Ontario

Land Information Ontario

NRVIS/OLIW Data Management Model For

Lake Simcoe Protection Act Watershed Boundary

(v.1)

Published Edition

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Additional Information

For more information about this document, please contact Land Information Ontario at (705) 755-1878 or *lio@ontario.ca*

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Preface

For most of the Ontario Government's geospatial information holdings, successful data management is achieved through the process of documenting data standards. This document summarizes the basic data management requirements for specific Land Information Ontario (LIO) Concrete Class(es).

Several corporate applications are used by LIO to manage, disseminate, protect and make accessible where available, all of the geospatial holdings that reside within the Ontario Land Information Warehouse (OLIW). The major applications are:

- Data Standards Repository (DSR)
- Land Information Data Subscription System (LIDS)
- Land Information Publishing System (LIPS)
- Land Information Security Administration System (LISA)
- LIO Internet Mapping Framework (IMF - includes Web Mapping and Web Feature Services)
- Natural Resources Values Information System (NRVIS) Administration
- Ontario Land Information Directory (OLID)

If the information you are looking for is not found in this document, LIO has a Support Team that can answer additional questions about a Concrete Class. This Support Team uses a **three-tiered support model** to assist clients, described below. When a user/client has a question about the dataset, they will initially contact…

TIER 1
Information Access Helpline
(705) 755-1878 email: *lio@ontario.ca*
If the Helpline staff cannot provide assistance, the request will in be passed on to…

TIER 2
***NRVIS Support Helpline**
Contacts provided by Tier-1
If NRVIS Support staff cannot provide assistance, they will consult with the Information Owner (IO), and then get back to the client.

TIER 3
Dataset Information Owner (IO):
Contacts provided by Tier-1 or Tier 2

** Please note that Tier-2 support is intended for datasets that are maintained by the NRVIS Application. OLIW-only dataset enquiries will be fielded directly to the Information Owner (IO) if assistance cannot be provided by Tier-1 support staff.*

Data Analysis Projects are supported by staff with the Ontario Land and Resources Cluster (LRC), GIS Business Solutions Section (GISBSS), GIS Data Services (GDS)

Caveat: The information within this document is relevant to the date it was produced, and may become outdated over time. The Information Owner for this Concrete Class is responsible for updating the OLID metadata record for their information holdings. The reader is encouraged to review the corresponding OLID record to obtain up-to-date information about Concrete Classes. The OLID Metadata record search engine, along with additional information about OLIW itself can be found by visiting their website.

Background and Context

A primer about the concrete class that describes what the information looks like, along with an introduction to the business area (Information Owner) that is responsible with its upkeep. Web links to additional supporting material are provided where applicable.

The Lake Simcoe watershed is defined in section 1 of the Act as Lake Simcoe and the part of Ontario, the water of which drains into Lake Simcoe or, if the boundaries are described more specifically in the regulations, the area within those boundaries. Ontario Regulation describes the area of the watershed and includes a reference to an electronic watershed boundary in the Land Information Ontario (LIO) warehouse, called "Lake Simcoe Protection Act Watershed Boundary". This watershed boundary may be publicly accessed through the internet from LIO's Land Information Distribution System (LIDS) provided the end user has signed and abides by the conditions of the License or Agreement. Contact LIO@ontario.ca for more details. LIDS website for signed users:

http://www.applio.lrc.gov.on.ca/lids/

A map showing the approximate boundary of the watershed can also be found at the MOE LSPA website:

http://www.ene.gov.on.ca/en/water/lakesimcoe/index.php

The watershed boundary referenced by the regulation may be amended from time to time. The Land Information Ontario warehouse will contain the current version of the boundary, as well as previous versions of the boundary after it has been amended. The Ministry of the Environment is responsible for ensuring that adequate consultation is undertaken prior to the boundary being amended, that necessary people, public agencies and other bodies are aware of an amendment when it is approved, and that web-sites are updated with current information. It is the responsibility of LSRCA, municipalities and other public agencies to inform MOE of new information pertaining to the scientific boundary of the Lake Simcoe watershed as it becomes known. It is anticipated that the regulated boundary will be amended to reflect new information on a regular basis, but not more frequently than once per year.

To provide for adequate consultation, generally, boundary amendments will be posted as a proposal for 30 days on the Environmental Bill of Rights (EBR) Registry. In the case of less significant amendments or geographically limited amendments, direct notification to land owners, municipalities and other relevant parties may be undertaken instead of, or in addition to, the EBR registry posting.

