



INDICATOR: PARTICIPATION IN ENVIRONMENTALLY SUSTAINABLE AGRICULTURE PROGRAM

STRATEGIC DIRECTION: Engage People

TARGET: 3. By 2015, the number of Ontarians who participate in biodiversity conservation activities is increased by 25%

11. By 2015, the proportion of private lands in Ontario that are managed for biodiversity is increased

THEME: Conservation and Sustainable Use – Sustainable Management

Background Information:

Ontario has about 52,000 farms and over 5 million hectares of land on farms (2011), which includes 3.6 million hectares of cropland (70.5% of farm area), almost 0.7 million hectares of pasture (12.9%) and about 0.8 million hectares of other lands (15.7%), primarily woodland and wetland. This represents about 8% of Canada's farmland. Almost 25% of farm income in Canada comes from Ontario farms (Statistics Canada 2012).

The Canada-Ontario Environmental Farm Plan (EFP) program was established in 1992. It encourages farmers to incorporate sustainable practices in their farming activities. Under the EFP, farmers complete environmental risk assessments of their farming practices, and create action plans that identify best management practices to reduce risks (Government of Canada, Government of Ontario and Ontario Farm Environment Coalition 2013).

Evaluations of the implementation of EFPs took place provincially in 1999 (Plummer et al. 2007) and 2010 (Prairie Research Associates 2010). Findings from a survey of EFP participants (n=189) include the following:

- High levels of implementation of EFP action plans, 65% completed in 2010, up from 54% in 1999.
- Significant investments made in on-farm environmental projects, \$69.6 thousand per farm on average, up from \$10.8 thousand in 1999.
- 77% of the funds were farmers' own funding.
- 42% of actions taken had no reported costs.
- Clear evidence of behaviour change, with the educational workshop influencing priorities (45% changed priorities after workshop).

Best Management Practices projects implemented include runoff control, improved manure storage, and nutrient management planning, practices that have multiple environmental benefits, including reducing threats to biodiversity. Other actions such as restricting livestock access to waterways, establishing vegetative buffers, restoring wetlands and controlling invasive plant species, provide direct benefits to biodiversity.

Many Best Management Practices have been supported through cost-sharing funding under a series of Canada-Ontario agriculture agreements from 2005 to present day including: the Agricultural Policy Framework (2005-2008), Growing Forward (2008-2013) and Growing Forward 2 (2013 to present). The Species at Risk Farm Incentive Program (SARFIP; Ontario Soil and Crop Improvement Association 2014)



and Grassland Habitat Farm Incentive Program are two programs that have funded specific biodiversity-related practices (Ministry of Natural Resources and Forestry and Environment Canada funding). Several other programs have been available in specific geographic areas including the Greenbelt, Oak Ridges Moraine and Lake Simcoe.

Geographic analysis of BMP adoption in Ontario by Agriculture and Agri-Food Canada (Ontario Soil and Crop Improvement Association 2012; Wozybun 2012) shows that the adoption of specific practices is linked to the specific agri-environmental risks in those geographic areas. For example, county-level adoption of manure management BMPs is highly correlated with manure production by livestock.

The indicator reports on the number of participants preparing EFPs and the change in numbers over time. Information on the total number and geographic distribution of On-farm Environmental Projects is included to supplement the information on participants and plans.

Data Analysis:

The annual number of participants in the Canada-Ontario Environmental Farm Plan program and the annual number of Environmental Farm Plans reviewed each year at the provincial level were compiled for the years 1994 to 2013 (Figure 1). The cumulative number of participants in the program was also calculated. Information on the number of On-farm Environmental Projects completed from 2005-2013 was mapped at the County level in southern Ontario and at the Region and District level in the north (Figure 2). Data for this indicator are maintained by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) in Guelph, Ontario.

