Unclassified

Land Information Ontario
Data Description

Railway

Disclaimer

This technical documentation has been prepared by the Ministry of Natural Resources (the "Ministry"), representing Her Majesty the Queen in right of Ontario. Although every effort has been made to verify the information, this document is presented as is, and the Ministry makes no guarantees, representations or warranties with respect to the information contained within this document, either express or implied, arising by law or otherwise, including but not limited to, effectiveness, completeness, accuracy, or fitness for purpose. The Ministry is not liable or responsible for any loss or harm of any kind arising from use of this information.

For an accessible version of this document, please contact Land Information Ontario at (705) 755 1878 or lio@ontario.ca

LIO Class Catalogue

Railway

Class Short Name: RAILWAY

Version Number: 3

Class Description:

Centreline linear features consisting of steel track for trains.

Abstract Class Name: SPMLINE

Abstract Class Description:

Spatial Multi-Line: An object is represented by ONE or MORE line segments. Line segments MAY be continuous and/or disjointed. Example: "Utility Line". Several line segments for a "Hydro Line" belonging to a particular grid may be interrupted by Utility Site "Hydro Stations".

Tables in LIO Class:

Railway

RAILWAY_SEGMENT_FT

A portion of a line of steel track providing a runway for wheeled vehicles.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER(13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
RAILWAY_STATUS_CODE	VARCHAR2(1)	No	STATUS_C	A, N (See RAILWAY_LINE_STATUS table)
Status of Railway line. eg. active, non-active				
RAILWAY_USE_CODE	VARCHAR2(1)	No	USE_C	A, H (See RAILWAY_USE table)
Current use of railway line. eg. abandoned, historical				
LOCATION_ACCURACY	VARCHAR2(25)	Yes	ACCURACY	Not Applicable, Over 10,000 metres, Within 1 metre, Within 10 metres, Within 10,000 metres, Within 100 metres, ... (See LOCATION_ACCURACY_LIST table)
The degree of conformity or closeness of a measurement within the database to its true value in the world.				
LOCATION_DESCR	VARCHAR2 (2000)	No	LOC_DES	
Description of the area or directions on how to get to the site.				
GEOG_UNIT_DESCR	VARCHAR2 (2000)	No	GUNT_DES	
Detailed description of the Geographic Unit.				
SENSITIVITY_CLASS	VARCHAR2(15)	Yes	SENS_CLASS	
The ranking of the sensitivity of the information embodied in the feature. Often wide-spread knowl edge of the location of some rare aspect of our natural heritage will endanger it. On the other han d, this knowledge by some parties is also extremely important for its protection. High - informatio n that is extremely sensitive and intended for use by named individuals only. Refers to information that could have negative impacts on human life or health if released. Currently no data classes me et this Medium - information that is sensitive and intended for use only by specified groups of employees an d approved agents of the Crown. For OLIW/NRVIS refers to information where the entire data type has been flagged as sensitive (i.e. Stick Nests for Vulnerable Threatened and Endangered (VTE) species) Low - information generally available to employees and approved agents of the Crown. Refers to se nsitive features within a data type not normally sensitive (i.e. specific instances of Pileated Wood pecker) Non-Sensitive - data and information that does not fall into any of the three sensitivity l evels. If disclosed will not result in any injury to individuals, government or private sector insti tutions (i.e. base data).				
SENSITIVITY_DATE	DATE	Yes	SENS_DATE	
The date that the sensitivity classification was established.				
SENSITIVITY_RATIONALE	VARCHAR2(50)	Yes	SENS_RAT	
The primary reason for the information sensitivity classification. Examples: "VTE Species", "Data Provider				

Agreement", "No Restriction Needed" (for Non-Sensitive data), "Protect Feature Type", "Protect Single Feature", "Legislative or Legal Reqt", "Cultural Heritage Site", "Other". Note: For Species at Risk (SAR) features, please use "Legislative or Legal Reqt" as a rationale.

