

Developing Agricultural Impact Assessment Guidelines for the Metro Vancouver Region

Background Report

Prepared for:

Metro Vancouver
Planning, Policy and Environment

Submitted by:

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Executive Summary

Metro Vancouver, while advocating for AIA guidelines, has no mandate or interest to intercede in local government land use decision-making. Metro Vancouver's stake in the discussion is related to implementation of the Metro Vancouver 2040, the region's regional growth strategy that aims to protect agricultural land and promote agricultural viability.

Despite provincial and local government initiatives to plan for agriculture, farmland continues to be fragmented, agricultural land values are increasing, there is more rural-urban conflict, and inefficient and inappropriate infrastructure and investment is either being encouraged or allowed to happen. A significant gap exists in understanding how changes in non-farm uses are affecting the viability of individual farms and the wider agricultural industry. The Agricultural Impact Assessment (AIA) process has the potential to generate better and more useful information on the effects of non-farm developments so that decision-makers are more aware of the costs associated with land use changes that create adverse effects on agriculture.

This Background Report to the Agricultural Impact Assessment Guidelines, prepared for Metro Vancouver, contains:

- the policy and regulatory context for agricultural impact assessment in Metro Vancouver;
- a discussion of environmental assessment approaches used, specifically agricultural impact assessment processes in a limited number of jurisdictions, and implications for AIA in Metro Vancouver;
- a reporting out of consultations with local government Agricultural Advisory Committees (AACs) and government agencies responsible for agriculture; and
- recommendations on how an AIA process might work in Metro Vancouver.

The recommendations include the following:

- an AIA requires a regulatory and policy context in order to be respected by farmers, non-farm developers, and the public at large and to provide decision-makers with the authority to formally use the tool to evaluate agricultural impacts of projects;
- the AIA process should be required in all situations where the potential for significant impacts to agriculture are present;
- the AIA should follow a staged process, in which the requirements for information from the proponent are specified in relation to the significance of agricultural impact;
- the conditions for triggering an AIA should be specified, and ideally in regulation or adopted policy;
- the requirement for AIA process should be systematic, and the AIA should be triggered in relation to the findings of a screening checklist and advice from AACs or other agencies, as applicable;
- the AIA should be used firstly, to avoid agricultural impacts; secondly, to eliminate potentially adverse impacts; and thirdly, to mitigate to completely off-set unavoidable impacts; and
- benefits would be maximized by all jurisdictional levels and non-farm development proponents using the same set of AIA guidelines.

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1.0 Introduction

Metro Vancouver 2040: Shaping our Future is the region's regional growth strategy that recognizes local government's role in protecting the supply of agricultural land and promoting agricultural viability. It also advances regional goals by supporting municipal objectives through data analysis, technical reports and planning tools. Despite provincial and local government initiatives to plan for agriculture, farmland continues to be fragmented, agricultural land values are increasing, there is more rural-urban conflict, and inefficient and inappropriate infrastructure and investment is either being encouraged or allowed to happen. A significant gap exists in understanding how changes in non-farm uses are affecting the viability of individual farms and the wider agricultural industry. This is evident from the small number of studies devoted to the subject.

Non-farm development¹ can be considered a response to growth pressures in the region and planning efforts to manage growth are evident at various jurisdictional levels. At the local level, most communities have their hands full accommodating demand for public services. In particular, land use, utilities, and transportation planning have large influences on agriculture. At the regional level, the region's regional growth strategy use an Urban Containment Boundary, land use designation and policies to direct population growth to urban areas to protect farmland and other natural assets and ensure more efficient use of financial resources for utility and transportation infrastructure. At the same time, planning for major projects, utility corridors and transportation routes is largely done at the federal and/or provincial level, which often disregards local government policies and regulations.

The normal processes of land use change are well understood and emanate directly from population growth, household formation and economic development. These processes have been accelerated by job mobility, growth of income and wealth, new information and communication technologies, improved transportation, and the ability for new age companies to operate businesses anywhere.

The demand for low-density non-farm development represents consequences of what economists usually attribute to market failure² and others see as the constant development pressure that places agriculture in a reactive mode, having to continually manage impacts and inefficiencies imposed by expanding non-farm development. The "market" for suburban and large lot lifestyles is high throughout North America, leading to negative impacts or externalities on farmland and rural areas. At the same time, the "market" for positive externalities from farming in rural areas, such as "viewscales", open space, and lower density, is not recognized. The impact of residential housing and non-farm uses in farming areas, in particular, removes positive externalities associated with agriculture. Researchers have recognized that the "creeping effect" of non-farm development on farmland tends to "justify" more land conversion as agricultural efficiencies decline, for example, caused by fragmentation of farmed lands, congestion of rural roads, and impaired access to fields.

Land use planning for agricultural areas in BC is unique because of the existence of the Agricultural Land Reserve (ALR). In the early 1970s, the province of British Columbia designated good quality farmland in the province as an "agricultural lands reserve" where non-agricultural land use would be strictly

¹ Non-farm development is defined as development either inside or outside of the ALR with the potential to cause direct, indirect and cumulative effects on agricultural land, activities and overall sector.

² Heimlich, RE and WD Anderson. 2001. Development at the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land. US Department of Agriculture: Economic Research Service. Agricultural Economic Report No., 803. <http://ageconsearch.umn.edu/handle/33943> ; <http://ageconsearch.umn.edu/bitstream/33943/1/ae010803.pdf>

controlled. The rationale for doing so is clearly stated in the act that refers to agricultural lands as a “scarce and important asset.” The dimensions of the value of farmland have expanded over the years to include:

- food safety, i.e., the ability to produce local food products under Canadian food regulations;
- food security, if food production systems should collapse elsewhere;
- potential to reduce food carbon footprint (e.g., 100 mile diet); and
- lifestyle, in the sentimental and cultural attachment to the concept of the family farm.

Nonetheless, strict protection of the land does not necessarily create all the conditions for viable farming and sustainable agriculture. In the shadow of urbanization, farming operations have faced efficiency challenges related to restrictions created by encroaching urban uses and the ability to carry out normal farming practices, such as extended working hours in the field, use of chemicals for pest control and fertilization, manure spreading and movement of machinery and equipment on local roads.

Municipal and regional agricultural plans in BC have consistently advocated for the use of agricultural impact assessments to identify and avoid detrimental impacts on farmland and farm operations. Perhaps because agricultural land reserves do not exist in other Canadian jurisdictions, some local governments in other provinces have been proactive in developing guidelines for assessing non-farm development impacts in consistent and more systematic ways. In the US, farmland regulatory and policy tools developed to identify and protect prime agricultural land have been found to be useful in identifying impacts and forestalling significant intrusions into prime farming areas. As such, we know that agricultural impact assessments (AIAs) have been adopted elsewhere as local governments have become concerned about the loss of food production lands and how the cumulative impact tends to be obscured by their individual land use decisions in an agricultural economy and resource base that transcends political boundaries.

1.1 Purpose of the Study

An underlying assumption in this investigation is that properly designed agricultural impact assessment tools will promote a comprehensive and consistent approach desired by all levels of government to identify and avoid the true impacts on agriculture of non-farm development in the region. Further, this consistency across all jurisdictions will improve local planning in support of agriculture. It will also reduce opportunities for one jurisdiction to be played off against another at the expense of agricultural resources.

The purpose of the study is several fold:

- to examine what various jurisdictions are doing to plan non-farm development growth and protect their agricultural lands and activities at the same time;
- to identify the types of agricultural impacts that are the greatest threats to farmers and agricultural land;
- to investigate the practicality of regional agricultural impact assessment tools for the Metro Vancouver area;
- to provide recommendations on what the agricultural impact assessment guideline should contain; and
- to develop, to the extent possible, an approach and guidelines for assessing impacts on agriculture from non-farm development.

1.2 Approach and Methodology

A large component of this study consisted of consultations with various stakeholders. The objective of the consultations was to get a sense of what mechanisms were presently being used to assess agricultural impacts and what types of impacts were problematic from an agricultural perspective. The participants were asked about their receptivity to the idea of a guideline/tool that could assist in the evaluation of the significance of agricultural impacts using a systematic assessment process. The consulting team prepared an overview document on key questions, which was discussed with participants. In group meetings, the team gave a short power point presentation to assist in the discussion.

As a second component of the study, the team conducted an Internet and literature review to identify approaches that have been tried elsewhere. In this review, environmental impact assessment processes were also examined as these approaches have been around for a period and the required screening and scoping methodologies are anticipated to be similar.

The content of the report reflects the findings from our consultations synthesized with the jurisdictional review of impact assessment processes and our knowledge of the necessary conditions for the viability of agriculture.

1.3 Who We Contacted

The consulting team met with Agricultural Advisory Committees (AACs) from municipalities in Metro Vancouver. Each of these meetings was attended by municipal personnel, in addition to farmer and other community representatives who contributed to the discussion. In several instances, a liaison Councilor also attended and a representative of the BC Ministry of Agriculture was present. The AACs that provided input were:

- Delta AAC
- Langley AAC
- Maple Ridge AAC
- Metro Vancouver AAC
- Pitt Meadows AAC
- Richmond AAC
- Surrey AAC
- Vancouver Food Policy Council.

In addition, the team conducted interviews with representatives of the following agencies:

- Agricultural Land Commission
- BC Agriculture Council
- BC Ministry of Agriculture, and
- Farm Industry Review Board.

2.0 Agricultural Impact Assessment Regulatory and Institutional Context

Jurisdictional roles and responsibilities play an important role in how agricultural impacts are currently assessed. Responsibilities for agricultural impact assessment are spread across several governmental entities in BC and the federal government.

2.1 Provincial Agricultural Impact Assessment

Roles and responsibilities are set out in various laws:

- Agricultural Land Commission Act
- Local Government Act
- Farm Practices Protection Act
- Land Title Act, and
- Environmental Assessment Act.

2.1.1 Agricultural Land Commission Act

The advent of the Agricultural Land Reserve (ALR) in 1974 created a requirement to protect agricultural land through provincial and local government land use planning. The mandate of the Agricultural Land Commission (ALC) is to be an independent steward dedicated to protecting BC's agricultural lands. Through a combination of exclusions and inclusions, the ALC has reversed losses of prime agricultural land to non-farm development from 6,000 hectares per year in the 1970's to a marginal gain in total farmland in 2009.³

The activities of the ALC have expanded over time to include improving communications with local governments, farm organizations, landowners and the general public. It is recognized that cooperative efforts are required with regional districts and local governments in local land use planning in order to maintain support for the ALR.

