

Land Information Ontario Data Description

Aquatic Resources Area Survey Point

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LIO Class Description

Aquatic Resource Area Survey Point

Class Short Name: ARASURPT

Version Number: 1

Class Description:

Description of the physical characteristics and fish species that pertain to one survey location on a waterbody (lake, river or stream). Each survey is characterized by a single point with associated attributes, and may be representative of a portion of a water body or an entire waterbody (lake, river or stream). The information in ARA Survey Point is used to update the ARA Summary Point data.

Abstract Class Name: SPSPNT

Abstract Class

Description:

Spatial Single-Point: An object is represented by ONE and ONLY ONE point. Examples: A cabin, bird nest, tower.

Metadata URL:

Tables in LIO Class:

Aquatic Resource Area Survey Point

ARA_SURVEY_POINT_FT

Description of the physical characteristics and fish species that pertain to one survey/site location on a waterbody (lake, river or stream). Each survey is represented by a single point which can correspond to one or many readings for a particular survey, and is representative of the partial or full body of water (lake, river or stream). The information in ARA Survey Point may be used to update the ARA Summary information.

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.				
ARA_IDENT	VARCHAR2(11)	Yes	ARA_IDENT	
A unique identifier for an aquatic resource area, composed of a user-defined combination of letters and numbers. The letters can represent the name of a waterbody, township, county, location or some other identifier which will help users identify waterbody segments that belong to one aquatic resource area (e.g. PTBO-001). It is suggested that district staff create ARA Identifiers in a manner similar to the way they were created in the original ARA layer.				
WATERBODY_LID	VARCHAR2(13)	No	WBY_LID	
A location code that uniquely identifies a waterbody, based on the visual centroid of the waterbody or the mouth of a river as represented in the Corporate Waterbody Table. The Waterbody LID is a manually derived identifier based on the UTM coordinates (datum NAD27). The format is derived from the UTM zone (2 digits), UTM Easting - rounded to first four digits and the UTM Northing - rounded to the first five digits. The final digit of the easting and northing portions may be adjusted to maintain uniqueness. The Waterbody LID should not be confused with actual locatio nal information. This attribute is required for linking ARA data to other external databases (ex. FISHNETv3 and Fish Stocking Information System (FSIS)).				
CORPORATE_WATERBODY_NAME	VARCHAR2(100)	No	WBY_NAME	
Corporate Waterbody Table name for a waterbody. This name may either be the same as the official name or local name(s) as assigned by MNR District staff. This name along with the Waterbody LID uniquely identifies a waterbody in Ontario for MNR Fisheries applications. Common descriptors (e.g. Lake, River, Creek, etc) are abbreviat ed and always placed at the end of the name. If the official name begins with a descriptor, the descriptor is still placed at the end but with a comma after the root name (ie. Lake Ontario is written as Ontario, L.). The custodian for this field lies with Inventory, Monitoring and Assessment Section (SIB).				
OFFICIAL_WATERBODY_NAME	VARCHAR2(100)	No	OFF_NAME	
The official name for the waterbody if it exists which is the name formally laid down, sanctioned, or imposed by a governing body.				
WATERBODY_ALIAS_NAME1	VARCHAR2(100)	No	WBY_ALIAS1	
First alternate name for a waterbody or river/stream (e.g. local name, name of main river, name of tributary). Helpful for identifying aquatic resource areas that may not have Official names, or if waterbodies are officially known as "Not Listed". Also useful for identifying stream segments that belong to a larger stream/river syste m.				
WATERBODY_ALIAS_NAME2	VARCHAR2(100)	No	WBY_ALIAS2	
Second alternate name for a waterbody or river/stream (e.g. local name, name of main river, name of tributary). Helpful for identifying aquatic resource areas that may not have Official names, or if waterbodies are officially known as "Not Listed". Also useful for identifying stream segments that belong to a larger stream/river syst em.				
FISHERIES_MANAGEMENT_ZONE_ID	NUMBER(2,0)	Yes	FMZ_ID	
A number that identifies a Fish Management Zone. A zone can consist of one area or multiple geographically separated areas.				
SURVEY_SITE_DESCR	VARCHAR2 (2000)	No	SITE_DESCR	

A user defined description of the survey site. It provides a detailed description of the survey site location and area surveyed.

SURVEY_METHOD	VARCHAR2(75)	No	METHOD	'Angling - Non Standard Survey', 'BSM - Broad-scale Monitoring', 'BTIN - Brook Trout Index Gill Netting Standard Survey', 'Broadcast Netting - Non Standard Survey', 'Creel - Non Standard Survey', 'Dip Nets - Non Standard Survey', ... (See ARA_SURVEY_METHOD_LIST table)
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The name of the survey (e.g. Aquatic Habitat Inventory) or survey method used (e.g. Fall Walleye Index Netting, Ontario Stream Assessment Protocol) to collect the data for the aquatic resource area. This attribute should be populated for survey points to indicate the type of work conducted to obtain the information used to create the aquatic resource area.

