



Southern Ontario Land Resource Information System (SOLRIS) Version 3.0: Frequently asked questions

Ministry of Natural Resources and Forestry
Science and Research Branch

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What is SOLRIS?

The Southern Ontario Land Resources Information System (SOLRIS) is a landscape-level inventory of natural, rural, and urban areas. SOLRIS follows a standardized approach for ecosystem description, inventory, and interpretation known as the Ecological Land Classification (ELC) for southern Ontario. SOLRIS Version 3.0 maps the following features:

Open Beach/Bar	Tallgrass Savannah	Open Water
Open Sand Dune	Tallgrass Woodland	Plantation – Tree Cultivated
Treed Sand Dune	Forest	Hedge Row
Open Cliff and Talus	Coniferous Forest	Tilled
Treed Cliff and Talus	Mixed Forest	Transportation
Open Alvar	Deciduous Forest	Built Up Area – Pervious
Shrub Alvar	Treed Swamp	Built Up Area – Impervious
Treed Alvar	Thicket Swamp	Extraction – Aggregate
Open Bedrock	Fen	Extraction – Peat/Topsoil
Sparse Treed	Bog	Undifferentiated
Open Tallgrass Prairie	Marsh	

SOLRIS also monitors landscape changes that have occurred since the Version 1.0 release (c. 2000). SOLRIS applies a change detection process to accomplish this task using Landsat-5 TM imagery. Changes are reported in three time periods: 2000-2005, 2005-2010 and 2010-2015. The reported changes provide trend information which helps to answer these questions:

- How much has been gained/lost?
- What is the rate of gains/losses?
- Where are the gains/losses?
- How do the rates of gain and loss vary regionally?
- What were the gains/losses converted from/to?

For detailed technical information on mapping scale, source data, and limitations, please refer to the SOLRIS Data Specifications 2019, Version 3.0, which accompanies the data.

What is the extent of SOLRIS?

SOLRIS data covers all of Ecoregions 7E, 6E and 5E (growth plan for the Greater Golden Horseshoe study area) and an eastern Ontario extension (areas not mapped by the existing forest resources inventory).

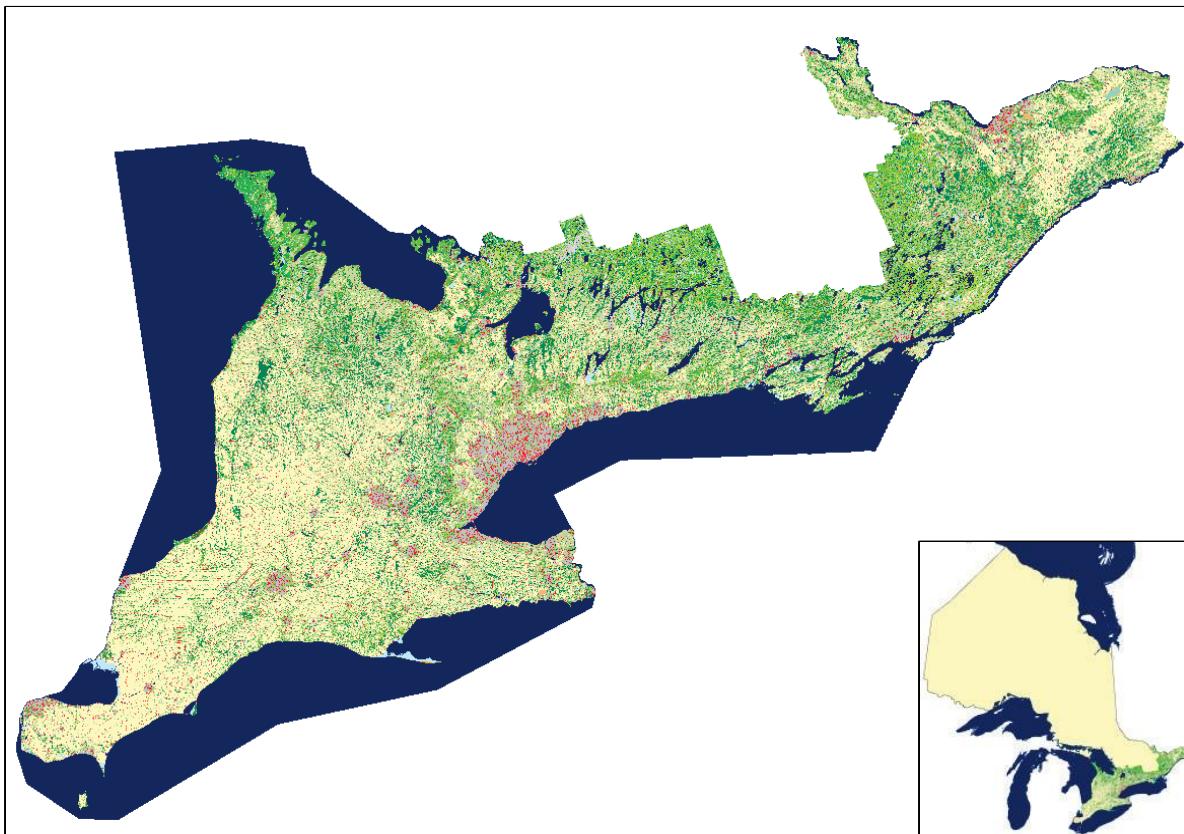


Figure 1: Map showing SOLRIS extent.

Why was SOLRIS created?

SOLRIS was developed to support landscape-scale planning initiatives in Southern Ontario such as source water protection, biodiversity conservation, natural heritage planning, and state of resources reporting.

How was SOLRIS created?

The SOLRIS inventory is a compilation of data from numerous sources including: provincial base data (woodland/ wetland perimeters, hydrology, built up areas, Ontario road network), satellite imagery, and digital elevation models. Computer modelling, visual interpretation with high resolution aerial photos, and field validation were used to create a seamless inventory for Southern Ontario.

How to use SOLRIS?

The SOLRIS product and method have evolved over the past few years based on changing needs, available resources, and new science and technology. Each release of SOLRIS includes a comprehensive metadata record that describes the classification system, accuracy, and data sources.

Why was SOLRIS updated?

SOLRIS was updated because version 2.1 is now 10 years old and therefore considered out of date. An updated inventory of Southern Ontario and change over time information is necessary in order to continue supporting landscape planning initiatives.

Change highlights for SOLRIS version 3.0:

This SOLRIS release contains two layers:

1. Landscape changes from version 1.0 to 3.0

Changes in the landscape are represented in three time periods: 2000-2005, 2005-2010 and 2010-2015. The data is provided in vector polygonal format. Each polygon is tagged with information describing the change event such as type, time period observed, cause, and confidence level associated.

2. Updated land cover

The landscape changes layer is used to update the land cover to the year 2015.

3. SOLRIS class mapping corrections.

Some classes previously mapped have been corrected with improved reference data. These corrections are not indicative of landscape change.

For more information:

- See SOLRIS Version 3.0 Data Specifications – April 2019
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