Results:

Trend: Improvement **Data Confidence:** High **Geographic Extent:** Provincial

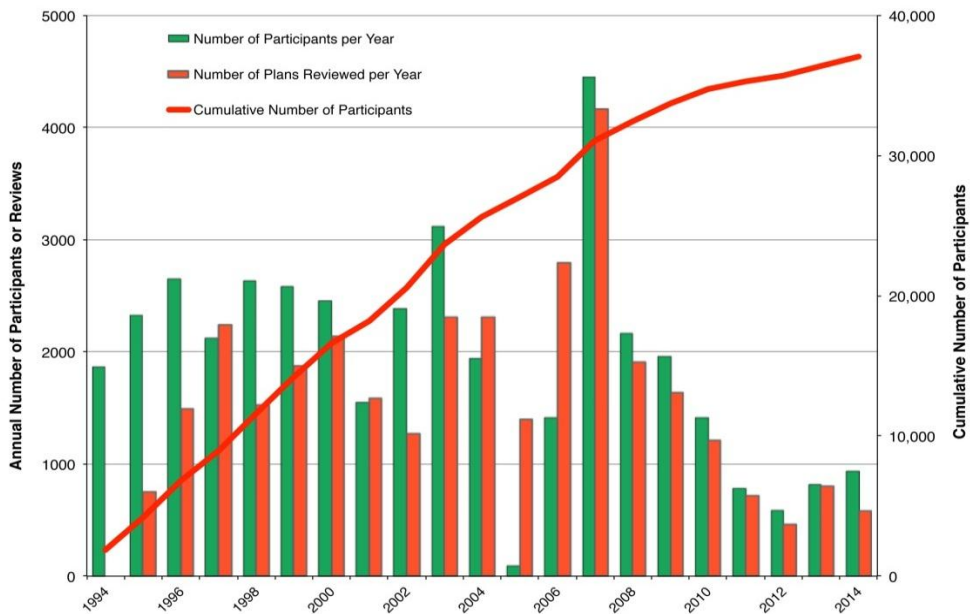


Figure 1. Number of participants in Canada-Ontario Environmental Farm Plan program, 1994-2013 (source: OMAFRA, Guelph, Ontario).

