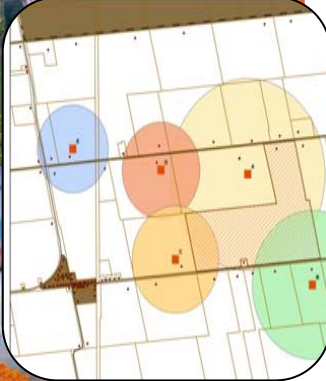


Agriculture Odour Management in Ontario



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Ministry of Agriculture, Food and Rural Affairs

Odour Management Conference & Technology Showcase

Toronto, September 14 & 15 2015



Profile of OMAFRA Stakeholders

- 
- **Ontario agricultural sector**
 - Over 200 commodities produced; \$8.86B gross farm cash receipts
 - Accounts for ¼ of Canada’s agricultural production
 - Home to the majority of Canada’s Class 1 agricultural land
 - **Ontario food processing sector**
 - Second-largest manufacturing sector in Ontario,
 - Accounts for 40% of Canadian food processing capacity
 - Buys 70% of the production from Ontario farms

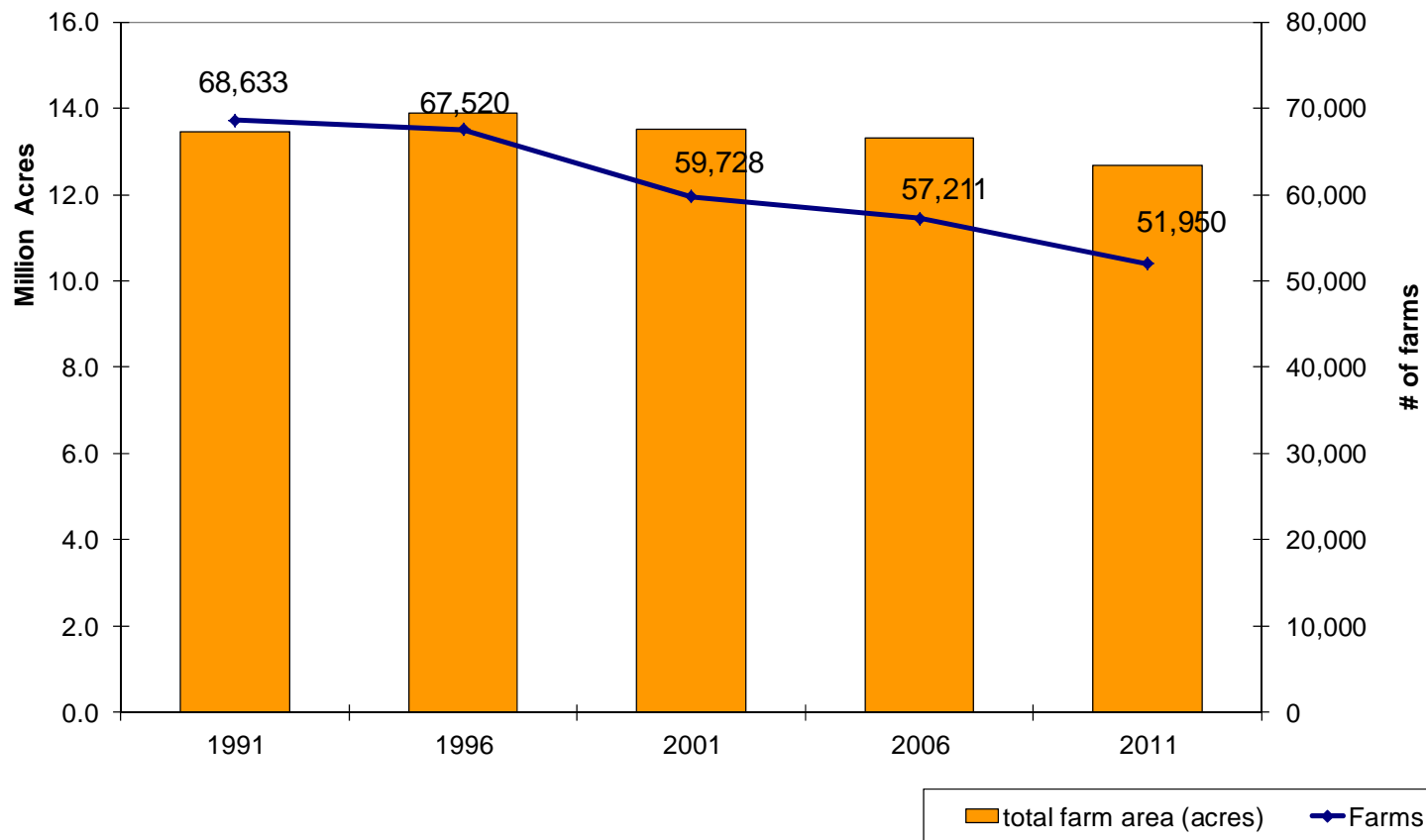
Statistical Snapshot of Primary Agriculture in Ontario