SENS_RATIONALE_OTHER_DESCR	VARCHAR2(250)	No	SENS_DESCR
Description of the reason(s) for the information classification when "Other" is selected as the rationale.			
VERIFICATION_STATUS_FLG	VARCHAR2(10)	No	VERISTT_FL
An indication as to whether a qualified employee has verified the existence of the geographic unit.			
VERIFICATION_STATUS_DATE	DATE	No	VERISTT_DT
Date that the geographic unit was verified/validated.			
BUSINESS_EFF_DATE_FLG	VARCHAR2(10)	No	BUSEFFDTFL
Indication of whether the business effective date is an actual or estimated value.			
BUSINESS_EFFECTIVE_DATE	DATE	No	BUS_EFF_DT
Date that the record becomes effective in relation to the business i.e. the date MNR became aware of its existence.			
BUSINESS_EXPIRY_DATE	DATE	No	BUS_EXP_DT
A date indicating when the record was determined to be invalid.			
SYSTEM_CALCULATED_AREA	NUMBER(16,3)	No	SYS_AREA
The area of a polygon measured in square metres by the system.			
SYSTEM_CALCULATED_LENGTH	NUMBER(16,3)	No	SYS_LENGTH
The perimeter of a polygon or length of a line measured in metres.			
USER_CALCULATED_METRIC	NUMBER(16,3)	No	USER_CALC
The length, perimeter or area of an object in metres or square metres as measured or provided by the user.			
GENERAL_COMMENTS	VARCHAR2 (2000)	No	GNL_CMT
General comments.			
GEOMETRY_UPDATE_DATETIME	DATE	No	GEO_UPD_DT
Date/time the geometry was created or last modified in the source database.			
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
Date/time the record was created or last modified in the source database.			
SHAPE	SDO_GEOMETRY	No	SHAPE
Geometry attribute.			

CLASS_ALIAS_NAME

Location name for the geographic feature. Only one primary local name is allowed per area. Other local names are alias names.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
LOCAL_NAME	VARCHAR2	Yes	LOCAL_NAME	

	(75)			
Local name of geographic unit.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the concrete class which this record is part of.				
PRIMARY_NAME_IND	VARCHAR2 (3)	Yes	PRIM_IND	Yes, No
Indication of whether this is the primary local or common name.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS_DATABASE_REFERENCE

A link to an external database or an internal object in the same database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
INTERNAL_EXTERNAL_FLG	VARCHAR2 (10)	Yes	INT_EXT	Internal, External
A flag indicating if the database being referenced is internal (NRVIS/LIO) or external.				
DATABASE_REFERENCE_IDENT	VARCHAR2 (50)	Yes	IDENT	
Identifier of a reference that is linked e.g. Land Use Permit Number, LIS Number, the FMF Object ID of a Concrete Class.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
Static short name that will be used by for the concrete class.				
DATABASE_REFERENCE_DETAIL	VARCHAR2 (2000)	No	DETAIL	
Details on the rationale, use, dependency, or comments on the database reference. If a dependence on other data class geometry exists, this can be identified in this field.				
RELATED_CLASS_SHORT_NAME	VARCHAR2 (8)	No	CLASS_NAME	
The static short name that is used by the related concrete class.				
EXT_REF_TYPE_CODE	VARCHAR2 (8)	No	EXT_TYPE	
The type of external database that the identifier pertains to e.g. LUPS, LIS, etc.				
TYPE_OTHER_DESCR	VARCHAR2 (60)	No	OTH_DESCR	
A full description of the type when set to "other".				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS_JUSTIFICATION

The justification for the addition of or changes to a geographic feature.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
JUSTIFICATION_REASON	VARCHAR2 (2000)	Yes	REASON	
Reason for justification of the existence of a geographic feature.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the data class which this record is part of.				
JUSTIFICATION_DATE	DATE	Yes	JUSTIF_DT	
Date that the geographic feature was justified.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS_OTHER_INFORMATION

This table allows the NRVIS/LIO users to enter local-needs type of information, currently not captured in the NRVIS or LIO database. The table content will be analysed periodically to determine if the field(s) should be incorporated into the regular data class structure.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
FIELD_NAME	VARCHAR2 (30)	Yes	FIELD_NAME	
The attribute name for the information.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the concrete class which this record is part of.				
FIELD_TYPE	VARCHAR2 (8)	Yes	FIELD_TYPE	String, Integer, Double
The type of field.				
FIELD_VALUE_STRING	VARCHAR2 (50)	No	VALUE_S	
A field used to store character strings.				
FIELD_VALUE_INTEGER	NUMBER (5,0)	No	VALUE_I	
A field used to store integer values (small numbers).				
FIELD_VALUE_DOUBLE	NUMBER (10,3)	No	VALUE_D	

A field used to store decimal data with up to two decimals.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE

Date/time the record was created or last modified in the source database.