While the ALC only receives applications pertaining to ALR lands, a number of ALC reports have been produced, for example, to provide guidance to local governments in bylaw development, landscape buffering, and non-farm uses adjacent to agricultural lands. These initiatives recognize that eliminating and reducing conflicts between farmers and non-farm residents are equally important for supporting agriculture. Many ALC recommendations have been adopted in local government agricultural plans, community plans, bylaws and policies. The ALC has developed guidelines for use by local governments to assist in drafting plan and bylaw provisions to regulate land use in the ALR, along the urban fringe, and for management of agricultural resources. These guidelines are intended to be used in a preventative manner to avoid land use conflicts with farming.⁴

The ALC has prepared a checklist of urban/agricultural conflicts to identify the sources of conflicts and impacts on farmland. This is mainly a listing of possible conflicts, and does not provide guidance on how to apply the checklist in specific situations.⁵

³ Nevertheless, several regions in the more populated areas have experienced substantial exclusions while more remote regions have gained area. See Agricultural Land Commission. Table 1: Area Included and Excluded from the ALR, by Year, in hectares, 1974-2009. http://www.alc.gov.bc.ca/alr/stats/Table1_incl-excl_allyears_d.pdf

⁴ Agricultural Land Commission. ALR & Community Planning Guidelines. http://www.alc.gov.bc.ca/publications/Community_Planning_Guidelinescolour.pdf

⁵ Agricultural Land Commission. Planning for Agriculture. Appendix 20: A Checklist of Common Urban/Agricultural Conflicts. http://www.landcommission.gov.bc.ca/publications/planning/Planning_for_Agriculture/index.htm

The ALC administers permitted uses⁶ in the ALR and any application to use ALR lands for non-farm purposes must be approved by the ALC in order to proceed. In making its decision, the ALC asks for material to support an application so that the agricultural impact can be assessed. The ALC uses an informal evaluation tool to assist in making sure the larger agricultural impact concerns in a non-farm development application are addressed, consisting of land use questions, zoning and anticipated impact on the neighbourhood. The agency is in the process of putting together a triage process for ALR applications so that municipalities can be more realistic in moving applications forward to the ALC. However, many of the applications propose trade-offs and create situations and impacts that cannot be completely understood without the existence of a baseline from which to measure impact. There is a danger that the moving baseline that currently exists does little to provide a defensible rationale for rejecting any non-farm application outright. As a result, proponents have become more and more inventive in proposing trades, swaps, and exchanges in return for development concessions.

In addition, the ALC is responsible for ensuring that its regulations are enforced on ALR lands. For example, when approval is given for soil fill deposition on an ALR property, an ALC enforcement officer works with local government to monitor the soil fill to ensure compliance of the activity so that the ALR is used appropriately. In these situations, while the project justification takes place at the time approval is obtained, the agricultural impact assessment tends to occur when compliance becomes an issue.

The ALC's review process is open to being overridden by the provincial government. Recently with respect to the Site C project in the BC Peace River Region, the provincial government announced that the role of the ALC has been suspended to avoid redundancy with the federal-provincial panel review process.⁷ Also in 2013, oil and gas activities and ancillary activities located on ALR lands are now either exempted from the requirement of an application for permission for non-farm use under the ALC Act, or approval is delegated to the BC Oil and Gas Commission.⁸ The agreement contains assessment guidelines to minimize impacts on agriculture capability and current or planned agricultural operations.⁹

2.1.2 Local Government Act

The *Local Government Act* provides the legislative framework for local and regional governments to address agriculture with tools such as community planning, zoning, nuisance regulations, the removal and deposit of soil, weed and pest control and water use and drainage.

Local Government

Local governments exercise authority over farmland and manage impacts through zoning, bylaws and policies expressed in official community plans (OCPs). When these OCPs are applied to land in the Agricultural Land Reserve, they must be referred to the Agricultural Land Commission for comment prior to adoption. Municipalities with farm land often include specific policies in their OCPs advocating protection of farmland and enhancement of farming operations. Some municipalities have special plans or strategies to enhance farming, such as Richmond's Agricultural Viability Strategy (AVS) which "is a long-term commitment and partnership of the City and agricultural community to strengthen and

⁶ See Agricultural Land Reserve Use, Subdivision and Procedure Regulation, B.C. Reg. 171/2002. http://www.alc.gov.bc.ca/legislation/Reg/ALR_Use-Subd-Proc_Reg.htm

⁷ Fisher, E. 2013. Energetic City. Site C Agricultural Land Commission review would be redundant: Energy Minister. Dec 16. <http://energeticcity.ca/article/news/2013/12/16/site-c-agricultural-land-commission-review-would-be-redundant-energy-minister>

⁸ Delegation Agreement between the ALC and the OGC. June, 2013. <http://www.alc.gov.bc.ca/Delegation/ALC-OGC/ogc-alc-delegation-agreement-updated-june-132013%5B1%5D.pdf>

⁹ Ibid. Appendix II.

enhance agricultural viability in Richmond.” Most municipalities have agricultural zoning categories that apply to farm lands, whether in or out of the ALR. These bylaws specify what uses are permitted and conditions of use, such as siting, site coverage, setbacks, and ancillary activities, within the agricultural zones. In addition, municipalities also approve and/or finance municipal roads and streets and other infrastructure, which can have substantial impacts on farming operations as well as inducing further nonfarm development. Some local governments have created development permit areas within their OCPs along the ALR boundary for the further protection of farming. Several local governments have policies for dealing with non-farm uses in the ALR that assess impacts on agricultural activities and operations and processes. These often involve Agricultural Advisory Committees to review the nature and significance of impacts.

Under Section 919.1 of the *Local Government Act*, an OCP may designate development permit areas for the purpose of protection of farming. The OCP must (a) describe the special conditions or objectives that justify the designation and (b) specify guidelines respecting the manner by which the special conditions or objectives will be addressed. Land within the designated area must not be subdivided and construction of, addition to or alteration of a building or other structure must not be started without a development permit. The development permit can impose conditions but cannot vary the use or density of the land from that permitted in the bylaw (except in certain health and safety circumstances), or vary a flood plain specification under the Act.

The development permit area under an OCP may (a) specify circumstances in which development approval information may be required, (b) designate areas for which development approval information may be required, and/or (c) designate areas for which, in specified circumstances, development approval information may be required. An OCP that specifies such circumstances or designates relevant areas for protection of farming must describe the special conditions or objectives that justify the specification or designation. Agricultural Impact Assessment Guidelines will need to focus on effective use of the development permit area tool under the Local Government Act including:

- the development approval information regarding agricultural impact assessment that may be required;
- the special conditions or objectives that justify the ‘protection of farming’ development permit area designation; and
- the specific guidelines respecting the manner by which the special conditions or objectives will be addressed.

Regional Government

The regional district, through its regional growth strategy, Metro Vancouver 2040: Shaping Our Future, has regulatory authority for an Urban Containment Boundary and Agricultural designated land through the Local Government Act.¹⁰ In addition, Metro Vancouver has an Agricultural Advisory Committee that meets regularly to review agricultural issues and advise the Metro Board on agricultural impacts and actions.

Ministry of Agriculture

The Ministry of Agriculture supports the ALC in preparing information to assist local and regional government in supporting agriculture and has developed, either alone or jointly, agricultural planning

¹⁰ Metro Vancouver. 2010. Metro Vancouver 2040: Shaping Our Future. Regional Growth Strategy ByLaw No. 1136. <http://www.metrovancouver.org/planning/development/strategy/RGSDocs/RGSAdoptedbyGVRDBoardJuly292011.pdf>

guidelines for rural-urban edge planning,¹¹ development permit areas,¹² vegetative and landscaped buffers, and subdivision planning near agriculture.¹³ While the Ministry may prepare papers responding to specific projects and impacts, it is generally focused on programs promoting industry development.

Under the Local Government Act, the Minister of Agriculture has the authority to address local government bylaws or policies that would prohibit or restrict the use of land for farming operations by establishing agricultural standards for the guidance of local governments, creating farm bylaws to give more flexibility in specific planning standards for agricultural operations, permitting intensive agriculture despite local zoning bylaw that might prohibit that use, and creating regulation to allow intensive use in specific geographical areas. In these situations, targeted agricultural impact assessment may be undertaken to substantiate impacts.

2.1.3 Farm Practices Protection Act (FPPA)

Farm Industry Review Board

The FPPA applies to farmers who farm in the ALR, in other areas where farming is permitted by local zoning bylaws, and in areas licensed for aquaculture. The Farm Industry Review Board (FIRB) is the tribunal responsible for considering complaints from persons aggrieved by odour, noise, dust, or other disturbances resulting from farm operations. In the case of complaints that are not settled, the Board will hear the complaints and determine whether the disturbance in question results from normal farm practices. In these circumstances, while agricultural impact is assessed on both the farmer and the aggrieved property owner, the objective is to reach solutions that resolve complaints.

The FIRB may also study any matter related to farm practices, on its own initiative, using various unspecified assessment techniques to arrive at conclusions and recommendations.

The Ministry is routinely involved with FPPA complaints to attempt to resolve concerns before the issues reach the FIRB. Where study of issues and recommendations is undertaken, agricultural impact is assessed.

2.1.3 Land Title Act

This act gives approving officers the power to assess impacts of new subdivisions on farmland. Before subdivision approval is given, the approving officers may require adequate buffering of farmland from the subdivision or the removal of unnecessary roads directed at the ALR to ensure no unreasonable interference occurs with farm operations.

More specifically, matters to be considered by approving officer on application for approval include:

- 86(1) Without limiting section 85(3), in considering an application for subdivision approval, the approving officer may
 - (c) refuse to approve the subdivision plan, if the approving officer considers that...