- Number of Farms 51,950¹
- Farm Operators 74,840¹
- Farm Cash Receipts \$12.1 Billion²
- Exports \$11.9 Billion³
- Land Area 12,668,236 acres¹

1 Source: Statistics Canada, 2011 Census of Agriculture.

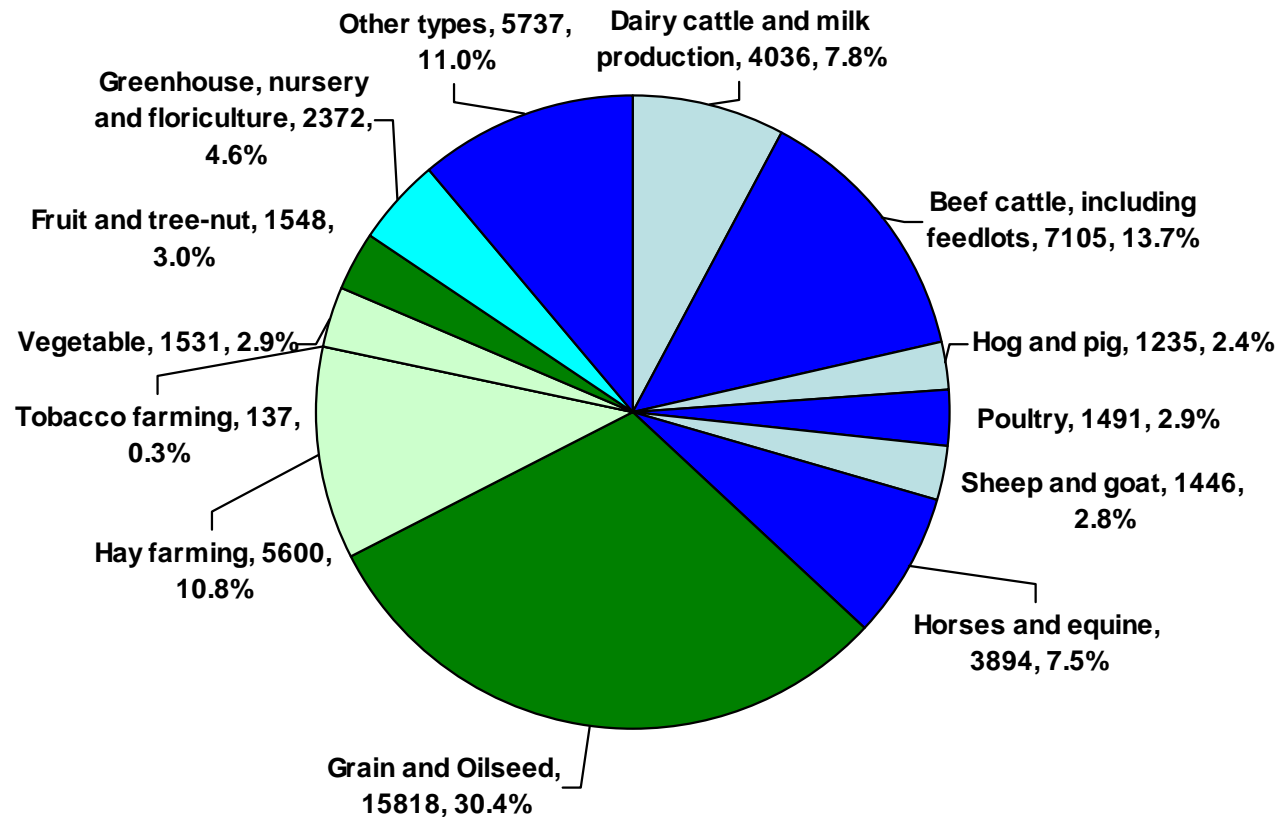
2 Source: Statistics Canada 2013

Number of Census Farms and Farm Area, Ontario, 1991 - 2011