CLASS_PARTY_ROLE

A link to an external contact database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
PARTY_IDENT	VARCHAR2 (25)	Yes	PARTY_ID	
An identifier for a party (group or individual). It should reference an identifier in an external database which would contain further information. The identifier should not contain personal information (i.e. Social Insurance Number, Outdoors Card Number, phone number, name etc.).				
PARTY_DATABASE	VARCHAR2 (100)	Yes	PARTY_DB	
The database that contains the party information.				
ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	Affiliated With, Approver, Authority Holder, Claim Holder, Contact, Contractor, ... (See ROLE_TYPE_LIST table)
The role that an organization or an individual plays.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the concrete class which this record is part of.				
ROLE_DETAIL	VARCHAR2 (200)	No	DETAIL	
Additional details about the role.				
START_DATE	DATE	No	START_DATE	
The date when a Party starts to play a Role.				
END_DATE	DATE	No	END_DATE	
The date when a Party ceases to play a Role.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS_SOURCE

Intersection table between the data class and Source List table.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	

A unique numeric provincial identifier assigned to each object.

SOURCE_NAME	VARCHAR2 (100)	Yes	SOURCE_NAM	AFFM Provincial Administrative Maps, Aerial Photography, Aerial Survey, Book/Publication, CIR Photograpy, City of Ottawa Borehole Database, ... (See SOURCE_LIST table)

The name of the source.

SOURCE_DETAIL	VARCHAR2 (254)	Yes	SOURCE_DET

What part of the source pertains to the feature. Examples: Summary data from a data base, pages in a book or atlas, figure number and page from a publication, a section of a map, record in a database.

CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME

Unique abbreviation of the concrete class name (primary key)

SOURCE_DESCR	VARCHAR2 (2000)	No	SOURCE_DES

Text providing details about the source.

METHOD_DESCR	VARCHAR2 (2000)	No	METHOD

The type of method, tools, and techniques used in observing/collecting/recording the Source. It may also include a URL where users could get further information on the method used.

SOURCE_APPLICABILITY	VARCHAR2 (20)	No	APPLICABIL

How the source contributes to the feature's definition.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE

Date/time the record was created or last modified in the source database.

CLASS_SUPPORTING_MATERIAL

Material (document/file/picture) that provides more information on a geographic feature.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	

A unique numeric provincial identifier assigned to each object.

MATERIAL_NAME	VARCHAR2 (200)	Yes	NAME

A name or brief description of the material.

MATERIAL_LOCATION	VARCHAR2 (200)	Yes	LOCATION

The location where the supporting material is stored. This may be a physical location or a link to a storage location.

CLASS_SHORT_NAME	VARCHAR2	Yes	CLASS_NAME

	(8)		

System-generated column denoting the concrete class which this record is part of.

URL_ENG	VARCHAR2 (500)	No	URL_ENG

The address of a computer or a document in English on the Internet that consists of a communications protocol followed by a colon and two slashes (as http://), the identifier of a computer (as www.m-w.com) and usually a path through a directory to a file -- called also universal resource locator.

URL_FRE	VARCHAR2 (500)	No	URL_FRE

The address of a computer or a document in French on the Internet that consists of a communications protocol followed by a colon and two slashes (as http://), the identifier of a computer (as www.m-w.com) and usually a path through a directory to a file -- called also universal resource locator.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE

Date/time the record was created or last modified in the source database.

EXTERNAL_REF_TYPE_LIST

List of valid EXTERNAL_REFERENCE_TYPE codes.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXT_REF_TYPE_CODE	VARCHAR2 (8)	Yes	EXT_REF_TY	

The type of external database that the identifier pertains to e.g. LUPS, LIS, Other.

EXT_REF_TYPE_DESCR	VARCHAR2 (60)	Yes	EXT_REF_TY	

Description of the type of external reference.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

LOCATION_ACCURACY_LIST

List of valid LOCATION_ACCURACYs.