¹¹ BC Ministry of Agriculture and Lands. 2009. Guide to Edge Planning: Promoting Compatibility Along Urban-Agricultural Edges. http://www.al.gov.bc.ca/resmgmt/sf/publications/823100-2_Guide_to_Edge_Planning.pdf

¹² BC Ministry of Agriculture. Development Permit Areas for the Protection of Farming. <http://www.al.gov.bc.ca/resmgmt/sf/edge/dpa.htm>

¹³ BC Ministry of Agriculture and Food. 1997. Planning Subdivisions near Agriculture. <http://www.al.gov.bc.ca/resmgmt/publist/800Series/820500-2PlanningSubdivisions.pdf>

(x) the anticipated development of the subdivision would unreasonably interfere with farming operations on adjoining or reasonably adjacent properties, due to inadequate buffering or separation of the development from the farm, or

(xi) the extent or location of highways and highway allowances shown on the plan is such that it would unreasonably or unnecessarily increase access to land in an agriculture land reserve.

Within municipalities, the approving officer is the Municipal Approving Officer, whom municipal councils appoint to approve or refuse subdivision proposals within municipal boundaries.¹⁴ It is presumed that such ruling incorporate an agricultural impact assessment process in their determination.

2.1.4 Environmental Assessment Act

The BC environmental assessment process required by the Environmental Assessment Office (EAO) applies to major projects that are automatically reviewable based on a threshold of impact, or by request of the Ministry of Environment for review at its discretion. Those projects that are automatically reviewable include: industrial projects; water management projects; waste disposal projects; mine project; food processing projects; transportation projects; and tourism destination resort projects.¹⁵

The application information requirements generally contain the following core elements:¹⁶

- description of the project, including all key project elements;
- spatial and temporal boundaries of the assessment;
- consultation that will take place;
- project setting and characteristics, including a description of a wide range of baseline studies that the proponent will undertake;
- scope of the assessment, including a list of all potential effects that will be considered;
- methodology for assessing impacts and mitigating effects;
- assessment of the potential significant adverse affects, including proposed mitigation measures and residual effects; and
- commitment to provide environmental management systems and monitoring plans.

More recently, a guideline for the selection of valued components and assessment of potential effects have been added to the assessment process.¹⁷ The elements now include more rigorous selection of valued components and evaluation of residual effects in terms of likelihood, significance, confidence and risk, and cumulative effects assessment. This guideline has been applied to the Site C project.

¹⁴ Ministry of Transportation and Infrastructure Involvement. Roles and Authorities. http://www.th.gov.bc.ca/DA/L3_min_trans.asp

¹⁵ Environmental Assessment Office. The Environmental Assessment Process. http://www.eao.gov.bc.ca/ea_process.html

¹⁶ Environmental Assessment Office User Guide. 2011. http://www.eao.gov.bc.ca/pdf/EAO_User_Guide%20Final-Mar2011.pdf

¹⁷ Environmental Assessment Office. 2013. A Guideline for the Selection of Valued Components and Assessment of Potential Effects. http://www.eao.gov.bc.ca/pdf/EAO_Valued_Components_Guideline_2013_09_09.pdf

2.2 Canadian Environmental Assessment

Federal environmental impact assessments are authorized under the Canadian Environmental Assessment Act 2012.¹⁸ Responsibility for conducting environmental assessments rests with the Canadian Nuclear Safety Commission, the National Energy Board, and the Canadian Environmental Assessment Agency (CEAA) for all other types of projects. An environmental assessment may be required when there is the potential for adverse environmental effects from a designated project within federal jurisdiction, such as:

- fish and fish habitat;
- other aquatic species;
- migratory birds;
- navigation;
- federal lands;
- effects that cross provincial or international boundaries;
- effects that impact on Aboriginal peoples, such as their use of lands and resources for traditional purposes; and
- changes to the environment that are directly linked to or necessarily incidental to any federal decisions about a project.

Federal environmental assessments are required to consider the following factors:¹⁹

- environmental effects, including environmental effects caused by accidents and malfunctions, and cumulative environmental effects;
- significance of those environmental effects;
- public comments;
- mitigation measures and follow-up program requirements;
- purpose of the designated project;
- alternative means of carrying out the designated project;
- changes to the project caused by the environment;
- results of any relevant regional study; and
- any other relevant matter.

In general, the federal environmental assessment process keeps its scope narrow and is focused on the assessment of effects on the environment, not including agricultural use with the exception of Aboriginal use of environmental resources.²⁰ This is understandable since, with the exception of federal lands in the province, the authority and responsibility for the management of provincial lands lies solely with BC. The federal environmental review carried out for the Deltaport Third Berth is an example of the approach used.²¹ Potential air quality effects on agricultural crops are omitted from discussion.

¹⁸ Canadian Environmental Assessment Act 2012. <http://laws-lois.justice.gc.ca/eng/acts/c-15.21/index.html>

¹⁹ Canadian Environmental Assessment Agency. Basics of Environmental Assessment. <http://www.ceaa-acee.gc.ca/default.asp?lang=en&n=B053F859-1#ceaa05>

²⁰ Canadian Environmental Assessment Agency. 2012. Guide to Preparing a Description of a Designated Project under the Canadian Environmental Assessment Act, 2012. http://www.ceaa-acee.gc.ca/63D3D025-2236-49C9-A169-DD89A36DA0E6/Guide_to_Preparing_a_Description_of_a_Designated_Project_under_CEEA_2012.pdf

²¹ Fisheries and Oceans Canada and Environment Canada. 2006. Comprehensive Study Report. <http://www.ceaa-acee.gc.ca/050/documents/16090/16090E.pdf>

2.3 Joint Federal-Provincial Environmental Assessment of Projects

Since 2004, the provincial EAO and Canadian Environmental Assessment Agency (CEAA) have entered into a bilateral implementation agreement that pursues joint environmental assessments of projects requiring federal and provincial review.²²

Started in 2006, the South Fraser Perimeter Road (SFPR) is an example of a project subjected to a joint federal-provincial environmental assessment process because of federal funding and potential federal authorizations required under the Navigable Waters Act and the Fisheries Act. The cumulative environmental effects report notes that cumulative agricultural impacts were not assessed because there was not a biophysical impact.²³ Nevertheless, the SFPR compensated Delta agriculture with substantial irrigation benefits, although the connection between the size of the agricultural impact and the size of the compensation is not known.

The Site C project is another example of a joint federal-provincial environmental assessment conducted under the most recent provincial value components and potential effects guideline. The evolving adversarial nature of these assessment reviews suggests that the impact assessment mechanism may need to broaden its scope to be defensible and palatable to those who make decisions on these projects.

²² Canada- BC Environmental Assessment Cooperation Agreement. 2004.
http://www.eao.gov.bc.ca/pdf/CEAA_EAO_Agreement_20081219.pdf

²³ South Fraser Perimeter Road. Environmental Assessment Application. Chapter 10.
http://www.sunburyneighbourhood.ca/PDF/CEA_CumulativeEffectsJune2008.pdf

3.0 Agricultural Impact Assessment Approaches in Other Jurisdictions

A review of other jurisdictions revealed that AIA approaches relate to the impacts of urban or regional growth on agriculture or natural resource development on agriculture. Contact was made with the International Association for Impact Assessment and this organization was unable to provide any specific guidelines that dealt with impacts to agriculture from development projects. These types of impacts are often included within broader environmental impact assessment processes.²⁴

Examples of AIA approaches that have relevancy to the Metro Vancouver context are the City of Kelowna²⁵, the Regional Municipality of Halton (Ontario),²⁶ City of Medford,²⁷ Oregon, US Land Evaluation and Site Assessment (LESA),²⁸ and locally, the District of Maple Ridge²⁹. Our review also found that other local governments, particularly in Ontario often require urban development related projects (OCP amendments, major development projects) to undergo an AIA.³⁰ In New South Wales, Australia, an Agricultural Impact Statement is required by the state government for natural resource development projects such as mining and petroleum (coal seam gas) exploration and development.^{31,32}

The European Union and the FAO also have environmental assessment guidelines that relate to agricultural impacts from non-farm development. These are reviewed as well.

3.1 City of Kelowna Agricultural Impact Assessment Terms of Reference

Under the City of Kelowna's Development Application Procedures Bylaw, the Director of Land Use Management may require an applicant of a development project to undertake an AIA "...to determine if a development proposal will adversely affect existing and future agricultural activities onsite and/or in the area surrounding the proposed development or change in land use." It is expected that AIAs will accompany applications under the Agricultural Land Commission Act for ALR exclusions, subdivision and non-farm uses. An AIA would also be required for changes to the City's Official Community Plan (OCP) or Zoning Bylaw for land currently zoned for agricultural use. An AIA could also be applied to proposals

²⁴ Hanna, Kevin S.(Ed). 2009. Environmental Impact Assessment: Practice and Participation. 2nd Edition. Oxford University Press and Noble, BF. 2010. Introduction to Environmental Impact Assessment – A Guide to Principles and Practices. 2nd Edition. Oxford University Press.

²⁵ City of Kelowna. 2012. Agricultural Impact Assessment Terms of Reference.

²⁶ Regional Municipality of Halton. 1985. Agricultural Impact Assessment Guidelines. October. Regional Municipality of Halton. 2011. Draft Agricultural Impact Assessment (AIA) Guidelines, November.

²⁷ City of Medford. 10.802 Urban-Agricultural Conflict Mitigation in Urban Reserve.

<http://www.ci.medford.or.us/CodePrint.asp?CodeID=4498>

²⁸ USDA. Natural Resources Conservation Service. National Agricultural Land Evaluation and Site Assessment (LESA) Handbook. ftp://ftp-fc.sc.egov.usda.gov/NSSC/land_use/LESA_Handbook.pdf

²⁹ District of Maple Ridge. 2011. Planning Department. Agricultural Impact Assessment Guidelines. May. (not adopted by Council).

³⁰ For example, see Town of Caledon. 2009. South Albion-Bolton Community Plan Agricultural Impact Assessment.. Planning and Development Department July and City of Barrie Secondary Plan, 2012. Agricultural Impact Assessment, March.

³¹ Government of New South Wales. 2012. Strategic Regional Land Use Policy. Guideline for Agricultural Impact Statements. October.