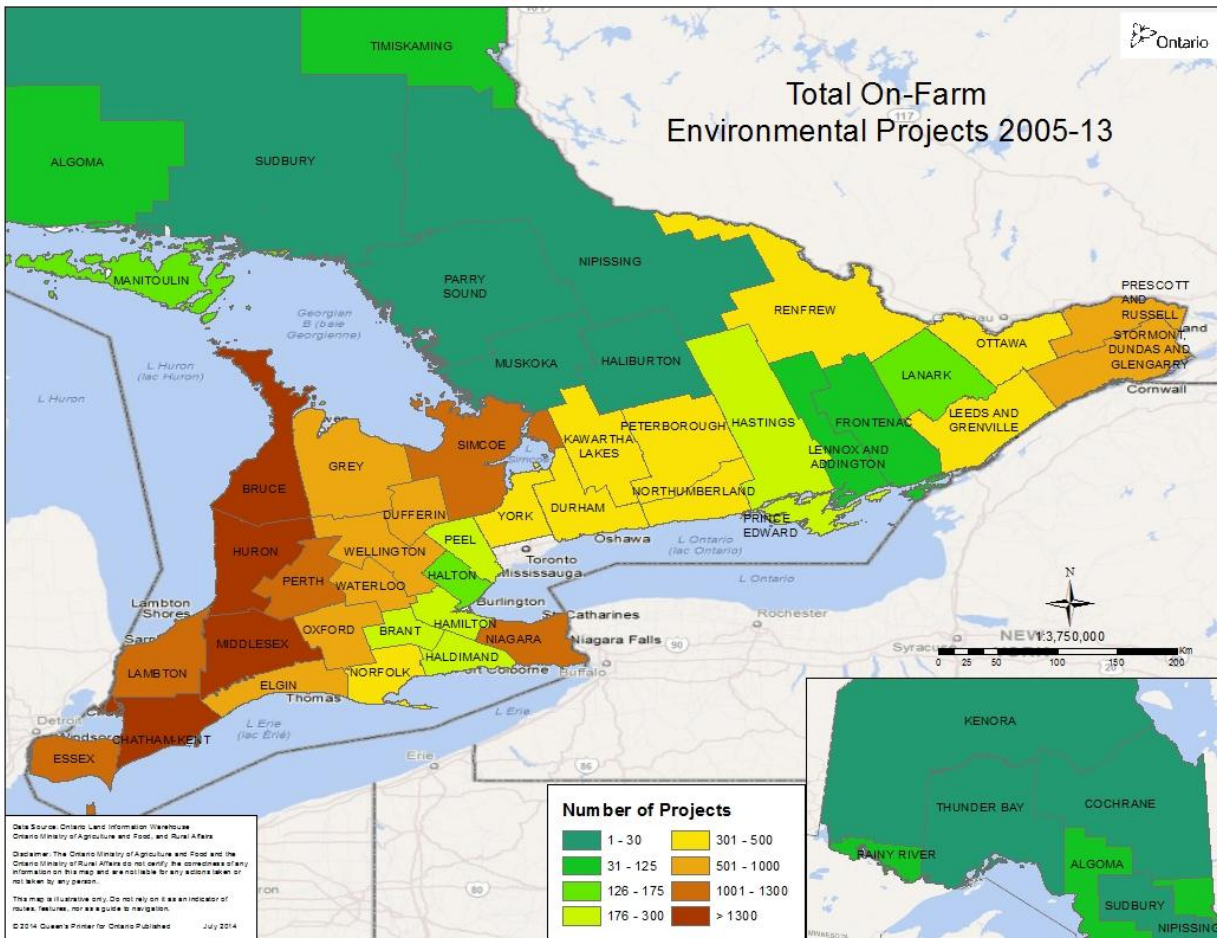


Figure 2. Number of completed On-farm Environmental Projects by County, Region and District (2005-13) (source: OMAFRA, Guelph, Ontario).

Status:

- An estimated 37,000 farms (about 70% of farms) participated in the Environmental Farm Plan program during 1992-2013 (Figure 1). That is about 2,000 additional farms since 2009, as reported in the State of Ontario's Biodiversity 2010.
- An estimated 37% of farm businesses had an up-to-date 3rd or 4th edition of the EFP in 2013.
- Between 2005 and 2013, farmers implemented 24,200 on-farm projects to achieve environmental outcomes (Figure 2), investing \$365,000,000. That is 6,700 additional environmental projects since 2009 and the last report, the State of Ontario's Biodiversity 2010.
- The Species at Risk Farm Incentive Program (SARFIP) helped fund almost 1000 of the projects mentioned above specifically to improve biodiversity and species at risk habitat. Examples include wetland creation, streambank vegetation buffers, nest boxes, pollinator habitat establishment and invasive species removal.



- The proportion of private lands in agricultural areas managed to be more “biodiversity friendly” has increased since 2009. Participation in the Environmental Farm Plan continues to grow, but at less than 25% level in the OBS target.

Links:

Related Targets: N/A

Related Themes: N/A

Web Links:

Canada-Ontario Farm Plan <http://www.omafra.gov.on.ca/english/environment/efp/efp.htm>
http://www.ontariosoilcrop.org/en/programs/environmental_farm_plan.htm

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[Available at:

http://www.ontariosoilcrop.org/docs/final_report_spatial_analysis_nm_bmp_ontario.pdf]

Citation

Ontario Biodiversity Council. 2015. State of Ontario's Biodiversity [web application]. Ontario Biodiversity Council, Peterborough, Ontario. [Available at: <http://ontariobiodiversitycouncil.ca/sobr> (Date Accessed: May 19, 2015)].