- Number of farms and farm area are decreasing
- Worldwide trend of urban consumption of agricultural land

Number of Ontario Farms by Industry Group (North American Industrial Classification System), 2011



Livestock and Poultry : 37% (20 000 livestock)

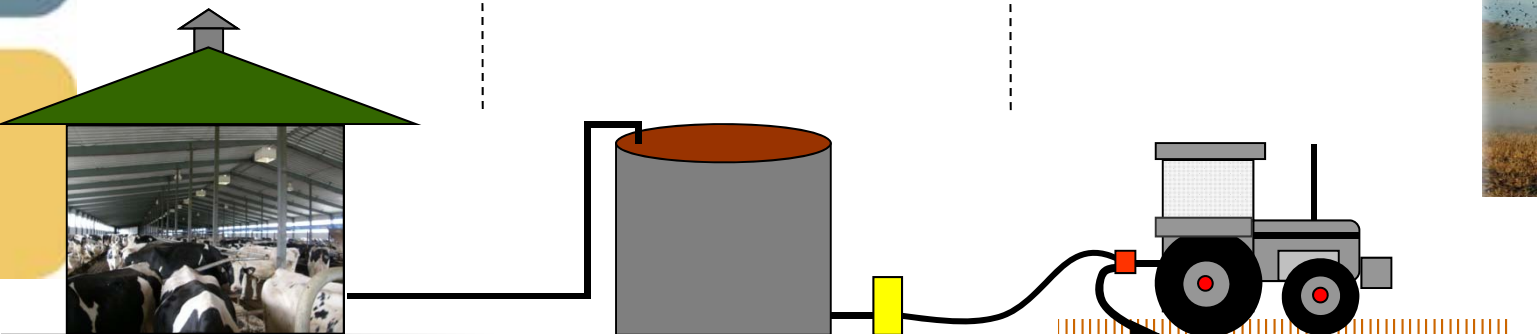
Source: Statistics Canada, 2011 Census of Agriculture.