³² Hunter Valley Energy Coal. 2013. Mt. Arthur Coal Open Cur Modification. Appendix A: Agricultural Impact Statement. Prepared for BHPBilliton. <http://www.bhpbilliton.com/home/aboutus/regulatory/Documents/MAC%202013/Project%20Exhibition%20Documents/Appendix%20A%20-%20Agricultural%20Impact%20Statement.pdf>

involving residential uses on land zoned for agriculture (additional dwelling for farm employees or temporary farm workers).

The AIA Terms of Reference provide policy and technical guidance to those proponents required to undertake an AIA. They include:

- Section 4 - Key Policy Considerations, which outlines eleven OCP policies and requires the AIA to determine how the proposal meets or does meet each policy;
- Section 5 – Professional Standards, which requires that the assessment be undertaken by a Qualified Professional, that it takes an avoidance, mitigation and compensation approach and also addresses cumulative effects of the proposed project;
- Section 6 outlines the Basic Assessment Requirements, which includes technical details of the project such as agricultural operations, soils, agricultural capability, adjacent land uses and their intensity, non-agricultural land uses and conflicts with existing and potential onsite agriculture, compatibility or incompatibility of proposed use(s) within an agricultural area and potential to cause secondary impacts, alternative sites for intended use, economic estimates of the long term loss of agricultural production and mitigation measures, barriers and constraints to different types of agricultural operations, degree of farmland fragmentation (quantified); drainage impacts to site and neighbouring area, traffic impacts, crops and byproducts, non-soil based options, accessory farm uses, alternative financial models for farming, farm home plate location, and agricultural worker dwellings; and
- Section 7 outlines the Data Deliverable (reporting) requirements.

The AIA requirements are meant to be a general guide and the Terms of Reference state that each project assessment will be customized to meet the needs of a specific project. It is envisioned that smaller projects would undergo a much less detailed review.

3.2 Regional Municipality of Halton AIA Guidelines

The Halton Region, Ontario has had AIA Guidelines in place since 1985 and is currently revising them as part of their Official Regional Plan Amendment (ROPA 38). The Halton Region established the requirement for an AIA as part of the Provincial and Regional policy goals to protect agricultural land. The Guidelines outline the following:

- when an AIA will be required;
- the nature and extent of the AIAs that will be required in support of any development that has the potential to impact lands where agriculture is a permitted use;
- the factors that must be addressed;
- the review process; and
- criteria used in evaluating proposals.

The purpose of an AIA is “...to quantify the impact a development could have on the Region. The evaluation will consider if the proposal will adversely affect existing and future agricultural production or activities on a subject property or in the area surrounding it and evaluate the potential impact a development may have on the overall viability of agriculture in the Region.” The AIA is to be used for Regional Plan amendments, local OCP amendments, zoning amendments, subdivision or condominium, site plan approval and Niagara Escarpment Plan amendment and development permit applications. Each development proposal is scoped by Regional staff and specific AIA requirements are determined based on the scale of the proposal and potential impacts.

The content requirements of an AIA are similar to those required by the City of Kelowna as discussed above. The AIA is to provide a review of the Policy and Regulatory framework from an agricultural perspective, as follows:

- an On-site and surrounding area Physical Resource Inventory (soils, climate, topography, drainage);
- On-site Features (past farming practices, type and intensity of existing agricultural production, non-agricultural land uses, parcel size, shape and accessibility, existing farm management, capital investment in agriculture);
- Off-site Land Use Features (surrounding land use types up to 1km from the property boundary of the site, existing and potential constraints on on-site agriculture, regional land use, lot and tenure patterns, fragmentation, non-agricultural commitments from planning documents);
- Agricultural Viability (viability of the site's agricultural potential on its own and in consolidation with larger operations, impact on viability of neighbouring agricultural operations from proposed development);
- Assessment of the Impacts on Agriculture (effects on the agricultural community – quantitative and qualitative, effects on surrounding agricultural operations, nutrient management, ability of surrounding community to respond to land use changes or changes from one agricultural type to another, impacts on the agricultural character of the region including tenure, fragmentation patterns, cumulative effects of the proposed development in terms of setting a precedent for future land use decisions);
- Alternative Location Analysis – demonstrate how the proposed development has the least impact on agriculture and determine if additional land needs to be designated to accommodate the proposed use; and
- Mitigative Measures (assess how both on-site and off-site impacts to agriculture could be reduced and how this would be done). The report is also to include professional opinions as to the extent to which the development can satisfy directions of the Provincial Policy Statement, the agricultural policies of the Regional Official Plan and local official plans and why the proposal represents good planning.

The AIA Guidelines also outline report requirements and procedures (pre-consultation meetings, use of qualified professionals, draft AIA requirements, peer review). A Scoping section is included which allows for staff to determine if an AIA will be required and lays out criteria for this (i.e., agriculturally related uses which by necessity must be located in proximity to farm operations, where other agricultural impact studies have been done and accepted by the Region, and where it is determined there will be no adverse impact from the project due to size, character, existing buffering, distance from agricultural lands, etc.).

3.3 District of Maple Ridge AIA Guidelines

The District of Maple Ridge also has Agricultural Assessment Guidelines that are used for assessing development proposals on or near agricultural lands.³³ The guidelines also include measures for groundwater impact assessment. The purpose of the guidelines is to determine if a development proposal has “identifiable or potential impacts on agricultural lands and if so, what mitigation measures are necessary.”

³³District of Maple Ridge. Planning Department. *Agricultural Impact Assessment Guidelines*. May 2011.

Assessment criteria include a description of the project and its impacts on agriculture; proposed mitigation measures; compatibility within an agricultural area; potential to cause secondary impacts; drainage impacts; downstream water and septic impacts; impacts of noise levels on wildlife; impacts of air emissions on crops and wildlife; traffic implications for farms and traffic safety; pesticide use on roadsides; servicing impacts on or near agricultural lands; and strategies to minimize residential/agricultural land use conflicts.

3.4 City of Medford, Oregon AIA Guidelines

The City of Medford, Oregon has established standards to mitigate the potential for conflict between farming activities and urban uses. The provisions are meant to implement policies that have been mutually adopted by the City of Medford and Jackson County as part of the Regional Plan Element of the Comprehensive Plan.³⁴ The standards set out impacts that require mitigation including: spray drift (from both urban uses and agricultural uses); trespass and vandalism; odor; dust, smoke and ash; run-off (stormwater and irrigation water); and noise. A number of mitigation measures are outlined including setbacks of urban development from farming operations, vegetated buffers, fencing, erosion control, and landowner deed declarations for odors, dust, smoke and ash. The implementation of mitigation measures, including the requirement for an Agricultural Impact Assessment Report is triggered by a development permit application where the proposed urban development abuts land zoned for agricultural use including: land division (subdivision), planned unit development, conditional use permit and a site plan and architectural review.

A pre-application conference is required for all applications and different levels of mitigation are required based on the sensitivity of the proposed urban use to agricultural impacts; the impact being buffered; the intensity of uses on the land adjacent to agricultural land and whether the mitigation is to be mid- or long-term.

The Agricultural Impact Assessment Report (AIAR) is submitted to the Planning Department for any land use or development application listed above. The purpose of the AIAR is "...to provide the approving authority with sufficient evidence to determine agricultural intensity (active or passive) and to evaluate the applicant's proposed method of complying with the provisions of this Section." The AIAR is to include: a map showing the zoning of land adjacent and within 200 feet of the property proposed for urban development; a description of the type and nature of agricultural uses and farming practices on the adjacent agricultural land such as: irrigation methods; agricultural products produced or planned; five year history of agricultural activities; method of frost protection; type of farming equipment used; soils; wind pattern; a mitigation plan of the measures proposed to comply with the mitigation requirements, a detailed landscaping and irrigation plan for the mitigation area, deed declarations, maintenance covenants, conditions and restrictions.

The approving authority determines whether adjacent agricultural uses are intensive or passive at the time the urban development application is filed and whether the applicant's proposed mitigation plan meets the standards of the Code. The approving authority then approves, approves with conditions, or denies the application of the AIAR and its proposals and conclusions.

³⁴ City of Medford, Municipal Code, Section 10.802 Urban-Agricultural Conflict Mitigation in Urban Reserve.
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- A proponent can deviate from the requirements listed above. They are required to submit a Conflict Assessment and Mitigation Study (CAMS) for evaluation by an Agricultural Buffering Committee that is appointed by the Jackson County Board of Commissioners.
- The Committee can make a recommendation to the City's approving authority regarding the acceptability of the deviation. The CAMS requirements are fairly detailed and include items such as:
 - determination of present and likely future agricultural land uses, practices and activities with the potential to cause adverse impacts to adjacent urban development. The assessment is to be based on soils, climate, topography, parcel size, configuration and location, infrastructure, regional agricultural practices and crops and farming history of adjacent agricultural land on similar parcels;
 - determination how the proposed urban development would likely impact the management and operation of nearby agricultural lands. All adjacent agricultural landowners within 1,000 feet of the development are to be interviewed and the findings included in the CAMS;
 - identify land uses, practices and activities that may cause adverse impacts and the extent of the impacts; quantify the impacts, where possible in terms of frequency and duration of activities taking into consideration the farming activities and the proposed buffering mechanisms and whether they will be sufficient to accommodate the future land uses; and
 - the current financial viability of a particular crop is not to be considered an important limiting factor in determining potential future use. Mitigation measures could include: buffering outcomes, siting of residences, size and geometry of lots, separation distances, communal open space, vegetation, natural landscape feature, acoustic features, etc. A plan for how the mitigation measures will be monitored and maintained is to also be included. A timeline for the development and mitigation measures is also required.

The approval authority is not bound to accept the recommendation of the Agricultural Buffering Committee, in whole or part in making its findings in accepting or rejecting the proposal. Also, any approval or a deviation does not create a precedent for any subsequent requests for deviations from the standards.

3.5 New South Wales Guideline for Agricultural Impact Statements

The Government of New South Wales, Australia has implemented a guideline for agricultural impact statements relating to mining and petroleum (including coal seam gas) exploration activity as part of the approval process under the State's *Environmental Planning and Assessment Act*. The Agricultural Impact Statement (AIS) is to demonstrate that the project design considers and minimizes potential impacts on agricultural lands or industries. The AIS is required for proposed projects located on or within 2 kilometres of Strategic Agricultural Land (as identified in regional land use plans). The proposed project "must further demonstrate that they will not have significant or unacceptable detrimental impacts on agricultural lands or industries..."