Column Name	Column Type	Mandatory	Short Name	Valid Values
LOCATION_ACCURACY	VARCHAR2 (25)	Yes	ACCURACY	

The accuracy of the location of the feature at an OBM scale. The degree of conformity or closeness of a measurement to the true value.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

RAILWAY_LINE_STATUS

List of valid Railway Status Codes

Column Name	Column Type	Mandatory	Short Name	Valid Values
RAILWAY_STATUS_CODE	VARCHAR2 (1)	Yes	RAILWAY_ST	
Status of Railway line. eg. active, non-active				
RAILWAY_STATUS_DESCR	VARCHAR2 (20)	Yes	RAILWAY_ST	
Status of Railway line.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

RAILWAY_USE

List of valid Railway Use Codes

Column Name	Column Type	Mandatory	Short Name	Valid Values
RAILWAY_USE_CODE	VARCHAR2 (1)	Yes	RAILWAY_US	
Current use of railway line. eg. abandoned, historical				
RAILWAY_USE_DESCR	VARCHAR2 (20)	Yes	RAILWAY_US	
Current use of railway line.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

ROLE_TYPE_LIST

List of valid party role types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	
The role that an organization or an individual plays.				
ROLE_TYPE_DESCR	VARCHAR2 (2000)	Yes	DESCR	
Description of Role Type.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

EXPIRY_DATETIME	DATE	No	EXP_DATE

Date/time that the record was expired from use.

SOURCE_LIST

A description of the source information that is the basis for creating or changing information about a geographic feature. In may be an observation, possibly resulting from a field survey or an adhoc report or a reference to a published or unpublished document.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SOURCE_NAME	VARCHAR2 (100)	Yes	NAME	
The name of the source.				
SOURCE_DATE	VARCHAR2 (50)	No	SRC_DATE	
The date of the source.				
SOURCE_ORIGINATOR	VARCHAR2 (75)	No	ORIGINATOR	
The originator or author of the source. Includes the author(s) of a book; the originator(s) of a survey or project, etc.Examples: Smith, J. Smith, J. and Jones, K. Smith, J., Jones, K. and White, T. Anon. (where no author identified) OMNR (where authorship is corporate) Northwest District (lead and delivered the data collection project)				
SOURCE_SCALE	VARCHAR2 (15)	No	SCALE	
The scale of the vector base or aerial photography, the cell resolution of a grid, or the pixel resolution of an image used to record the location of the feature. Examples: For a vector source or aerial photography: 1:10,000 1:20,000 1:250,000. For a grid or imagery source: 1 km, 10 m, 15 seconds.				
HORIZONTAL_DATUM	VARCHAR2 (10)	No	H_DATUM	
Identifies the reference system used for defining the coordinates of points. There are three common horizontal datum systems used in Ontario: NAD83, NAD27, NAD27 with 1974 adjustment. The datum models the shape of the earth.				
VERTICAL_DATUM	VARCHAR2 (30)	No	V_DATUM	
The zero surface to which elevations or heights are referred is called a vertical datum. Traditionally, surveyors and mapmakers have tried to simplify the task by using the average (or mean) sea level as the definition of zero elevation, because the sea surface is available worldwide. MSL is a close approximation to another surface, defined by gravity, called the geoid, which is the true zero surface for measuring elevations. Example: WGS-84 EGM96 Geoid.				
SOURCE_PROJECTION	VARCHAR2 (40)	No	PROJECTION	
The name of a systematic representation of all or part of the surface of the Earth on a plane or developable surface.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

LIO Lookup Table Values:

EXTERNAL_REF_TYPE_LIST

EXT REF TYPE CODE	EXT REF TYPE DESCR	EXPIRY DATETIME
ALPS	Aggregate Licence Permit Database	
AMIS	Abandoned Mines Database	
ARFIS	Algonquin Region Forest Database	
BCD	Biological and Conservation Database	
DTDB	Digital Topographic Database	
FISHARC	Fisheries Data Archive	
FISHLIB	Fisheries Information Library	
FRI	Forest Resources Inventory Database	
IF	Internal Filing	
LIS	Land Index System	
LUP	Land Use Permit	
NADB	Natural Areas Database	
NTDB	National Topographic Database	
NWEIMS	Wetland Evaluation Information Management Database (North)	
OBM	Ontario Base Map Database	
OFIS	Ontario Fisheries Information Database	
OLI	Ontario Land Inventory	
OPDS	Ontario Petroleum Database	
OTHER	Other External Reference	
PER	Permit	
RBT	Resource Based Tourism Licence	
SFMM	Sustainable Forest Management Model	
WEIMS	Wetland Evaluation Information Management Database (South)	
^	NRVIS 2.0 Data Conversion	1999-11-05

