. There are also many types of these farming-wildlife organizations in Britain.

CITY

- Encourage senior levels of government to establish programs to provide financial assistance for crop damage or loss
- Encourage federal and provincial wildlife agencies to provide technical advice to farmers on how best to reduce crop damage

Financial Implication

- Financial assistance for insurance, compensation and bird population control should be shared by senior levels of government since Surrey farmers are providing provincial and national wildlife benefits
- Surrey and local residential landowners should consider incentives to encourage farmers to use less disruptive wildlife management techniques by assisting them in adopting practical alternatives

PROVINCE

- Provide extension services to individual farmers on ways of controlling depredation of crops, including raptor use
- Provide crop insurance programs for farmers
- Provide financial assistance to farmers that provide specialized habitats to encourage raptor use as a means of controlling unwanted birds
- Consider controlling pest wildlife through such means as trapping, addling of eggs, and limited hunting.

FEDERAL

- Establish a compensation program to address waterfowl damage to agricultural crops
- Explore the possibility of establishing a farm-wildlife organization that deals with agricultural impact-wildlife habitat issues
- Provide re-seeding benefits for farmers
- Provide financial assistance to farmers who plant lure crops and provide wildlife habitat on farm land
- Promote “environment friendly” production systems
- Provide incentives to farmers to adopt “environment friendly” farm management practices

3.3.3 Drainage, Irrigation and Flood Control

DISCUSSION

Farmers have experienced excessive flooding, runoff and siltation, some of which has been a result of upland development and local drainage improvements. Farmers have also been restricted in their ability to maintain ditches because of concerns over impacts to fish habitat.

No new licenses for irrigation are being approved and less than 30 percent of the ALR is currently irrigated. This is a major constraint on future agricultural development.

Flooding has caused property damage and reduced agricultural productivity. The potential requirement for easements in flood spill areas could constrain agricultural production. A lack of water for irrigation has constrained growth in agriculture.

Flood proofing on individual properties in the Surrey lowlands is carried out by import of soil fill. The practice results in displacement of water onto neighbouring properties. Unauthorized fill on agricultural land can create local drainage problems as well as result in the loss of productive capability. Local property owner ditching and diversion of surface drainage in the rural-urban fringe has created localized flooding on adjacent agricultural holdings.

OBJECTIVES

- Continue to improve regional drainage and reduce flooding
- Remedy localized flooding and drainage problems through implementation of appropriate drainage measures and reduction of unauthorized or inappropriate fill placement
- Investigate feasibility of securing irrigation water for farming
- Encourage water conservation measures through improved irrigation technology

RECOMMENDED ACTIONS

CITY

- Continue to implement the Serpentine-Nicomekl Lowlands Flood Control (SNLFC) project
- Evaluate potential floodspill easements for their impact on agricultural production
- Implement Master Drainage Plans in upland areas
- Review and assess existing and future drainage plans for their potential impacts on agricultural areas
- Continue to implement integrated stormwater management strategies that incorporate best management practices for minimizing disruption of natural hydrological regimes (e.g., reduction of impervious surfaces, water retention, maintaining groundwater recharge and discharge rates)
- Investigate alternative water sources for irrigation supply

- Work with provincial and federal agencies to determine whether or not peak seasonal irrigation water demands could be met from local rivers without jeopardizing fisheries
- Investigate the feasibility of supplying water to specific areas for the purpose of promoting intensive agricultural production
- Inform farmers through mailouts (e.g., with tax notices) of the process regarding drainage culvert size and location
- Ensure that all fill placements are authorized and are used for the purpose intended
- Consider extending water supply into adjacent agricultural and agricultural industrial areas when new urban development occurs for domestic and commercial purposes
- Provide for agricultural access to stormwater detention ponds for irrigation supply

Financial Implication

- Continue to fund the Serpentine-Nicomekl Lowlands Flood Control (SNLFC) project
- Additional public and private costs may be required to extend services to some farming areas. These may be shared with the agricultural industry and through the neighbourhood concept planning processes, cost-sharing agreements could possibly be negotiated

PROVINCE

- Encourage farmers, through financial incentives or disincentives, to implement better irrigation technology to reduce water demands
- Inform farmers of the provisions of the Draft Ditch Maintenance Policy Guidelines and monitor the application of the guidelines to determine if they meet the needs of farmers
- Determine whether peak seasonal irrigation demands could be met from local rivers without jeopardizing fisheries

3.3.4 Pesticide Drift and Chemical Usage

DISCUSSION

There is a growing public concern, not restricted to farming areas, over the use of pesticides in society. In farming areas, there is a perceived risk of pesticides drifting into residential areas and organic farming areas. Chemical usage also poses potential risks to fish, wildlife, water and air quality.