The AIS Guideline outlines the information and assessment requirements that are to be included in the AIS. These include:

- detailed assessment of the agricultural resources and agricultural production of the project area (maps, soils, slope, climate, land characteristics, water characteristics, agricultural history and

characteristics, support services and infrastructure). For many mining and petroleum exploration activities, the land will have to be restored and rehabilitated following use;

- assessment of impacts using a risk-based assessment (identification of adverse impacts, including cumulative impacts, on agricultural resources and production, land values, and flow of impacts on the site and in the local area during operation and post-operation phases of the project, uncertainty associated with the predicted impacts and mitigation measures and the consequences and likelihood that these uncertainties will be realized and further risks such as weed management, biosecurity, subsidence, dust, noise, vibration and traffic);
- the assessment is to take a holistic approach in considering for example, biodiversity offsets proposed as part of the development that result in a loss or dislocation of agricultural resources or industries as well as agricultural scenic and landscape values;
- socio-economic impacts including potential impacts on visual amenity, landscape values and tourism infrastructure relied upon by local and regional agricultural enterprises;
- feasible options to avoid, minimize or mitigate potential impacts on agricultural resources including: project design review/alternatives, monitoring programs to assess predicted versus actual impacts as a project proceeds, trigger response plans and trigger points at which operations will cease or be modified or remedial actions will occur to address impacts including a process to respond to unforeseen impacts, proposed remediation in response to a trigger event, assumptions used in assessing how remedial actions will work, demonstrated capacity to remediate and rehabilitate lands; and
- consultation with adjoining land-users and government agencies, including community groups.

3.6 EU Environmental Assessment Guidelines

Environmental impact assessment materials were examined because they represent a long standing approach to the identification of impacts and the application of significance indicators. The European Communities (EU) Guidance on EIA³⁵ is particularly useful because it represents a guidance intended to be used across EU jurisdictions by various member countries. As such, effort was made to distill core impacts issues down to practical guidance on screening and scoping, since EIA is mandatory or voluntary across countries and the guidance is presented to encourage wide uptake by competent authorities, developers, EIA Teams, and consultees.

A key component of the EIA is the screening checklist, which takes little modification to identify agricultural impacts. In addition, the EU has a scoping checklist, built from the significance findings of the screening which helps assessors to determine the need for more rigorous EIA assessment. For any given project, the proponent addresses the questions in the checklists and assessors assess the adequacy of the responses.

3.7 US Land Evaluation and Site Assessment (LESA)

The LESA rating system is based on a land classification system designed in 1971 and applied throughout the US by local and state governments to evaluate which agricultural lands should be protected from conversion to non-agricultural uses. It is a parallel system to the BC's Agricultural Land Reserve in that it uses soil-based factors to assess importance of farmland, but only as one set of considerations for farmland protection. The other considerations are:

³⁵ Environmental Resources Management. 2001. Guidance on EIA Screening. For the Office for Official Publications of the European Communities. Edinburgh. <http://ec.europa.eu/environment/eia/eia-guidelines/g-screening-full-text.pdf>

- Factors other than soil-based qualities measuring limitations on agricultural productivity or farm practices, with example factors such as:
 - size of site – larger farms should be rated higher than smaller ones and size of may differ depending on landform – use field size as a proxy for “economical to farm”;
 - potential for conflict - Compatibility with adjacent uses – with the number of houses on smaller parcel sizes than the average considered to be potentially conflicting, with scaling to measure the significance of the problem;
 - compatibility with surrounding (not adjacent) uses – larger parcels can withstand a higher relative degree of conflict – to measure the effect on agricultural practices and cropping options;
 - shape of the site – with odd shapes more inefficient to farm – use a measure of ratio of area to the perimeter and scaled to reflect the optimum of a 2:1 rectangular shape;
 - percent of site in agricultural use – or percent of site suitable to farm;
 - level of on-farm investment – scaled relative to optimum or average investment for a farm of its type and size;
 - availability of agricultural support services – Stewardship of the site – extent to which good soil and water conservation practices are used;
 - environmental limitations on agricultural practices; and
 - availability and reliability of irrigation water.

- Factors measuring development pressure or land conversion, with example factors such as:
 - land use policy designation – consistency with designated land uses – based on presence adjacent agricultural zoning or low-density zoning;
 - percent of surrounding land in urban or rural development use (e.g., housing density, impervious surface ratio);
 - distance to public sewer, public water, urban feeder highway, and urban center or growth boundary;
 - length of road (or type of road) frontage of subject site; and
 - proximity to protected farmland.

- Factors measuring other public values, such as historic or scenic values, with example factors such as:
 - open space strategic value of a site;
 - educational value of a site;
 - historic buildings or archaeological sites;
 - wetlands or riparian values of a site;
 - scenic values of a site;
 - wildlife habitat values of a site;
 - environmentally sensitive areas; and
 - floodplain protection on a site.

The LESA system has been adapted to local situations by choosing which factors to include, developing rating scales, developing systematic measurement procedures and assigning weights to each factor. Where LESA is used, the system is updated periodically to adjust for changes in policy, agricultural practices and new research. Factors are scaled so that more of a desirable attribute and less of an undesirable attribute indicates a stronger argument for keeping the site in agriculture and is reflected in a higher point score.

In 1990, the US Natural Resources Conservation Service (NRCS) began the LESA project to inventory LESA use throughout the US and to evaluate more than 200 state and local LESA systems.³⁶ This review provides an extremely comprehensive picture of how the system has been applied in various locales and how it has been used to make decisions based on impact to the agricultural resources.

Advantages of the computational system are that decisions are replicable, thresholds can be set in relation to policy, and it makes the type and impact of acceptable non-farm development more predictable. Disadvantages are that it takes time to select criteria for assessment and to set up rating systems that reflect the values they are intended to portray.

From a BC perspective, one instructive finding of the LESA project is that while the system is designed to facilitate significance testing for protecting farmland, it also is capable of providing a system for assessing how non-farm development is likely to affect an existing farming system, fine tuned by whichever indicator variables and threshold ratings are selected.

The LESA project also notes that it is important to benchmark the variables to a baseline state and a date. That is, as non-farm development occurs, if the values of indicators are allowed to change every time they are recalculated, the baseline state will keep moving. This is referred to as the “creeping effect” and the calculations may show lower impacts over time, ‘justifying’ more land conversion. Eventually, a moving baseline will no longer be sufficient to protect agriculture. This consideration would appear to be particularly important for Metro Vancouver, where non-farm development pressures on farming are extreme.

The US Federal Government uses the LESA system in operating under the Farmland Protection Policy Act. This Act is intended to ensure that the federal government projects do not contribute to the unnecessary and irreversible conversion of important farmland to non-agricultural uses.³⁷

3.8 FAO Environmental Impact Assessment

The Food and Agriculture Organization of the United Nations (FAO) has developed guidelines as a tool for decision-makers to identify potential impacts of proposed project, to evaluate alternative approaches and to design and incorporate appropriate prevention, mitigation, management and monitoring measures.³⁸

The EIA process is an initial environmental review (IER) to determine the environmental category into which a project is assigned. The IER takes place as early as possible when a project concept or proposal is identified, but must be sufficiently developed to identify an initial list of issues, impacts and stakeholders from a screening checklist. The appropriate environmental category depends on the potential nature and severity of identified environmental and social impacts, and the selected

³⁶ Pease, JR and RE Coughlin. Land Evaluation and Site Assessment: A Guidebook for Rating Agricultural Lands, Second Edition. Prepared for the USDA. Natural Resources Conservation Service. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1047455.pdf

³⁷ Although the Act was passed by Congress in 1981, rules and regulations were published in the Federal Register only in 1994. See NRCS. <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/landuse/fppa/>

³⁸ Food and Agriculture Organization of the United Nations. 2012. Environmental Impacts Assessment: Guidelines for FAO Field Projects. <http://www.fao.org/docrep/016/i2802e/i2802e.pdf>

environmental category dictates whether there is a need for additional impact assessment before project approval and implementation.

Category C projects are exempted from further analysis. Category A and B projects are submitted to environmental scoping, defining the nature of any further environmental analysis or full-fledged EIA to be performed.

3.10 Implications for Metro Vancouver

Based on a review of AIA approaches in other jurisdictions, several guiding principles are indicated as essential to guiding development and implementation of AIA's within Metro Vancouver.

Establish a Sound Policy Context

AIA requirements should have a basis in policy or regulation. This could be through policy statements in an OCP, a Development Permit Designation covering the ALR and adjacent non-agricultural lands, and in bylaws (e.g., zoning, subdivision, development permit application, etc.), or through federal or province/state directive. This provides the commissioning authority³⁹ a triggering point and the ability to require information to assess potential adverse impacts of a proposed project on agriculture and also allows for transparency and accountability of the process for developers, farmers, other affected interests and the public. Many AIA requirements include a zone of impact, which could be any development on land adjacent to or abutting agriculturally designated land (zoned, ALR) or within a certain distance from agricultural land (e.g., 2 km, 1000 feet, 300 feet, etc.). Many jurisdictions recognize that the zone of impact could be quite broad, depending on the type of project proposed.

Several local governments, states, and federal governments have incorporated policies and regulations to assess the impact on farmland and the farming sector from non-farm developments. These provisions are considered important to ensuring that prime farmland is protected and that land use decisions affecting farming are applied in a consistent and predictable manner. In this respect, the existence and mandate of the BC ALC provides a clear policy and regulatory context for the consideration and protection of agriculture from non-farm developments in the ALR. As well, the ALC often considers impacts from areas outside of the ALR in reviewing applications for non-farm use. This is an advantage over the policy and regulatory landscapes in most other jurisdictions. Exercise of this jurisdictional authority and responsibility would be expected to trigger an assessment process that should incorporate the key elements of the agricultural impact assessment guidelines.