Agriculture Odour source

Barn
66%

Manure Storage
17%

Manure Application
17%



5 most common farm odour complaints

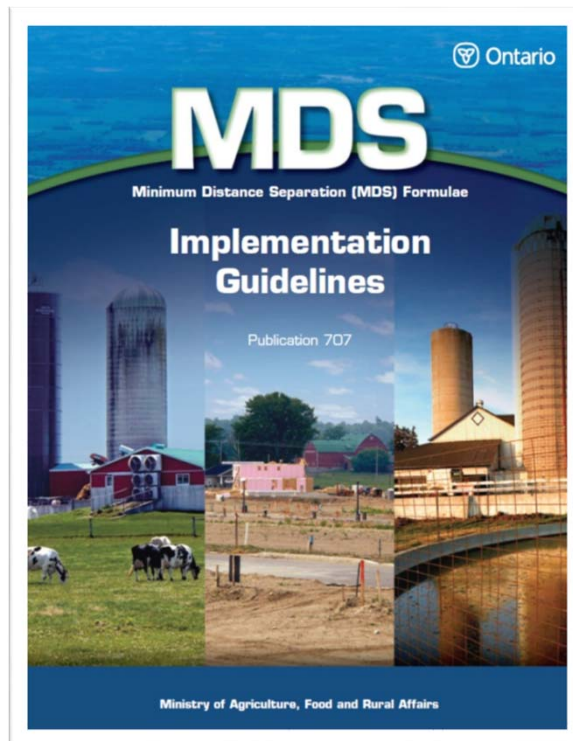
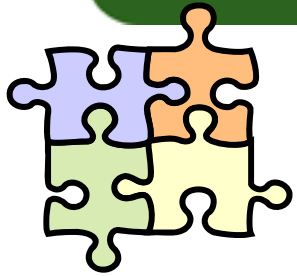
- Storage & spreading of manure
- Storage & spreading of non-manure materials
- Temporary field storage of manure/other material
- Composting of manure & other materials
- Emerging green energy systems



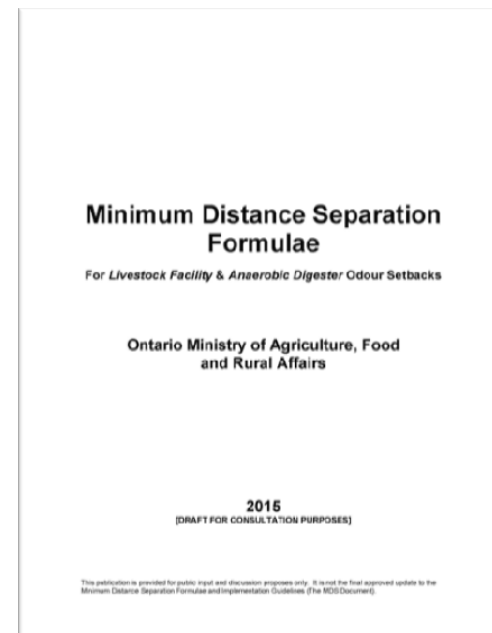
Farm Odour: 40% of 160 complaints

98% of cases are resolved through conflict resolution and implementation of BMP







Minimum Distance Separation (MDS) Formulae





What is MDS?

- 
- Minimum Distance Separation (MDS) is a land use planning tool developed by OMAFRA in the 1970's.
 - MDS calculates a setback between a livestock operation and other surrounding land uses, and visa versa.
 - **Intent is to minimize nuisance complaints due to odour and thereby reduce potential land use conflicts between livestock facilities and other land uses.**
 - MDS is applied at the time of a building permit application or a land use planning approval.
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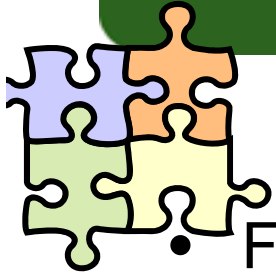
How Does MDS Work?

- The MDS Formulae is made up of two separate but related formulae (MDS I & MDS II)
- **MDS I** calculates a separation distance between proposed non-farm development and an existing livestock facility
- **MDS II** calculates a separation distance between a new or altered livestock facility and existing development and is applied at the time of a building permit application.

How Does MDS Work?

The separation distances calculated by the MDS formulae vary according to a five factors:

- Factor A** – Relative Odour Potential
(i.e. how 'smelly'?)
- Factor B** – Number of Nutrient Units
(i.e. how many livestock?)
- Factor C** – Orderly Expansion Factor
(i.e. how big an increase?)
- Factor D** – Manure or Material State
(i.e. solid vs. liquid?)
- Factor E** – Encroaching Land Use Factor
(i.e. what's being proposed?)



Farming & Food Production Protection Act (FFPPA)

- FFPPA protects farmers against nuisance complaints providing they follow 'normal farm practices.'
- There are seven nuisances listed under the Act
 - ✓ noise, odour, dust, light, vibration, smoke and flies
- The Act also protects farmers from municipal bylaws restricting normal farm practice.