OBJECTIVES

- Manage and reduce the real or perceived threat to suburban residents from chemical use on farmland

RECOMMENDED ACTIONS

CITY

- Develop and promote local markets for organic farm produce
- Provide financial assistance to farmers that reduce chemical use and move toward IPM
- Encourage notices where pesticide spraying is to occur.
- Encourage pesticide free production practices in sensitive areas
- Encourage “environment or urban-friendly” production systems
- Require vegetative buffers to mitigate potential effects of pesticide use

PROVINCE

- Encourage farmers to implement Integrated Pest Management (IPM) using biological pest control, cultural practices and/or chemicals to combat pest problems
- Continue to implement environmental guidelines for specific agricultural commodities
- The federal and provincial governments to monitor impacts of pesticide use
- Educate the public on the threats posed by pesticide use in agricultural production
- Provide incentives to farmers to adopt pesticide free production in areas with a potential to drift into residential areas, known wildlife habitat and organic farms

3.3.5 Fish Habitat Protection

DISCUSSION

Many of the ditches flowing through agricultural areas are considered streams or contribute nutrients to fish bearing streams. These watercourses and the riparian vegetation adjacent to these watercourses are protected as fish habitat under the federal Fisheries Act and provincial Fish Protection Act. Restrictions on farming can include ditch maintenance, irrigation water availability, and protection of riparian areas through setbacks.

Farming activities can be harmful to fish habitat through impaired water quality from manure, nutrient and pesticide runoff and reduction of water availability for fish.

Restrictive regulations can add costs to farming and alienate productive farmland.

OBJECTIVES

- Reduce impacts from agricultural operations on fish habitat
- Balance the needs of the farming community with the requirements of fish habitat protection

RECOMMENDED ACTIONS

CITY

- Monitor to ensure that any riparian setback requirements of senior government agencies are based on scientifically sound rationale and do not impair agricultural initiatives supported by the City
- Encourage efforts by farmers who are continuing to make on-farm improvements in nutrient management

PROVINCE

- Continue to implement the Code of Agricultural Practice for Waste Management under the Waste Management Act
- Recognize the potential for financial losses to agricultural property owners associated with fish habitat protection programs

FEDERAL

- Make sure that riparian setback requirements are appropriate and justified
- Investigate the US National Conservation Buffer Initiative, which communicates the economic and environmental benefits of buffer strips and helps landowners to install “common sense” conservation buffers which effectively mitigate the movement of sediment, nutrients and pesticides within and from farm fields
- Ensure that the guidelines are workable from a farming perspective and are working in their intended way for the benefit of agriculture and fish

- Develop a compensation program for sensitive lands lost or alienated for stream buffers and riparian setbacks

3.3.6 Safe Farm Vehicle Movement

DISCUSSION

With increasing traffic volumes on many roads, farmers are faced with trying to safely move farm vehicles and equipment. Local roads are more frequently being used by commuters as a means of avoiding busy arterial routes and highways. Farmers also have difficulty in moving farm equipment on local roads that are used by people parking to access trails and dykes.

There is an increased risk of accidents as farm vehicles and equipment try to compete with traffic along busy roads. On local roads, parked cars can prevent farmers from accessing fields with their equipment, leading to blocked costly delays.

OBJECTIVES

- Provide for safe farm vehicle movement
- Provide for unrestricted farm vehicle access on local roads

RECOMMENDED ACTIONS

AGRICULTURAL ADVISORY COMMITTEE

- Identify roads that need attention
- Review the transportation plan to determine its impacts on agriculture and provisions for improving agricultural transportation

CITY

- Ensure that safe farm vehicle movement is adequately addressed in the current City wide transportation planning
- Install wider shoulders and pull off areas for farm vehicles
- Install farm traffic tunnels and/or overpasses on local roads, where feasible
- Enforce parking and speed regulations on local farm roads
- Where lacking, install farm vehicle signs
- Educate the public about farm vehicle movement and hazards

Financial Implication

- Capital expenditures may be required to make road improvements

AGRICULTURAL LAND COMMISSION

- Consider the impact of ALR land conversions on agriculture when granting special use permits for transportation corridors

PROVINCE

- Require farm vehicles to have more visible flashing lights when they are using roads
- Plan for farm traffic tunnels and/or overpasses on provincial roads, where required

4.0 AGRICULTURAL IMPLEMENTATION STRATEGY

4.1 Implementation Priorities and Time Frame

Table 1 prioritizes the key issues/recommendation areas in terms of importance to the agricultural plan and time frame for implementation.