To ensure that appropriate parties are aware of an amendment after it is approved (otherwise known as the 'Version Date' in the spatial layer), the Lake Simcoe Protection Act requires that an amended boundary be published as a decision in the Ontario Gazette or the EBR Registry. The date that it is published becomes the effective date of that new boundary (known as the 'Submission Date' for the packaged product or 'Business_Effective_Date' for the structured product). For more information, please refer to any additional documentation packaged with this product, and the metadata found on the LIO website:

http://lioapp.lrc.gov.on.ca/edwin/EDWINCGI.exe?IHID=5111&AgencyID=1&Theme=All_Themes

Information Owner

An Information Owner is responsible for defining the structure, access and upkeep of their business areas' information assets. They are also responsible in communicating with their stakeholder community and to evaluate their business needs. See 'Contacts' section for Director and main business area contact names.

No Organization Currently Defined

Status: None

Concrete Class Details

Lake Simcoe Protection Act Watershed Boundary v.1 (LSPAWB)

The Lake Simcoe Protection Act Watershed Boundary (LSPAWB) was created to support the Lake Simcoe Protection Act. The boundary was first created by the Lake Simcoe Region Conservation Authority (LSRCA) in 2005 as part of a Source Water Protection boundary project using the LSRCA 2002 5-meter Digital Elevation Model (DEM) and the best available data at the time. The portions of the watershed where the boundary shared a border with the Toronto and Region Conservation Authority (TRCA) and the Nottawasaga Valley Conservation Authority (NVCA) were manually reviewed and updated though a series of consultations between agencies. The boundary was created in ArcHydro.

Modeling Template: Standard
Modeled NRVIS/LIO concrete classes are implemented with a direct relationship to the GEOG_UNIT table and its associated child tables which are available to all concrete classes.

Target Databases: NRVIS (v.3.4.5) and OLIW (2009)

Sensitivity Classification and Rationale: Non-Sensitive *Public information - reference through legislation and should be made available to anyone.*

Governance: Aligns to current requirements under the Lake Simcoe Protection Act Watershed Boundary.

Associated Geographic Unit Types

Also known as "GUTS", these represent the next level of a concrete class into subtypes. For example, concrete class 'Nesting Site' has a number of "GUTS" defined by species e.g. "Bald Eagle Nesting Site, "Great Blue Heron Nesting Site" etc. With the nesting site example, separate GUTS were created to better manage and control access to data associated with protected and vulnerable bird species.

Grouped by LRC's Sensitivity Classification, with expired GUTS listed at the end.

Lake Simcoe Protection Act Watershed Boundary does not have Geographic Unit Types (GUTS) associated with it.

Contacts

The following listing identifies staff that helped define all aspects of the concrete class' information requirements and structure.

Contact Last name, First name - Position / Org. / Role(s)

Campbell, Darren - GIS Coordinator

Lake Simcoe Region Conservation Authority

Role(s):

Maintenance (Data):

Gaiot, John - Data Analyst

Ministry of Natural Resources (MNR), Science and Information Resources Division (SIRD), Geographic Information Branch (GIB), WRIP

Role(s):

Business Area Expert: *Expertise on generalization and technical issues.*

Hernandez, Pilar - Lake Simcoe GIS Officer

Ministry of Natural Resources (MNR), Field Services Division (FSD), Southern Region (SR), Aurora District

Role(s):

Maintenance (data): *MNR Maintenance*

Metadata (OLID): *Maintenance of metadata*

INFORMATION ACCESS HELPLINE STAFF - Helpline

No Organization Currently Defined

Role(s):

Distribution: *Oversees distribution in LIDs*

Publisher: *First point of contact*

INFORMATION ACCESS HELPLINE STAFF - Helpline Contact

Ministry of Natural Resources (MNR), Science and Information Resources Division (SIRD), Geographic Information Branch (GIB), Land Information Ontario

Role(s):

Distribution: *Oversees distribution in LIDs*

Publisher: *First point of contact*

Klose, Steve - Director

Ministry of the Environment (MOE), Environmental Programs Division, Lake Simcoe Project

Role(s):

Information Owner - Director: *Information Owner*

Kuyvenhoven, Monique - WRIP Architect

Lands and Resources Cluster, Business Solution Services

Role(s):

Data Analyst: *Lead data analyst.*

Lompart, Chris - Business Area contact - information owner

Ministry of the Environment (MOE), Integrated Environmental Planning Division

Role(s):

