Agricultural Impact Assessments (AIAs): A Primer

Food Safety and Environmental Policy Branch

Agricultural Land use Planning Unit

Ontario Ministry of Agriculture, Food and Agribusiness





Outline

- OMAFA's role in Land Use Planning
- Farmland Trends
- Policy Context:
 - PPS, 2024
 - Provincial Land Use Plans
 - Aggregate Resources Act
- Overview of AIAs
 - Hierarchy of Measures
 - AIA and the Agricultural System
- Overview of AIA Process:
 - AIA or equivalent analysis
 - Implementation considerations
 - Evaluation of alternative locations
 - IESO's Second Long-term Procurement (LT2)
 - OMAFA Resources



OMAFA Role in Land Use Planning

- Support the long-term protection of agricultural land and viability of the agricultural system.
- Technical expertise in policy development for farmland protection and agricultural land use
 - Support development of provincial policies (e.g., PPS) and plans (e.g., Greenbelt)
- Support implementation through One Window review and approval of municipal planning documents by MMAH; and Municipal Plan Review where appropriate.
- Work with partner ministries to balance various provincial resource interests with agricultural land protection.
- Develop training and guidance material to support agricultural land use planning in Ontario.
- Provide agricultural mapping and other data for MMAH and municipalities
 - Agricultural System Portal (data and mapping)
 - Agricultural Capability mapping (e.g. Canada Land Inventory for Common Field Crops)
 - Mapping of municipal drains and tile drainage systems
- Coordinate with other agricultural legislation as needed, such as: Nutrient Management Act, 2002; Farming and Food Production Protection Act, 1998; and Drainage Act.



Farmland Trends

- Several data sources to track trends over time; each source tells us something different (e.g., leading and lagging indicators, quantity vs. quality, location):
 - o CLI soils mapping
 - Census of Agriculture
 - o Official Plans
 - o GIS data (e.g., SOLRIS, AAFC)
 - o MPAC
- Key findings:
 - o All data sources show a decline in farmland area
 - Development pressure continues to be highest on Ontario's best agricultural land
 - Lower capability land is being farmed to compensate for the loss in high quality land; limited opportunities to convert additional land to crops
 - Some opportunities for vertically integrated agriculture (e.g., greenhouses), but higher cost and resource needs, and only an option for limited commodities.

Availability Analysis

CLI Class	Millions of Ha	% of ON's land base
Class 1	1.2	1.4%
Class 2	1.6	1.8%
Class 3	1.2	1.3%
Total	4.1	4.4%



Expansion of urban areas in the GTA occur on high quality farmland



Policy Context

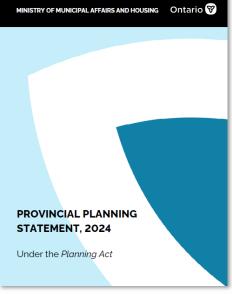
The Provincial Planning Statement came into effect October 20^{th,} 2024

 A key change is requiring AIAs Province-wide for non-agricultural uses (whereas previously, AIAs were only required in the Greater Golden Horseshoe Region).

- The PPS 2024 requires an AIA for:
 - New/expanding mineral aggregate operations in Prime Agricultural Areas
 - Other non-agricultural uses (e.g., hospitals, golf courses) in Prime Agricultural Areas

AlAs are required to be considered for:

Settlement area boundary expansions





What is an AIA?

- A study that identifies and evaluates potential impacts of nonagricultural development on the agricultural system.
- Recommends ways to avoid, or where avoidance is not possible, minimize and mitigate adverse impacts.
- A tool to inform where and how development can occur in a way that supports the success of the agri-food sector.
 - For example, by including measures to retain agricultural land and promote compatibility with agricultural operations and agribusinesses.
- The AIA process is flexible and can be scoped to be proportional to the size and potential impact of the project.
 - Costs for AIA can range, depending on scale and work involved, such as detailed soil sampling.
- AIAs are often completed by a consultant who has knowledge of Ontario agriculture.
- The Province is not an AIA approver but may provide support by sharing data/mapping and providing advice on process/content.



AlAs help build support for proposed development and compatibility with agricultural operations and businesses



AIA Hierarchy of Measures

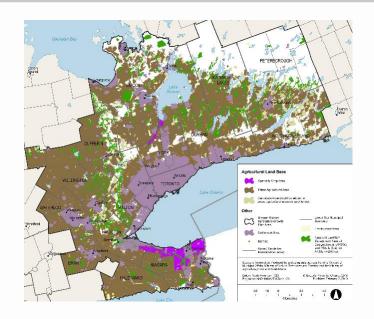
- 1. Avoid: Impacts are prevented
 - Consider alternative locations; with preference to sites outside of prime agricultural areas (PAA) (i.e., rural lands) or those that avoid key elements of the agri-food network.
- 2. Minimize: Impacts are not fully prevented, but kept to a minimum
 - If a development is permitted in a PAA and it has been demonstrated that it must locate in a PAA (e.g., due to other siting constraints, etc.), then lower priority agricultural lands must also be considered.
 - For example, Class 3 land prior to Class 1 or 2 lands.
- 3. **Mitigate:** There will be impacts, but they are managed through different techniques/tools, for example:
 - vegetative screens and buffers;
 - setbacks and location on site;
 - fencing;
 - alternative access to farm fields;
 - planned rehabilitation;
 - managing on-site construction (e.g., phasing, timing, etc.) to lessen impacts to surrounding agricultural operations, etc.