The 1st order priority item relating to agricultural viability issues and requiring immediate action is the development of an agricultural strategy to implement the economic growth components of the agricultural plan. The most immediate and largest threat to the agricultural land base is considered to be the conversion of agricultural land outside the ALR for non-farming purposes. First order priority items causing encroachment on the agricultural operations and requiring immediate attention are nuisance, noise and smells and wildlife depredation of crops. The ongoing drainage and flood control project is also critical in terms of importance although implementation, by necessity, will continue over a shorter term.

Two key issues/recommendation areas to enhance agricultural viability, i.e., supporting the agricultural service industry and promoting farming in Surrey, are considered of 3rd order priority and are expected to require a longer time frame for implementation. This is not to diminish the importance of these recommendations for the protection and promotion of Surrey agriculture. Rather, these tasks may involve budgetary planning, require co-ordination between different levels of government and depend on industry response which is likely to be better once a number of the other higher priority items have been addressed.

4.2 Organizational and Staffing Requirements

4.2.1 Agricultural Program Manager

It is recommended that Surrey establish a staff person to act in a co-ordinator and liaison capacity for the development of agriculture within the City. The person would be responsible for taking the lead on developing the Agricultural Implementation Strategy, implementing the Agriculture Plan, and liaising with City staff in various Departments including Engineering, Economic Development and Planning and Development. The person, technically trained in and thoroughly familiar with agriculture, would:

- Provide analysis on behalf of the AAC on planning and development issues affecting agriculture (i.e., oversee implementation of an agricultural impact assessment process)
- Assist farmers through the development application process, and

- Work with other agencies on agricultural issues, as required.

The person must be prepared to work on a one-on-one basis with farmers and the farming community, in providing technical advice on agricultural development issues, and in representing the best interests of agriculture as per the intent of the Official Community Plan. This position could report directly to the City Manager.

Since there is a need for the City to be proactive about the economic development opportunities for agriculture, the Agricultural Program Manager would be well schooled in the economic aspects of the Agricultural Plan and be able to communicate agriculture's potential for contributing to the City's overall economic development strategy. In this regard, the Agricultural Program Manager's responsibility would also be to facilitate and co-ordinate linkages that would further the Agricultural Implementation Strategy, including liaising with the agriculture service and value-added industries and other government agencies.

4.2.2 Agricultural Advisory Committee

The AAC is an effective forum for discussing agricultural issues within the City and providing advice to Council and various departments. The AAC should continue to examine establishing sub-committees, wherever necessary, to deal with major ongoing issues facing agriculture. These sub-committees are not meant to be standing committees and are expected to work towards resolution of major issues. They should include representatives from other advisory bodies within the City as well as elected politicians, other government agencies, organizations, stakeholders, and citizens, where appropriate.

It is anticipated that sub-committees may be created, as required, to deal with the agricultural dimensions of various issues including transportation, recreation, fish and wildlife stewardship, and agricultural development

For these sub-committees to work effectively, they will require additional resources over the present situation. However, the costs should be more than offset by the benefits realized through the resolution of issues and establishing a co-operative relationship among all interests.

4.3 Funding Implications

4.3.1 Staffing

The implementation of the Agricultural Plan is expected to require approximately 1 person on a full-time ongoing basis. This is not necessarily a new budgeted position, since it may be possible to fill it by means of a reallocation of existing staffing budgets.

4.3.2 Capital Costs

No major new capital costs are anticipated for implementing the Agricultural Plan. The Plan does recommend preparing an Agricultural Development Strategy that would entail some preparation costs. As part of such a strategy, the plan recommends extending services to particular areas of Surrey to promote intensive agricultural development. There would be a cost for services such as water, sewer and power, however, many of these costs would be recoverable through charges to agricultural development.

There are also some minor costs associated with the preparation of promotional literature and informational bulletins on specific agricultural development issues (e.g., a guide to greenhouse development approvals).

The City is already involved in ongoing capital expenditures relating to drainage and flood control. The Plan does not recommend any additional expenditure in this area beyond the current programs.

4.3.3 Cost-Sharing Opportunities

The Plan refers to the possible provision of incentives to farmers for adopting resource conservation methods (e.g., better irrigation technology), reduction of odours through better manure storage handling, and provision of wildlife habitat, etc. Adoption of these measures would provide a wide range of social and economic benefits and may allow for more intensive agriculture in some areas. Surrey should explore opportunities to cost-share programs with farmers and other agencies and groups. For example, the Greenfields program in Delta provides seed to farmers for winter crops that benefit migratory waterfowl.