LIO Lookup Table Values:

LOCATION_ACCURACY_LIST

LOCATION ACCURACY	EXPIRY DATETIME
Not Applicable	
Over 10,000 metres	
Within 1 metre	
Within 10 metres	
Within 10,000 metres	
Within 100 metres	
Within 1000 metres	
Within 2 metres	
Within 20 metres	
Within 200 metres	
Within 2000 metres	
Within 5 metres	
Within 50 metres	
Within 500 metres	
Within 5000 metres	
AC Accurate (to 10m)	2007-01-12
AP Approximate (to 500m)	2007-01-12
GE General (to 10,000m)	2007-01-12
MO Moderate (to 1000m)	2007-01-12
RE Reliable (to 100m)	2007-01-12
VA Very Accurate (to 2m)	2007-01-12
VG Vague (to 100,000m)	2007-01-12
^ Data Load	2007-01-12

LIO Lookup Table Values:

RAILWAY_LINE_STATUS

RAILWAY STATUS CODE	RAILWAY STATUS DESCR	EXPIRY DATETIME
A	Active	
N	Non-Active	

LIO Lookup Table Values:

RAILWAY_USE

RAILWAY USE CODE	RAILWAY USE DESCR	EXPIRY DATETIME
A	Abandoned	
H	Historical	

LIO Lookup Table Values:

ROLE_TYPE_LIST

ROLE TYPE	ROLE TYPE DESCR	EXPIRY DATETIME
Affiliated With	This role type indicates that the related "from" Party (Individual or Group) has a relationship with the related "to" Party that is not more explicitly covered by another role type.	
Approver	This role type indicates that the related Party (Individual or Group) is one that has approved action associated with the related item. For example, if the related item is an Authority (License, permit, etc.) this would indicate the Party that approved the issuance of the Authority; if the related item is a Recommended Action this would indicate the Party that approved the initiation of the action; etc.	
Authority Holder	This role type indicates that the related Party (Individual or Group) is the one to which the Ministry has issued the related Authority (license, permit, etc.).	
Claim Holder	This role type indicates that the related Party (Individual or Group) is the one that is the registered owner of the related Mining Claim (area).	
Contact	This role type indicates that the related "from" Party (Individual or Group) is the designated point of contact for communication with the related "to" Party.	
Contractor	N/A	
Custodian	This role type indicates that the related Party (Individual or Group) is responsible for the care of the related Geographic Unit.	
Data Provider	This role type indicates that the related Party (Individual or Group) is the provider of a data source about the related Geographic Unit.	
Employee	This role type indicates that the related "from" Party (an Individual) is employed by the related "to" Party (a Group).	
Evaluator	This role type indicates that the related Party (Individual or Group) is the one who has evaluated the related Geographic Unit.	
Group Member	This role type indicates that the related "from" Party (Individual or Group) is a member of the related "to" Party (a Group). This could include membership in a Local Citizens Committee or a designated interest group.	
Information Holding Custodian	This role type indicates that the related Party (Individual or Group) is responsible for the storage and protection of the related Information Holding.	
Interested Party	This role type indicates that the related Party (Individual or Group) has a stated interest in a related Issue; or has a stated interest in plans and activities involving the related Geographic Unit.	
Issuer	This role type indicates that the related Party (Individual or Group)	

	is one that has issued the related Authority (license, permit, etc.).	
Lease Holder	This role type indicates that the related Party (Individual or Group) has occupancy rights to the related Geographic Unit for the period and according to the terms of a lease agreement.	
Manager	This role type indicates that the related "from" Party (Individual or Group) manages or directs the activities of the related "to" Party (the "to" Party reports to or is accountable to the "from" Party); or manages the operation of the related Geographic Unit (e.g., a Tourism Establishment).	
Metadata Custodian	This role type indicates that the related Party (Individual or Group) is responsible for the storage and protection of the information ABOUT the related Information Holding. Note: There is a separate role type for the custodian of the information holding itself.	
Observer	This role type indicates that the related Party (Individual or Group) is the one who made the observations in the related Information Source.	
Operator	This role type indicates that the related Party (Individual or Group) operates the related Geographic Unit facility (e.g., Tourism Establishment, Mill).	
Owner	This role type indicates that the related Party (Individual or Group) owns the related Geographic Unit (e.g., Tourism Establishment).	
Partner	This role type indicates that the related "from" Party (Individual or Group) has a partnership arrangement with the related "to" Party.	
Steward	This role type indicates that the related "from" Party (Individual or Group) is responsible for assisting the Ministry with respect to the management of resources within the related Geographic Unit.	
Supervisor	This role type indicates that the related "from Party (Individual or Group) supervises the activities of the related "to" Party.	
Verifier	N/A	