Consult Early

An AIA process should include a pre-application meeting between the proponent and the commissioning authority (e.g., local planning department) at an early stage. Such a meeting allows the proponent to provide preliminary details of the project and for the approving authority to outline the development approval process and potential AIA requirements. It is also an opportunity for the approving authority and the proponent to discuss potential alternatives that could avoid or significantly reduce any adverse impacts to agriculture. These alternatives, for example, might relate to the design, location, extent, duration and timeframe of the project. Other agency involvement and approval requirements should also be discussed.

³⁹ A "commissioning authority" is defined as "... any person or organization that has the legally delegated or invested authority, capacity, or power to perform a designated function".

Screen for Potential Adverse Impacts

Most jurisdictions reviewed contain provisions for project proponents to provide information that would allow for a determination of whether the proposed project is likely to cause adverse impacts to agriculture. A screening checklist is a useful way to “check off” the project characteristics and whether or not they are likely to affect agriculture. In some circumstances it may be deemed by the commissioning authority that additional assessment is not required and mitigation measures can be identified which would result in adverse impacts being avoided or mitigated to an acceptable level. However, if the commissioning authority determines that the project could have significant impacts on agriculture, or that sufficient uncertainty exists about the impacts of the development, then the project would require further analysis of impacts and mitigation measures and additional information requirements would need to be provided by the project proponent through a formal AIA.

Scope the AIA Requirements

While in some circumstances, identification of impacts and mitigation measures may occur during the pre-consultation and screening phases identified above, several jurisdictions require that the project identify in more detail how the project will affect agriculture and to propose mitigation measures to offset the impacts. The approving authority, with information from the proponent, will need to provide guidance on the scope of the impact assessment.

Use Qualified Independent Professionals

All the jurisdictions reviewed require that the project impact assessments use qualified and independent professionals to assess impacts and propose mitigation measures and to ensure quality and reliability of the AIA. The types of professionals to be used will depend upon the nature of the project and the impacts. However, as a minimum, a Professional Agrologist should be part of a team, but planners, hydrologists, soil scientists, agricultural economists and others may be required.

Focus on Prevention or Avoidance First, Followed by Effective Mitigation Measures

The guidelines reviewed put great emphasis on the application of mitigation measures to avoid, prevent, lessen or compensate for impacts to agriculture. The precautionary principle is applied in many circumstances first. The impacts and mitigation measures are not restricted to direct, physical impacts to agriculture such as loss of agricultural land. They include the future viability of agriculture (and not restricted to the current financial situation of the farms), the downstream or broader agricultural community effects and social impacts. Many jurisdictions require that mitigation measures be monitored and assessed for effectiveness throughout the duration of the project construction period and beyond. For some development proposals, the approving authority may require bonding to ensure conditions are met. Another important consideration is that if a particular mitigation approach is accepted by a jurisdiction, it does not necessarily set a precedent for future mitigation approaches.

Include Cumulative Effects in the Assessment

Other guidelines require that cumulative impacts be included in an assessment. It is recognized that impacts to agriculture may result from a number of related or unrelated projects. These incremental developments can add up or accumulate to the point where they cause unacceptable or adverse impacts to agriculture and need to be planned for and mitigated.

Cumulative effects require a context for assessment, such as relative to a baseline condition. Some jurisdictions have emphasized that the baseline should be established to a date in time, as repeated assessment of the baseline situation over time will result in a “floating baseline” that will underestimate the true cumulative effect of incremental development.

Make the Decision Making Process is Consistent and Transparent

The policy and regulatory context should establish a clear decision making process. The local approving authority will have the ability to set clear information requirements for the proponent, assess the information submitted, and make a decision on the proposal application, including setting conditions for approval. In some cases, additional information may be required and the approving authority may need to have the information reviewed by a third party. In some cases, other agencies will also have a role in approving a project (e.g., provincial and federal government). Keeping a public record of decisions is essential to ensure transparency and to demonstrate consistency in decision making.

Promote Harmonization of AIA Requirements between Jurisdictions to assist Coordination and Efficiency

The agricultural impact assessment process could benefit from a greater degree of inter-jurisdictional coordination and cooperation. This would include harmonizing, to the extent possible, assessment processes and requirements involving local, provincial and federal levels of government. Each level of government has some role in assessing impacts to agriculture, depending on the nature of the project.

4.0 Consultation Findings

The responses received in the consultations indicated a substantial amount of variability in the approaches being applied to deal with non-farm development impacts on agriculture in Metro Vancouver, with perceived needs, and perceived remedies.

The responses are broken out by constituency view. BC Agriculture Council (BCAC) and the AACs were considered to represent agricultural concerns. AACs were also considered to provide local government perspectives by virtue of their membership, which included municipal planners and Councilors. The ALC, FIRB, and BCMA were considered to represent provincial perspectives.

4.1 What are the Agricultural Impact Assessment (AIA) Needs?

4.1.1 Agriculturalist Perspectives

BCAC considers AIAs vital for properly assessing the impact of non-farm and non-agricultural projects on agriculture. This is because planners and decision-makers in local government are often not aware of issues created for agriculture by non-farm development, particularly in relation to long term impacts and including those caused by municipal plans. It is noted that the province needs to develop a clear long term (20 to 50 year) objective for food and agriculture to provide a context for local agricultural impact assessment.

BCAC has no policies on land use. The BCAC's initial concern is on the potential for AIAs to be applied to projects initiated by farmers. On the one hand, a need is expressed for a more consistent land use planning landscape in which reduces hurdles for farmers and support services to the agricultural industry. On the other hand, there is concern that another layer of regulatory approval would have the potential to duplicate the requirements of other regulations.

During discussion, it was made clear that the intent of the AIA Guidelines being considered in this project is to identify and assess detrimental impacts to agriculture. However, with this caution, it is also recognized that some farm developments are of a scale and intensity that they have the potential to create detrimental impacts to agriculture.

Farmer representatives on several AACs voiced concern about the potential for redundancy of AIAs in relation to existing assessment processes applied to farmland in the ALR, such as ALC approvals and FIRB hearings on FPPA issues. While compliance monitoring and enforcement may be issues, the review and enforcement provisions of the ALC and FIRB are considered adequate to respond to agricultural impacts in the ALR. Farmers in some jurisdictions noted that local government itself creates agricultural impacts by not following its own zoning, bylaw and policy provisions. Some farmers are wary of the idea of agricultural impact assessment guidelines being initiated by Metro Vancouver and are concerned that it may lead to additional regulation in the ALR.

However, farmers noted that agricultural impacts of projects initiated by federal and provincial proponents are their biggest concern, partly because there is no current regulatory requirement to conduct agricultural impacts assessments of these projects. The agricultural enhancement strategy that was negotiated in relation to the South Fraser Perimeter Road, while a significant concession to the Delta farming sector, was a one-off situation and there is no obligation for federal/provincial projects to use the same process in the future. Projects of anticipated future concern include Fraser Surrey Docks coal transfer facility (Surrey), Deltaport and railway expansion (Delta), and the CP Rail Intermodal Yard

expansion (Pitt Meadows). There is also the potential that the one-off approach used for the South Fraser Perimeter Road could be a precedent for senior government level project reviews.

AIA guidelines were discussed at a meeting of the Metro Vancouver Regional AAC. The preliminary findings of the consultations were shared. Discussion centered on a few key points;

- The finding that provincial and federal/provincial projects are causing agricultural impacts because of no formal assessment mechanism dealing systematically with agricultural effects was noted. Efforts are being made to inform senior government of the situation of current project with the potential to have adverse effects on agriculture (e.g., Surrey Docks coal).
- Local governments need to move in tandem on AIA to address non-farm development impacts on agriculture. Otherwise, developers will shift activities to those areas with the least rigorous requirements and agriculture will suffer as a result. Issues associated with the monitoring and enforcement of soil fill permits and regulations in various municipalities was cited as a prime example.

4.1.2 Local Government Perspectives

The perspectives of local government were obtained primarily from councilors and planning staff that attended the AAC meetings. More than one politician stated their objection to any possibility of guidelines or standards be issued from Metro Vancouver on the basis that there is a risk of these becoming conformance tests in the future.

There is a wide range of sophistication in terms of approaches to dealing with agricultural impacts by local government. In some municipalities, AACs play important advisory roles and their opinions are respected by decision makers. In these jurisdictions, the existing process of referral of agricultural issues to the AAC, and resulting in recommendations to City Council, is considered to work well. It was noted that this arrangement works best when policies and bylaws supporting agriculture are in place and are followed. Arguments were made that those policies and bylaws that currently work well in preserving farmland and protecting farming operations could either be adopted by other local governments or dovetailed into the AIA process.

In other local jurisdictions, the primacy of agriculture in the ALR may not be so assured because of competing demands for the use of the land base. In Richmond, for example, the future of the Garden City Lands may be influenced by a wide range of community factions, of which agriculture may be one competing interest. In Maple Ridge, for another example, the rural residential use of land holdings in RS-3 (one family rural residential) zoned blocks of the ALR complicates planning when dealing with non-farm development impacts in the ALR.

Nevertheless, municipal planners indicated support for the idea of an agricultural impact assessment tool to systemize their evaluations. Many planners have little agricultural knowledge and would welcome a checklist by which applications could be screened for agricultural impacts. There is also support for the development of a tool that, in addition, can assist in assessing the significance of identified impacts.

Planners also noted that an agricultural impact assessment process might better address inter-jurisdictional issues in areas such as drainage and transportation. Examples cited included upland development in one municipality that is causing floodplain drainage issues in an adjoining municipality and suburban development creating transportation bottlenecks across municipalities. The expectation is

that more thorough assessments of projects with inter-jurisdictional impacts are required in order to anticipate agricultural impacts before the fact.

4.1.3 Provincial Perspectives

ALC staff recognizes the potential benefits associated with an AIA process, particularly in terms of getting more information before decision makers. They have first-hand experience with many of the spillovers onto agricultural land but little influence on what happens outside of the ALR boundary. Currently the ALC has no jurisdiction or influence on lands outside of the ALR but is looking at new legislation which could require proponents of development applications on properties outside of the ALR to provide agricultural impact assessments if there is a likelihood of agricultural impacts being created. The development of a systematic process that could fulfill the information needs of both the municipality and the ALC is attractive, but would require more coordination between the ALC and local governments.