Agricultural System Approach

• An **Agricultural System** is a group of inter-connected elements that together create a viable, thriving agricultural sector.



1. Agricultural Land Base

Continuous, productive land base composed of prime agricultural areas (including Specialty Crop Areas) and **may** include other lower capability lands supporting agricultural production



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2. Agri-Food Network

Infrastructure, services, and agri-food assets (processors, feed mills, etc.) important to the viability of the agri-food sector

Agricultural Systems Portal (arcgis.com)



Agricultural Impact Assessment Process

1 ldentify and evaluate site alternatives (if required by policy)

Assess potential impacts to surrounding agricultural operations and lands in the primary and secondary study areas

3 Identify how potential impacts can be avoided, minimized and mitigated

4 Make recommendations on how to avoid, minimize and mitigate impacts

Agricultural Impact Assessment Report

Section 1: Introduction

Section 2: Study Areas

Section 3: Assessment of Impacts

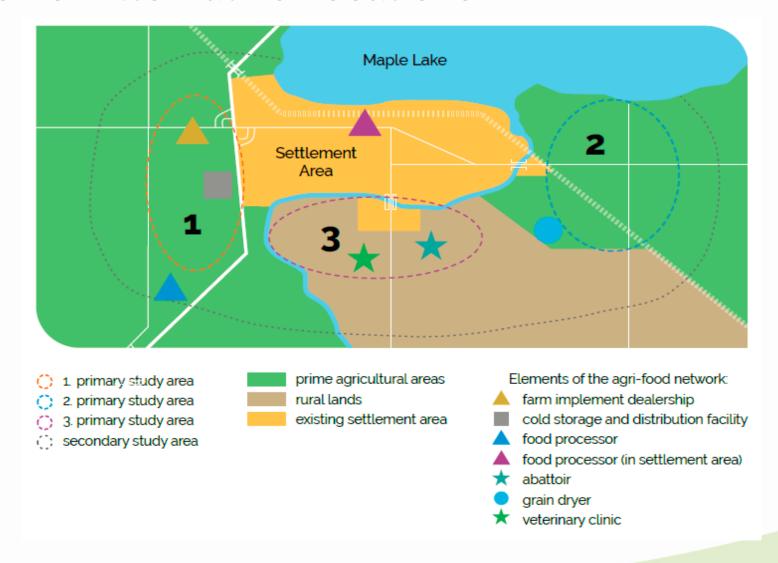
Section 4: Measures to Address Impacts

Section 5: Recommendations and Conclusions

Appendices



Evaluation of Alternative Locations



AIA or Equivalent Analysis

- Impacts to the agricultural system may be documented in an AIA report or as part of another study as an "equivalent analysis
 - Planning Justification Report that addresses several land use planning matters
 - Reference may be made to other studies rather than duplicate work (e.g., noise, traffic, hydrogeology studies)
 - E.g., Environmental Assessment (EA) for infrastructure projects such as transportation systems, water and wastewater treatment plants, landfill sites
 - E.g., Environmental Report to satisfy Ontario Energy Board's Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario
- Agricultural System impacts may be one of several considerations / priorities (e.g., growth management / complete communities, need for aggregate resources or infrastructure) but the aim is to find opportunities to avoid, minimize and mitigate impacts



Study Areas

Primary Study Area: area considered for the proposed non-agricultural use

Secondary Study Area: area that may be impacted by the proposed use; area may vary depending upon the degree/type of impact

- The size of the study areas will vary depending on the proposed use and the potential for adverse impacts.
- Pre-consultation with an approval authority, supported by a broad-scale scan of agricultural land uses and the agri-food network in the area can help inform the identification of study areas.
- Context matters, consider the type and scale of the proposed use, consider the types of agricultural operations, the agri-food network and potential impacts.



Settlement Area Boundary Expansions



Mineral Aggregate Extraction



Who can undertake an AIA?

- AIAs are often completed by a consultant who has knowledge of Ontario agriculture.
- 'Qualified Professionals' include consultants involved in the disciplines of development, engineering, land use planning, environmental assessments, agrology and agronomy.