LIO Lookup Table Values:

SOURCE_LIST

SOURCE NAME	SOURCE DATE	SOURCE ORIGINATOR	SOURCE SCALE	HORIZONTAL DATUM	VERTICAL DATUM	SOURCE PROJECTION	EXPIRY DATETIME
AFFM Provincial Administrative Maps		Ministry of Natural Resources	600000				
Aerial Photography		Ministry of Natural Resources	15840				
Aerial Survey							
Book/Publication							
CIR Photograpy		Ministry of Natural Resources					
City of Ottawa Borehole Database	1883 - 2006	City of Ottawa	Varies		Mean Average Sea Level	Geodetic and UTM	
Digital File							
Digital Map							
Field Survey\Site Visit							
File System/Filing Cabinet Information							
Forest Resources Inventory		Ministry of Natural Resources		NAD27		UTM	
GPS Data Collection							
Hard Copy/Paper Map							
IKONOS Multispectral		Ministry of Natural Resources					
IKONOS Panchromatic		Ministry of Natural Resources					
IRS Multispectral		Ministry of Natural Resources					
IRS Panchromatic		Ministry of Natural Resources					
IRS Pansharpened		Ministry of Natural Resources					

Landsat-1,2,3 MSS		Ministry of Natural Resources					
Landsat-4,5 MSS		Ministry of Natural Resources					
Landsat-7 ETM		Ministry of Natural Resources					
Local Borehole Drilling Program Results	2006	Ministry of Northern Development and Mines			Mean Average Sea Level		
Local Knowledge							
MNDM Assesment File							
MNDM Client/Company Information							
MNR Based Observation							
MTO Engineering Reports	Varies	Ministry of Transportation	Varies		Mean Average Sea Level		
NRCan - CanVec	2008	Natural Resources Canada	50000	NAD83			
NRCan - National Hydro Network	2008	Natural Resources Canada	50000	NAD83			
NTS Map 1:250000	1970 to 2003	Department of Natural Reosurces	250000	NAD27			
NTS Map 1:50000	1970 to 2003	Department of Natural Resources	50000	NAD27			
Ontario Base Map 1:10000	1978 to 1995	Ministry of Natural Resources	10000	NAD27		UTM	
Ontario Base Map 1:20000	1978 to 1995	Ministry of Natural Resources	20000	NAD27		UTM	
Ontario Geological Survey Fieldwork Mapping	Varies to 2004	Ontario Geological Survey	1:50,000	NAD83	Mean Average Sea Level	Universal Transvers Mercator	
Ontario Parcel				NAD83			
OrthoImagery		Ministry of Natural Resources					
Public Observation							

Quaternary Geology Study	Varies	Ministry of Northern Development and Mines			Mean Average Sea Level		
Unknown	11-12-02						
Urban Geology Automated Information System (UGAIS)	1956-1972	Geological Survey of Canada	Varies	NAD27	Mean Average Sea Level	Universal Transverse Mercator	
Water Well Data Improvement Project	2006	Ministry of Natural Resources, Water Resources Information Program	Varies	NAD83	Mean Average Sea Level	Geodetic	
Water Well Information System (WWIS)	1899 - 2003	Ministry of the Environment, Environmental Monitoring and Reporting Branch	Varies	NAD27	Mean Average Sea Level	Universal Transverse Mercator	
Waterloo Area Geology Automated Information System (WAGAIS)	1900 - 1977	Geological Survey of Canada	Varies	NAD27	Mean Average Sea Level	Universal Traverse Mercator	
External Source from NRVIS 2							2007-01-12
Internal Source from NRVIS 2							2007-01-12
Material Source from NRVIS 2							2007-01-12
Ontario Base Map	1978 to 1995	Ministry of Natural Resources		NAD27		UTM	2007-01-12
Source Observation from NRVIS 2							2007-01-12
Unknown Imagery							2007-01-12