The ALC is concerned that any AIA process needs to gain traction with most municipalities in a region in order to be effective in reducing agricultural impacts. Otherwise, developers may simply migrate to those jurisdictions where the least amount of compliance is required. So, a critical question is how local governments will deal with non-conformance issues respecting their own stated planning and how committed they may be toward protecting agricultural land and activities from the slow, indirect and cumulative impacts of non-farm development 'creep'.

One potentially problematic outcome is that the AIA could be used as a mitigation document because it would be anticipated to contain proposals to offset agricultural impacts from non-farm development. The ALC would prefer that avoidance of agricultural impacts and preservation of agricultural land should be the first objective of an AIA applying to ALR land.

In many respects, the BCMA is the research and technical arm of the ALC so it to be expected that their agricultural policies are closely aligned. Ministry staff indicates strong support for an AIA process as a tool for local governments to see the implications of non-farm development on agriculture. As well, there are benefits to be gained from doing a more comprehensive assessment of ALR land use applications prior to their turning up at the ALC's door.

Ministry staff sees the need for an AIA tool that applies both to land in and outside of the ALR and is strongly supportive of Metro Vancouver's initiative in this area. As well, they would support the use of AIAs to assess the impacts of local and regional government plans (including parks, conservation and wildlife habitat proposals) that might create impacts on agriculture in the ALR.

The Farm Industry Review Board (FIRB) sees a need for an AIA process that applies to any agricultural land, whether situated in or out of the ALR. The agency sees a natural split in roles emerging out of the devolvement of responsibilities to lower levels of government, wherein local governments and proponents will do the implementation while senior levels of government will provide guidance.

FIRB staff sees a need for the AIA to be applicable to agricultural land uses as well, since a substantial proportion of FPPA complaints are related to farmer-to-farmer conflicts. Otherwise, AIA guidelines would have limited utility as the agency needs to know all aspects of regulations and local knowledge in order to make adjudications.

FIRB is wary of trying to control non-farm development outside of the ALR too aggressively, as some local governments may balk and zone the problem away.

5.0 Recommendations: A Framework for the AIA Process

Based on the consultation findings and the review of various impact assessment processes, this section provides context for how AIA guidelines might “work” in Metro Vancouver.

5.1 Regulatory and Policy Context

Local governments have tools such as bylaws and the authority through OCPs and Development Permit Area designations to officially enshrine policy pertaining to agriculture officially. The provincial government, with the ALC Act, already has the legislative instrument to require agricultural impact assessments pertaining to non-farm developments in the ALR.

Recommendation:

The AIA process needs to be incorporated into the regulatory environment for agriculture and current land use decision-making respecting non-farm developments. This is because informal policies are difficult to apply inconsistently and competent authorities may be subject to legal challenges should project proponents feel they are being treated separately. The review of non-farm developments with the potential for inter-jurisdictional agricultural impacts could be accommodated through the adoption of the AIA process requirement at the ALC level.

4.1 When should an AIA be required?

From the farmers’ perspective, there is a clear list of direct impacts that could potentially require an AIA. In some municipalities, some of these concerns are already governed by bylaw and policies. These concerns include physical impacts to farmland, such as farmland loss, altered drainage and stormwater flows, altered irrigation, restrictions on traffic flow and field access, increased biosecurity and food safety risks, and loss of beneficial insects. In addition, agricultural activity impacts need to be considered, such as impacts on farming activities and farm practices due to changes in land use, introduction of new land uses, and density effects. Finally, direct and cumulative effects are a potential concern in relation to continuation of support services to agriculture, farm sector fragmentation, and traffic and farm movement congestion.

From the ALC’s and BCMA’s perspectives, some of the discussion centered on proximity to the ALR as a criterion for red flagging agricultural concerns, with the 300 m distance indicated as a minimum distance for urban/agriculture neighbour-to-neighbour interactions (this could be a screening criterion for rural residential non-farm development). However, longer distance effects are recognized, especially in relation to potential changes to drainage, irrigation, and water quality and soil and waste disposal from non-farm developments. As such, the nature of potential effects is considered as important as proximity to farmland for AIA consideration. BCAC suggested that “invasiveness” should be operationalized as a criterion in identifying the need for a review.⁴⁰ FIRB indicated that the initial stage should be a “contextual” analysis, in which factors such as scale and type of project would also check-listed for potential impacts.

ALC and FIRB mentioned that non-farm developments should be consistent with stated plans of local governments, including agricultural plans. Both the ALC and BCMA consider that, ideally, any plan affecting farmland should be examined for the need for an AIA.

⁴⁰ That is, an assessment of how incompatible the proposed non-farm project is with the surrounding or adjacent agricultural activity.

Recommendation:

It is important to remember that the AIA process has several primary and tangible functions: a) identifying potential impacts; b) identifying mitigative measures to avoid or eliminate adverse effects; and c) providing agriculture with consistent and predictable outcomes. In order to be reliable and dependable, an AIA should be triggered whenever there is likelihood that non-farm development has the potential to cause significant direct, indirect, secondary or cumulative impacts to agriculture.

4.2 How should an AIA be triggered?

This question led to a range of comments. In general, all categories of interviewees thought that an initial AIA screening should take place for any project with potential to affect agriculture, regardless of location within the municipality. Projects with potential impacts across municipal boundaries (transboundary effects) should automatically trigger the assessment process.

Context of the triggering process is critical. If there is an existing regulatory process, such as existing legislation or adopted policy, then the trigger needs to be incorporated into that process. If a regulatory process does not currently exist, the AIA is without weight and could be challenged for being an unfair hindrance to normal business practices.

The interviewees all supported the idea of a staged AIA triggering process. The key points were that the screening checklist needs to consider the full range of potential effects. There is also need for a scoping mechanism so that “significant” impacts may be identified and, depending on the level of significance, the appropriate level of AIA can be requested. This full-blown AIA would address those issues identified to be significant in the scoping process.

Recommendation:

A staged approach to determining the need for an AIA appears to be the most efficient way of identifying and dealing with significant agricultural impacts, if they exist. At the screening stage, the checklist review of the proponent’s application should be capable of determining the presence of a significant impact(s) or alternatively, to identify the information requirements to gauge the potential for significant impact(s) to occur. Where additional information is requested, an AIA would be triggered if significant impacts to agriculture were identified or if sufficient uncertainty about potential impacts leads to agricultural concern.

4.3 What Regulation could cause the Triggering?

At the local government level, the need for an AIA has to be established as part of a bylaw or policy that makes the requirement necessary. The preceding analysis indicates that these jurisdictions may create development permit areas, generate policy, and adopt agricultural plans in the OCP that require consideration of the protection of agriculture and establish when the AIA process should be invoked in assessing the impact of non-farm developments.

In local jurisdictions without a requirement for an AIA, it is anticipated that local governments might use an AIA process to identify agricultural impacts but could not use the tool to require a developer to take agricultural issues into consideration. In regional districts, there is currently no requirement for an AIA process but such a process could be adopted in best management practices for assessing the impacts of Metro Vancouver non-farm developments and policies on agriculture.

At the ALC level, AIA guidelines could be applied as part of the normal review process associated with assessment of applications for non-farm use in the ALR. Similarly, AIA guidelines are appropriate tools to assess the agricultural impacts of provincial, federal and federal/provincial non-farm developments.

Recommendation:

While many non-farm development applications in the ALR already provide a substantial amount of information about agricultural effects, non-farm developments outside of the ALR are not required to address potential agricultural impacts unless the local governments have designated Development Permit Area(s) conditions to consider such effects. It is suggested that local governments would need to incorporate the requirement for an AIA into adopted policy and/or regulation in order to have sufficient authority to require the AIA for specific projects.

At the provincial level, the ALC already has legal mandate and responsibility for assessing agricultural impacts of non-farm developments in the ALR. Federal and federal/provincial projects are subject to assessment processes that could incorporate agricultural impact assessment considerations, in much the same way that environmental impacts assessments are currently carried out.

44 What should be the AIA Process?

All interviewees considered the municipality to be the appropriate implementer of the AIA process, with proponents responsible for preparing the AIA. Some AAC participants mentioned that proponents would welcome more guidance for preparing applications. The AIA would be reviewed by the local government and referred to the ALC, FIRB, Metro Vancouver BC EAO, and CEAA, as appropriate. In this approach, projects initiated by provincial and/or federal proponents would respond to an AIA process requested by local jurisdictions.

It is anticipated that the commissioning authority may vary in relation to who is the proponent of the project. Nonetheless, one fundamental vested interest is always the stakeholder with authority over the land that will be affected by a proposed non-farm development, i.e., local government. In Metro Vancouver, AACs are natural advisors to local government on impacts of non-developments on agriculture and have representatives on those committees from provincial agencies with responsibility for agriculture.

Recommendation:

It is considered critical from political and process perspectives that local vested interests be incorporated in the AIA scope. For local projects, local governments with advisory assistance from their AACs are appropriate commissioning authorities. Where the commissioning authority is federal, provincial, or federal/provincial, the AIA process needs to be rigorous enough to address local concerns. As such, the AIA requirements should not vary by class of project proponent or level of commissioning authority, but be focused on the impact of the non-farm development in the agricultural community affected.

4.5 How should an AIA be used?

Considerable discussion took place over the purpose of the AIA. Pressures on farmland are intense in Metro Vancouver because of the relatively small amount of farmland and the large demand for land for non-farm development. Overall, interviewees indicated that the purpose of the AIA process is to identify significant effects from non-farm developments and in describing them; it may be possible to quantify the magnitude of impacts. In this respect, the AIA would be a tool to make decision-makers aware of

the costs of decisions related to agriculture and go no further than to request information on red-flagged impacts.