Main Business Area Contact: *First point of contact for business area decisions.*

Business Area Use

Intended Use and Purpose: The Lake Simcoe watershed is defined in section 1 of the Act as Lake Simcoe and the part of Ontario, the water of which drains into Lake Simcoe or, if the boundaries are described more specifically in the regulations, the area within those boundaries. Ontario Regulation describes the area of the watershed and includes a reference to an electronic watershed boundary in the Land Information Ontario (LIO) warehouse, called “Lake Simcoe Protection Act Watershed Boundary”. This watershed boundary may be publicly accessed through the internet from LIO’s Land Information Distribution System (LIDS) provided the end user has signed and abides by the conditions of the Licence or Agreement. Contact LIO@ontario.ca for more details. LIDS website for signed users:

- http://www.applio.lrc.gov.on.ca/lids/

Business Drivers: The Lake Simcoe Protection Act.

Use Caveats: This is a boundary referenced in the Lake Simcoe Protection Act, and is scientifically based, however, updated information on the Lake Simcoe watershed boundary may be available. Please contact the information owner for any updated watershed boundary information.

To provide for adequate consultation, generally, boundary amendments will be posted as a proposal for 30 days on the Environmental Bill of Rights (EBR) Registry. In the case of less significant amendments or geographically limited amendments, direct notification to land owners, municipalities and other relevant parties may be undertaken instead of, or in addition to, the EBR registry posting.

Structured NRVIS/OLIW product will always have the most recent version.

Previous versions are archived with the Aurora District Lake Simcoe GIS Officer and may be useful for municipalities with time sensitive decisions on approvals or official plans.

Geospatial Details

This section describes how the data will be spatially represented.

Default geospatial reference details for all NRVIS/LIOW concrete classes:

Grid or Coordinate System: *Geographic (Lat., Long.)*
Map Projection: *Not Applicable*
Horizontal Datum: *NAD83*
Vertical Datum *(z-scale): Not Applicable*
Vertical Positional Accuracy*: Not Applicable*

NRVIS/OLIW Abstract Class: SPMNTPOLY

Spatial Multi-Non-Tessellating-Polygon: An object is represented by ONE or MORE polygons. Polygons may NOT overlap. HOLES within and GAPS between polygons ARE allowed. Example: the St. Lawrence Islands National Park, where the Park itself is made up of many islands.

Geographic Extent: Other (Lake Simcoe Watershed)

Geographic Completeness: 100% Complete

Average Horizontal Positional Accuracy*:* Within 50 metres

Data Life-Cycle and Maintenance

This section provides details about the data's life-cycle

Compile

Responsibility of: Lake Simcoe Region Conservation Authority GIS Staff
LSRCA GIS Officer