The Buy BC Investment Foundation could provide dollars for developing a Surrey logo and other local farm marketing programs.

The Youth Options BC Program sponsored through the Premier's Youth Office has two sub-programs (i.e., Student Summer Works Program and First Job in Science and

Table 1
Consideration of Key Issue/Recommendation Area by Priority and Time Frame for Action

Priority for Action	Key Issue/Recommendation Area	Time Frame for Action
1	3.1.1 Agricultural land use efficiency	Immediate
1	3.1.2 Rural-urban conflicts	Immediate
1	3.2.4 Conversion of agricultural land outside the ALR for non-farming purposes	Immediate
1	3.3.2 Wildlife depredation of crops	Immediate
1	3.3.4 Drainage, irrigation and flood proofing	Shorter Term
2	3.1.3 Demand for local agricultural products	Immediate
2	3.1.4 Marketing of local agricultural products	Shorter Term
2	3.2.1 Conversion of land within the Agricultural Land Reserve (ALR) for non-farming purposes	Immediate
2	3.2.2 Impact of ownership of ALR land by non-farmers	Immediate
2	3.3.1 Recreational access	Immediate
2	3.3.5 Fish habitat protection	Shorter Term
2	3.3.6 Safe farm vehicle movement	Shorter Term
3	3.1.5 Agricultural service industry support	Shorter Term
3	3.1.6 Farm succession	Shorter Term
3	3.2.3 Impact of residential development within the ALR	Longer Term
3	3.3.4 Pesticide drift and chemical use	Immediate

Technology Program) that appear to be able to provide funding to employers with workers in training capacities.

Finally, The BC Investment Agriculture Foundation supports projects that promote long-term growth, employment and competitiveness of BC's agriculture and food industry, associated industries and rural areas. The Foundation receives financial support from Agriculture and Agri-food Canada through the Canadian Adaptation and Rural Development Fund.

4.4 Summary of Key Participants

Five categories of agricultural plan implementation participants are indicated in Table 2. These groups are:

Private individuals and organizations - consisting of private farming and non-farming residents, interest groups and other private and non-profit organizations

- Surrey - representing jurisdictional responsibilities of the City
- GVRD - consisting of other municipalities within the Greater Vancouver Regional District, but which could apply to some parts of the Fraser Valley Regional District as well
- Provincial Government - in roles defined by jurisdiction, responsibilities and as a potential source of funding
- Federal Government - in roles defined by jurisdiction, responsibilities and as a potential source of funding

Both Surrey and the province have roles to play in all key issue areas and many recommended actions. However, since the plan calls for participation of stakeholders through a co-operative, incentive-based approach which reflects the societal distribution of costs and benefits in protecting and enhancing agriculture, the role of private individuals and organizations is expected to be extensive, particularly in 1st order priority items. It may be noted that 2nd and 3rd order priorities tend to require the co-operation of local and senior governments in areas which private individuals and organizations would have less participation.

The responsibilities of key participants or stakeholders in Surrey's agricultural plan will have implications for cost sharing of recommended initiatives.

Table 2
Consideration of Key Issue/Recommendation Area by Priority and Key
Participants' Action Roles

Priority of Action	Key Issue/Recommendation Area	Action Role					
		Private Individ/ Org's	Surrey	GVRD	ALC	Prov Gov't	Fed Gov't
1	3.1.1 Agricultural land use efficiency		✓	✓		✓	✓
1	3.2.4 Conversion of agricultural land outside the ALR for non-farming purposes		✓			✓	
1	3.3.2 Wildlife depredation of crops	✓	✓			✓	✓
1	3.1.2 Rural-urban conflicts	✓	✓			✓	
1	3.3.3 Drainage, irrigation and flood proofing	✓	✓			✓	✓
2	3.3.1 Recreational access	✓	✓		✓		
2	3.1.3 Demand for local agricultural products		✓		✓	✓	
2	3.1.4 Marketing of local agricultural products	✓	✓		✓	✓	
2	3.2.1 Conversion of land within the Agricultural Land Reserve (ALR) for non-farming purposes		✓	✓		✓	
2	3.2.2 Impact of ownership of ALR land by non-farmers		✓	✓		✓	
2	3.3.5 Fish habitat protection	✓	✓			✓	✓
2	3.3.6 Safe farm vehicle movement		✓		✓	✓	
3	3.1.5 Agricultural service industry support		✓			✓	✓
3	3.1.6 Farm Succession		✓		✓	✓	✓
3	3.2.3 Impact of residential development within the ALR		✓	✓		✓	
3	3.3.4 Pesticide drift and chemical use	✓	✓	✓		✓	