Underlying the assessment is the question on how the AIA should speak to trade-offs, if any, between non-farm development and farmland preservation. The reality is that non-farm developments will continue to occur and agricultural compensation and mitigation measures have become important tools to reduce the overall effects of development conflicts. A central issue is who decides what level of compensation or agricultural impact avoidance is allowable or adequate to permit non-farm development impacts. Currently, this responsibility falls on local governments and the ALC has indicated no interest in acquiring a decision making role. Nevertheless, a range of opinions has been expressed in consultations as follows:

- BCMA considers that the AIA should be backed by remedies that are so onerous or expensive that they act as deterrents to non-farm developments affecting agriculture;
- Some municipalities have incorporated trade-offs in policies and bylaws dealing with developments affecting agriculture⁴¹ and consider that this function should stay with local government since it can best reflect local needs;
- The ALC considers that the AIA should not become a mitigation document and the first position should be the avoidance of impacts. However, many applications are approved with conditions that allow trade-offs based on the absence of empirical information on their adequacy or effectiveness;
- Local governments consider that more effective enforcement of ALC regulation (e.g., soil fill, housing) would alleviate some development conflicts being created in the ALR;
- Some farmers are most concerned about the need for the compensation to be identified and the size being sufficient to cover the impact;
- Some interviewees feel that the use of an AIA process would have to be comprehensive within local jurisdictions and consistent across jurisdictions in order that agriculture could be systematically protected in the region by similar understandings of the effects of direct, indirect and cumulative impacts;
- Some interviewees were frustrated that trade-offs involving agricultural resources were largely controlled by political processes at all political levels.

It is considered good practice in environmental impact assessments (EIAs) for proponents to give consideration to alternatives and mitigation measures when avoidance cannot be accomplished. Similarly, agricultural impacts are amenable to quantitative assessment techniques and AIAs probably should consider compensation and mitigation measures where non-farm developments must proceed and losses cannot be circumvented.

Recommendation:

Given that the purpose of the AIA is inform decision-makers of the agricultural costs of decisions related to non-farm developments in agriculturally designated areas, it is recommended that the findings of an AIA should be applied to non-farm development in the following order: first, avoid agricultural impacts;

⁴¹ In Surrey, there is a bylaw requirement that lost farmland is compensated for at a ratio of 2:1 with land of the same capability, but it is not known how onerous this requirement is. In any event, even if adding land into the agricultural land base, trade-off policies such as this still entail an absolute loss of farmland in the municipality but offer the prospect that other land may be locked up more securely for agriculture. Similarly, in Delta negotiation of the SFPR Agricultural Enhancement Strategy fell back on policy requiring mitigation or compensation measures so as to cause no-net-loss to agriculture.

secondly, eliminate potentially adverse impacts; and thirdly, mitigate to completely off-set unavoidable impacts.

4.6 Who would use the AIA Process?

The AIA tools, where they are used, are currently used at the local government level. It is anticipated that local governments will continue to be the primary assessors of agricultural effects, with the results reviewed by senior authorities (ALC, MV, and BCMA) in their respective areas of jurisdiction.

In order for this process to work in a coordinated fashion, a set of principles would be required to develop some level of agreement between what local governments require and what would be needed to ensure that senior reviewers had enough information for their deliberations and decisions. Senior authorities would welcome a more comprehensive approach to harmonize the review process, and anticipate being able to use the checklists developed to ensure that topics or area of potential impacts are not missed.

There is also broad consensus that developers, or their consultants, would use the AIA guidelines, to improve the quality and consistency of their applications, streamlining the application process and reducing staff processing time. As well, experts on panels may find the guidelines useful in focusing their reviews.

Whether provincial and federal authorities would use AIAs is open to debate. An earlier section explained that the US federal government applies rating systems to land used for federal projects in order to lessen adverse impacts on prime farmland. In Canada, that process is not occurring in a systematic manner, at either senior level. A recent gap in the agricultural impact assessment process is the absence of any requirement for federal or provincial government projects to look at indirect and cumulative effects on agriculture, although this could possibly change with improved best practices adopted by the province in 2013.⁴²

It is also debatable whether the AIA guideline would address the needs of FIRB at this time, since many of the disputes resolved are related to conflicts between farming operations and non-farmers in rural areas. In the future however, it is conceivable that there will be pressure on regulators to subject some farming projects to impact assessment due to their large scale, high demand on resources, ability to create large volumes of waste products, and potential to cause cross-impacts in the farming sector.⁴³

4.7 Who is qualified to do an AIA?

There are at least two lines of thought on this topic. For municipal projects and private projects, the commissioning authority is the local government.

If AIA requirements are enshrined in non-farm development applications through supporting policy, bylaw or OCP directive, then it would make sense to have the project proponent provide the requirements of the AIA process, guided by a list of requirements from the commissioning authority.

⁴² See BC Environmental Assessment Office. 2013. Guideline for the Selection of Valued Components and Assessment of Potential Effects.

http://www.eao.gov.bc.ca/pdf/EAO_Valued_Components_Guideline_2013_09_09.pdf

⁴³ A small number of agricultural developments require mandatory EIS while other types of agricultural projects are subject to case-by-case screening for significant effects.

The proponent would be expected to engage the services of a qualified professional (QP), with appropriate credentials (e.g., P.Ag.) .

If the commissioning authority does not have the regulatory authority to require an IAA, it would be more difficult to insist that the proponent provide comprehensive information, especially at the local level at the screening stage. In the past, for projects in the ALR, the requirements for ALC review and approval have been sufficient to motivate proponents to address agricultural impacts to some extent. For projects outside of the ALR, wholly within local government purview, a municipal planner may be tasked with undertaking a preliminary assessment (screening) to determine if a non-farm development has acceptable agricultural impacts or whether AIA is required. In this instance, the options are either for the planner to use AIA guidelines and checklist to identify, at a preliminary level, if significant agricultural impacts are possible or to engage a qualified person to undertake a review. This screening could have outcomes of a) no significant impacts, no further action required; b) potentially significant impacts, go to scoping stage; or c) clearly significant impacts, go to AIA process.

In either of the two pathways, a qualified person representing the proponent would be expected to provide information beyond the screening, i.e., at the scoping and AIA stages. The commissioning authority would be expected to use the AAC to advise on agricultural issues, a body which includes representatives of the ALC and BCMA. Under some circumstances, the commissioning authority may be anticipated to employ a qualified professional to assess the information provided by the proponent and generated by the advisory committee.

Recommendation:

The proponent would be expected to engage the services of a QP to carry out the work. In more complicated applications, the commissioning authority may contract its own QP to assess the comprehensiveness and accuracy of the proponent's application.

4.8 Who Makes Decisions about the AIA Findings?

For municipal projects and private projects within municipalities, the commissioning authority is the local government.

If the non-farm development occurs in the ALR, a decision would be made by the commissioning authority and formally passed on to the ALC for approval. If the non-farm development occurs outside the ALR, the final decision would be made by the local authority.

For provincial, federal, and federal/provincial projects, the role of agencies responsible for managing the projects are the commissioning authorities. It is anticipated that local governments would lobby these agencies to require that AIAs be undertaken, utilize the AIA process, and apply significance indicators that reflect the concerns of local governments.

Recommendation:

Decisions incorporating the findings of AIAs should be made by the commissioning authority for the non-farm development. The decisions should be based on information that fairly represents the interests of all stakeholders in the process.

4.9 Monitoring, Enforcement and Compliance

The objective of the AIA is to ensure that significant impacts on agriculture are addressed in the siting, design, construction, operation and decommissioning of a non-farm development. It is essential that

competent authorities monitor AIA conditions in development requirements, hopefully through regulatory provisions under which the AIA is sanctioned.

Similarly, failure of development proponents needs to be enforceable, through rectification of the failure, fines and/or stop work orders. It is essential that the size of the penalties be large enough to totally remove any benefit and act as an effective deterrent to non-compliance.

Recommendation:

Adoption of the AIA requirement into the non-farm development process provides a key initial step in identifying concerns. It is also essential to anticipate the prospect that an AIA requirement issuing from the AIAI process may be circumvented or not complied with. The AIA process should be predictable, fair, and efficient, with enforcement and penalty safeguards to act as a deterrent to non-compliance.

5.0 Potential Topics for Further Study

It is useful to consider AIA guidelines as one tool to evaluate non-farm developments as part of a decision-making process to establish thresholds for when an agricultural impact assessment should be done. The guidelines should not be intended as a stand-alone tool to make decisions about farmland or a technique strictly to protect farmlands. Nevertheless, it can help to identify the types of agricultural impacts that could occur from non-farm land uses and can assist land use decision-making to avoid or minimize adverse effects.

Ideas for further direction in AIA objectives, procedures and application emerged from investigations.

5.1 LESA Pilot Project

A recurring theme among local governments is that agriculture across the various municipalities is not homogenous and that its needs vary accordingly. One way to address this perception is to devise an assessment process that is sensitive and uses local expert judgment in the process.

Consideration should be given to the feasibility of developing Land Evaluation and Site Assessment (LESA) techniques for conducting agricultural impact assessments in Metro Vancouver, modeled on the US NRCS experience. One approach would be to undertake a pilot study in one or two municipalities with different agricultural characteristics. Farm baselines for locally relevant agricultural impact indicators could be developed. Ratings for the impacts of non-farm developments on these criteria would then be tested to see if the AIA process could duplicate or mimic previous local decisions and could provide useful information and insights about the nature of agricultural changes occurring in the municipality.

It is anticipated that a sample of 20 to 30 farm properties per municipality could provide enough information to benchmark agriculture's local characteristics. Consultations with planners, the public, and the farming sector would be required to develop locally relevant rating systems and validate threshold criteria.

5.2 Application of Standardized AIA Processes to Federal and Provincial Projects

Above the local level, there is a fair amount of frustration with the lack of systematic approach identifying and dealing with impacts of large projects on agriculture. Part of the concern is that the real story of what is happening hasn't yet been figured out and that no one knows where projects going on today will take agriculture in the not too distant future. The focus on loss of physical resources and economic compensation and mitigation, approaches that are applied in environmental impact assessment, do not address the conditions necessary to sustain the sector in the future. This suggests a problem with a lack of a clear policy context despite an agricultural land use designation.

5.3 Improved Agricultural Information for AIA Significance Testing

It is recommended that the province consider adjusting the Agricultural Land Use Inventory (ALUI)⁴⁴ data collection process to obtain more information relevant to the sustainability of agricultural sectors in the various municipalities. The program already provides farm level detail but it could generate baseline information more useful to assessment of non-farm land development impacts. (e.g., location

⁴⁴ BC Ministry of Agriculture. GIS and Agricultural Land Use Inventories. <http://www.agf.gov.bc.ca/resmgmt/sf/gis/>

of services including input suppliers, farm traffic and equipment corridors, and regional agricultural resources and improvements context).