Agency Location(s): LSRCA

Frequency: Annually

Procedures/Standards: Post EBR review and vetted through the MOE staff person

Tools/Forms/Applications: ArcGIS, NRVIS

Load

Responsibility of: MNR Aurora District
Lake Simcoe GIS Officer

Agency Location(s): Aurora

Frequency: Annually

Procedures/Standards: Post EBR review and vetted through the MOE staff person

Tools/Forms/Applications: Load into OLIW via SNIF package

Archive

Responsibility of: MNR Aurora District
Lake Simcoe GIS Officer

Agency Location(s): Aurora

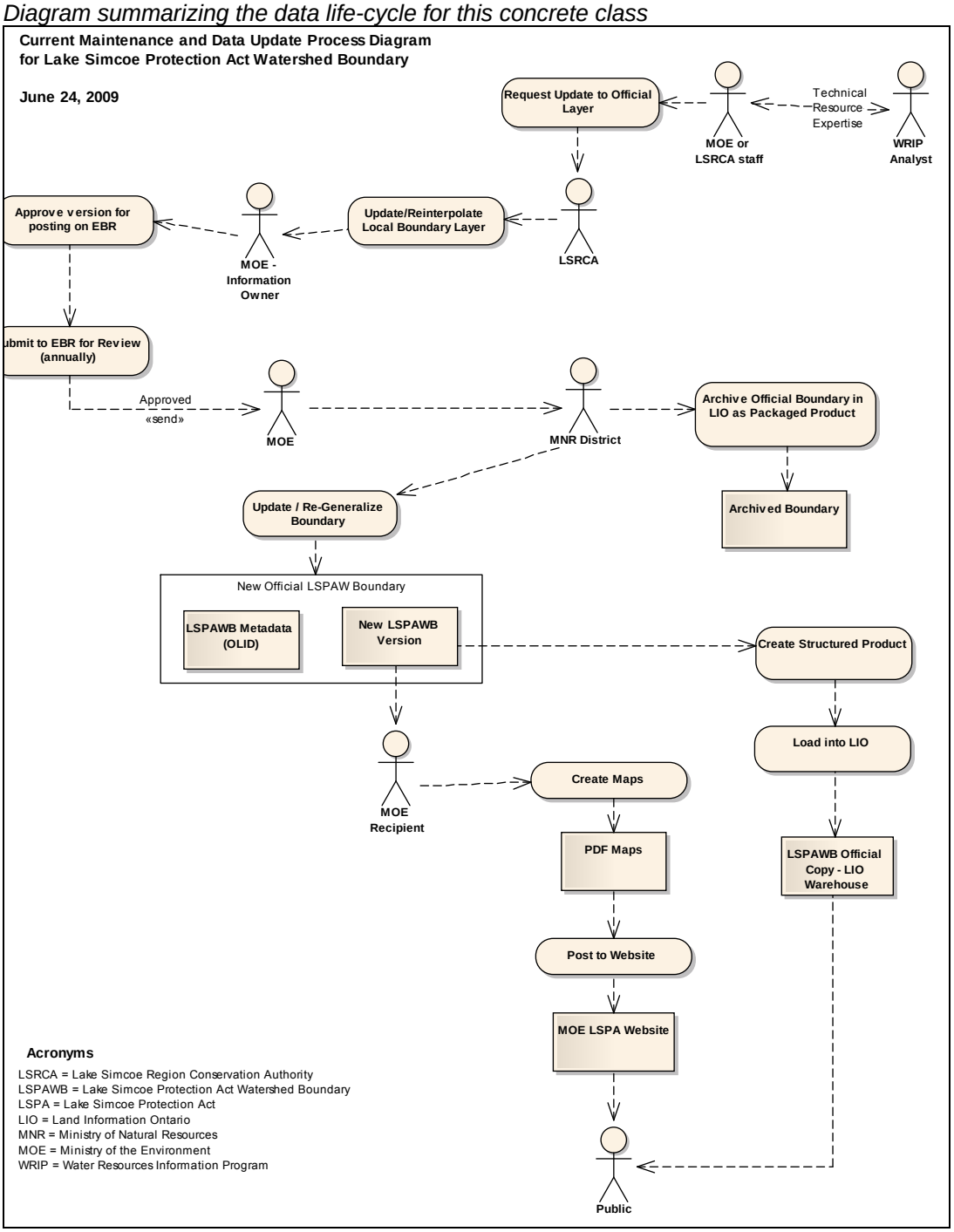
Frequency: Annually

Procedures/Standards: Post EBR and after new official version has been loaded into structured data class in OLIW

Tools/Forms/Applications: OLIW

Data Life-Cycle Diagram

Diagram summarizing the data life-cycle for this concrete class



Data Access and Services

This section provides details about the access management to the information stored in this data class. Some of the information documented here governing the scope of access is summarized in the Information Access form that is officially filed with LIO's Information Access Services Section.

Due to the nature and origin of the data stored in Concrete Classes, there are often special rules and considerations that control how the data is to be accessed, used and maintained.

Data Access Use Restrictions/Constraints: No restrictions placed on data access or use.

Data Access Maintenance Restrictions/Constraints: Updated boundary needs to be posted to the EBR and approved by the information owner, on an annual basis.

Web Mapping Services (WMS): Yes

NRVIS Administration Details:

Field Data Capture Form: No

Personal Information Stored: No

Area of Responsibility: Province

Default NRVIS Access Privileges:

- NRVIS Users Browse
- Administrators Check-In

Physical Model

The implemented database physical data model diagram and data dictionary for this data class can be found in the Standard NRVIS Interchange Format (SNIF) report published to the Land Information Ontario Data in the Warehouse web page.

As with any data class, model modifications may have taken place post-implementation and after the authoring date of this document. For example, tables, relationships, attributes and/or lookup table/domain values and Geographic Unit Types (GUTS) may be added, redefined or removed. The published SNIF reports found on the LIO website will always reflect the latest implemented version of the data class.

Modeling Decision Points

Documents business area and/or physical implementation decision points or recommendations with a rationale that influence how the concrete class is modeled and later implemented. Reviewing these points will often answer questions that may be asked of the model.