A team approach is recommended for complex proposals

- Key areas of expertise and knowledge include:
 - ontario agri-business, agricultural supply chains, rural/agricultural economic development;
 - rural and agricultural land use planning;
 - Canada Land Inventory (CLI) classification system for assessing agricultural land, and where necessary, soil science and soil mapping procedures;
 - Minimum Distance Separation formulae and biosecurity practices and protocols;
 - reviewing technical information from non-agricultural disciplines (e.g., hydrology, hydrogeology, geotechnical and transportation reports) and assessing their relevance and utility in identifying potential agricultural impacts;
 - identifying, assessing, and evaluating the potential measures to avoid, minimize and mitigate impacts to the agricultural system; and
 - providing expert testimony in Ontario.





AIA Guidance Updates

OMAFA is in the process of updating the 2018 Draft AIA Guidance.

Updates and improvements to the document will include:

- Removing outdated references and updating to reflect the PPS (2024) requirement for AIAs province-wide.
- Efforts to work towards more 'evergreen' guidance document (e.g., removing specific policy references to reduce updates needed in future)
- Efforts/edits to emphasize a flexible approach for the completion of AIAs; effort is to be proportional to project size and potential impacts.
- Provide a more robust suite of measures for avoiding, minimizing, and mitigating impacts to agriculture to increase compatibility with non-agricultural uses.
- Edits to streamline and make the document more user-friendly (e.g., colour-coded based on types of development, an AIA checklist, a case study, and list of resources to support completion of AIAs).

Agricultural considerations in LT2

- November 28, 2024 Ministerial Directive to the IESO outlined that LT2 design must:
 - provide rated criteria points for projects that avoid prime agricultural areas;
 - ensure no new energy projects may be built in specialty crop areas;
 - prohibit ground-mounted solar projects in prime agricultural areas; and,
 - o require the completion of an Agricultural Impact Assessment (AIA) to the satisfaction of the municipality, if a project were proposed to locate in a prime agricultural area.

- To support the procurement, OMAFA has developed guidance material for the AIA requirements.
 - AIA Component One Requirement (posted May 2025)
 - AIA Components Two and Three Requirement (available on IESO website)



AIA Component One Requirement (i.e., avoiding impacts by evaluating alternative locations)

- As part of engaging with municipalities, proponents are expected to offer evidence of how alternative locations were evaluated as part of their site selection process, including:
 - o siting options that avoid prime agricultural areas; or where avoidance was not possible,
 - siting options that minimize impacts, such as alternative locations in prime agricultural areas with lower priority agricultural lands, based on Canada Land Inventory (CLI) soil mapping.

Timing: Information shared with municipalities as part of seeking their support.

Milestone: Confirmation and attestation required at time of bid submission.

- Information documents evaluation of alternative locations and, if no reasonable alternatives were found, provide rationale explaining why.
- Guidelines recognize that project siting can be driven by many factors: sites with good fuel availability, transmission availability, cost to develop, etc.
- Guidelines available at IESO's LT2 website.



AIA Component Two & Three Requirements

- Impact assessment and approaches to minimize and mitigate impacts
 - Must be completed within 18 months of Contract award
 - Both stages require confirmation from the Local Municipality that the requirement has been met (within 18-months of contract execution), and both are formally documented through required LT2 prescribed forms.
 - OMAFA staff do not approve or endorse individual AIAs.
 Ministry staff may provide technical support to municipalities and Proponents/Suppliers to facilitate a consistent approach for AIAs.
 - Draft Guidelines for Component 2 and 3 are available at IESO's <u>LT2 website</u>





Appendix A: AIA: Additional Resources

This list of sources of information may not be complete or applicable to all proposals. Contact OMAFA staff for additional information or resources, if needed.

- Ag Maps (interactive "make a map" application with layers on drainage, soil, CLI, etc.)
 (OMAFA)
- Agricultural System Portal (OMAFA)
- Annual crop inventory mapping (Agriculture and Agri-Food Canada)
- Ontario GeoHub topography/elevation, orthoimagery, soil, tile and constructed drainage, controlled drainage, seed zones, natural heritage features (Government of Ontario)
- Ontario Soil Survey reports (Government of Canada)
- Specialty crop area mapping and information <u>Greenbelt Plan</u>, <u>Grey County Official Plan</u>, <u>County of Lambton Official Plan</u>
- Topographic mapping with effective user scale of 1:10,000 or larger where needed (MNR)



Appendix B: Existing OMAFA Resources & Guidance Material

- The Minimum Distance Separation Formulae
- Prime Agricultural Areas
- The Agricultural System
- Agricultural Systems Portal
- Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas
- <u>Draft Agricultural Impact Assessment Guidance</u>
- GIS Storyboard on evaluating alternative locations for non-agricultural uses