Normal Farm Practices

The Act defines normal farm practice as a farming practice which:



- is consistent with proper, acceptable customs and standards of similar operations; or
- uses innovative technology according to proper, advanced farm management practices.

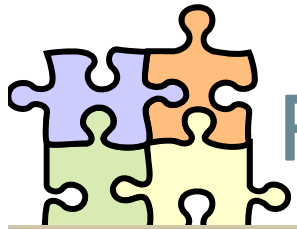
The Nutrient Management Act can also establish normal farm practices through its regulations.





Conflict Resolution Process is mandatory

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- Before the Normal Farm Practices Protection Board (NFPPB) can consider an application for a hearing, the case must first go through the Farm Practices Conflict Resolution Process.
 - 98% of cases are resolved through conflict resolution by OMAFRA's agricultural engineers or environmental specialists.
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Raising Awareness / Communications

Enablers:

Field workshops
& research

BEST MANAGEMENT PRACTICES
Application of Municipal Sewage Biosolids to Cropland

BEST MANAGEMENT PRACTICES
Manure Management

BEST MANAGEMENT PRACTICES
Deadstock Disposal

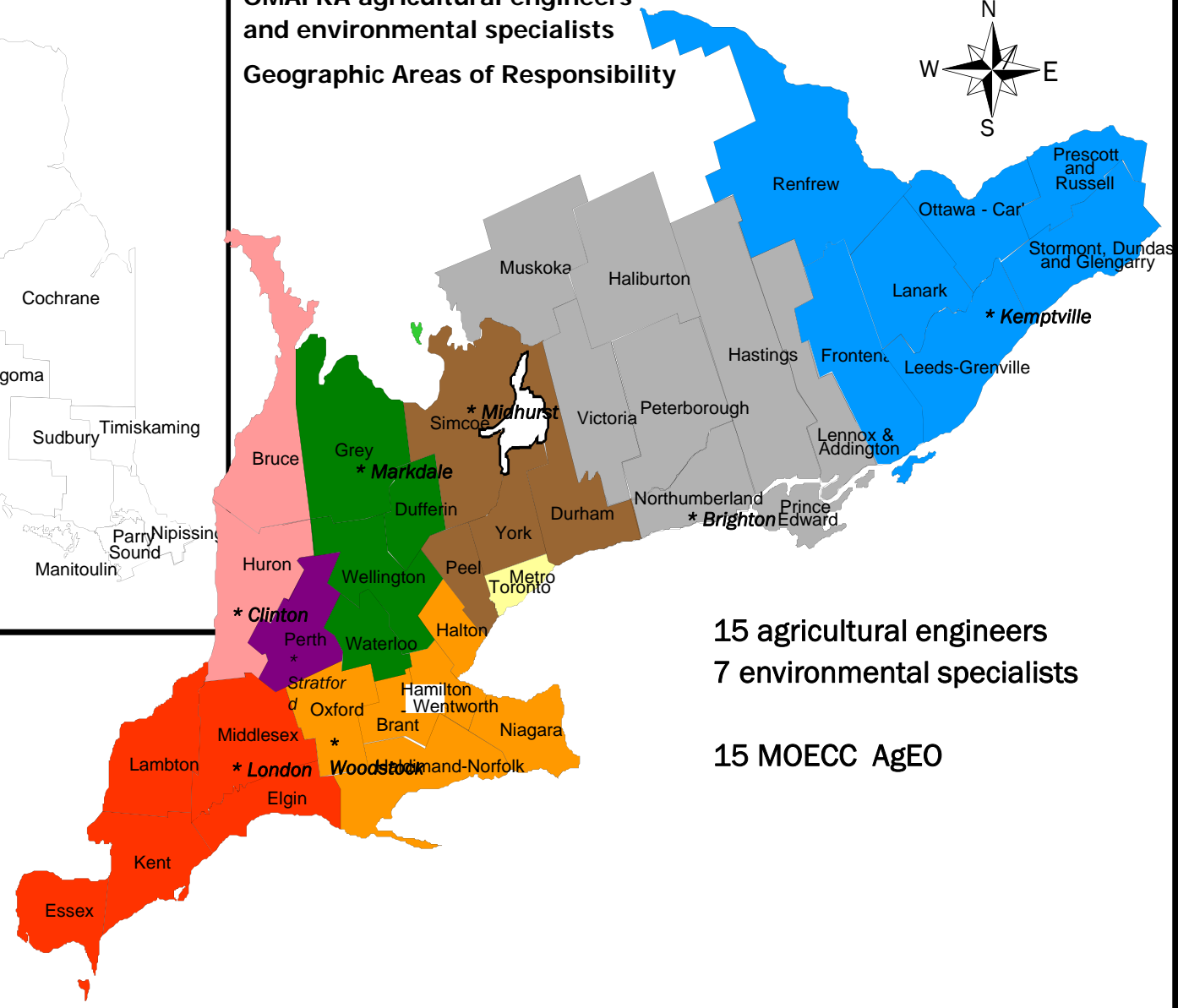
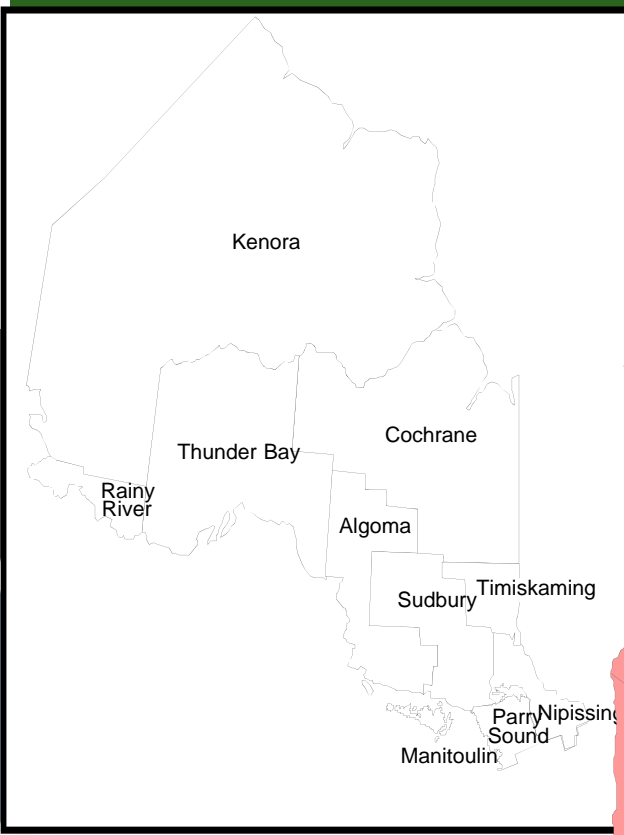
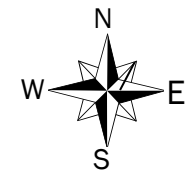
VENTILATION FOR LIVESTOCK AND POULTRY FACILITIES
Publication 833
Municipality of Agriculture, Food and Rural Affairs
Ontario

Canada
Ontario
OFRA

Best Management Practices Guides



**OMAFRA agricultural engineers
and environmental specialists
Geographic Areas of Responsibility**



**15 agricultural engineers
7 environmental specialists**

15 MOECC AgEO

In Summary

- Agriculture and food processing are important contributors to Ontario Economy
- Livestock production produces odour emissions that induce several cohabitation problems
- OMAFRA Role:
 - Collaborate
 - Influence work of others
 - Engage stakeholders
 - Program delivery
 - Share knowledge & expertise
- OMAFRA will further strengthen partnerships in research, data collection and monitoring, policy and program development, knowledge translation and transfer, and communications.