SURVEY_METHOD_OTHER_DESCR	VARCHAR2(100)	No	METH_OTH	
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Description of survey method used if the "Other" option was selected in the "Survey Method" attribute.

SURVEY_SITE_LENGTH	NUMBER(8,1)	No	SITE_LGTH	
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The total length of the survey site in a stream/river, if different from the total length of the associated water segment. ARA Survey site point should be placed at the visual centroid of the total site. If no site length is recorded, it is assumed that the ARA Survey point is associated with the entire water segment.

SURVEY_DATE	DATE	No	SURV_DATE	
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The date when the survey was conducted.

SURVEY_TIME	VARCHAR2(4)	No	SURV_TIME	
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Time of day (by 24h clock) that the survey was conducted. ex. 11pm would be entered as 2300, 8am would be entered as 0800

SURVEYOR_AGENCY	VARCHAR2(50)	No	AGENCY	'Ausable Bayfield Conservation Authority', 'Cataraqui Region Conservation Authority', 'Catfish Creek Conservation Authority', 'Central Lake Ontario Conservation Authority', 'Conservation Halton', 'Consulting Company', ... (See ARA_SURVEYOR_AGENCY_LIST table)
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The agency or organization who performed the survey, including government, partner agencies, non-government, academic, individuals, tourist operators etc. and/or the position of the person from the organization. Individual names should not be captured here.

SURVEYOR_DESCR	VARCHAR2(50)	No	SURVEYOR_D	
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Detailed description of the organization/agency that conducted the survey. For example, the name of the consulting company who was responsible for conducting the survey.

LOCAL_REFERENCE_DESCR	VARCHAR2(75)	No	LOCAL_REF	
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Description of the location of the original hard copy survey which is used by local offices to assist in locating the file. For example a filing cabinet number.

AIR_TEMPERATURE	NUMBER(3,1)	No	AIR_TEMP	
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The temperature in degrees Celsius of the air where the survey was conducted (used in river/stream sampling of water temperature). If surveyors use the Ontario Stream Assessment Protocol (OSAP) water temperature may be combined

with maximum air temperature to estimate the maximum summer water temperature of a site. This then contributes to our understanding of thermal regime and suitability of the stream for fish communities.

WATER_TEMPERATURE	NUMBER(4,1)	No	WATER_TEMP
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The temperature of the water in degrees Celsius where the survey was conducted. In streams, the temperature is taken in the main flow of the stream (i.e., a run or scour pool) avoiding deep pools. In a lake, the temperature is measured 1 m below surface. It is important to note that this attribute only tells users what the temperature was on that day in that location, because stream/lake surface temperatures vary considerably over both time and location. If surveyors use the Ontario Stream Assessment Protocol (OSAP) water temperature may be combined with maximum air temperature to estimate the maximum summer water temperature of a site. This then contributes to our understanding of thermal regime and suitability of the stream for fish communities.

FISH_SPECIES_SUMMARY	VARCHAR2 (2000)	No	SPECIES
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A concatenation of all fish species common names found in the aquatic resource area, derived through the ARA Survey or Summary Species tables. This attribute would be queried to select aquatic resource areas by species. The ARA Survey or Summary Species tables could then be used for further information pertaining to each species. An example of how information in this field may look is: "American brook lamprey, American shad, Aurora trout, Brown trout, Lake sturgeon, Longnose gar, Rainbow trout"

CONDUCTIVITY	NUMBER(6,1)	No	CONDUCTIV
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Conductivity is the ability of an aqueous solution to carry an electric current. The value entered should be the most recent point in time single reading, or if more than one sample a mean of all samples collected 2 m below the surface. If more than one sample has been taken within a segment, the mean should be calculated based on samples taken at approximately the same time (i.e. calculate the mean conductivity readings taken at approximately the same time from three basins of a lake) during one year. Measured in units of mhos/sec at 25 C.

SECCHI_DEPTH	NUMBER(5,1)	No	SECCHI_DEP
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The mean depth at which a weighted 20 cm disk with alternate black and white quadrants disappears from view when lowered into the water of a lake on the shaded side of a boat and the depth where it reappears when being raised, measured in meters (m). This information is recorded for lakes only.

COMMENTS	VARCHAR2 (2000)	No	COMMENTS
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Unstructured description, additional notes, or further explanation.

FISHNET_PROJECT_CODE	VARCHAR2(20)	No	FN_PROJECT
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The code used in FishNet to indicate individual survey initiatives. It is a unique code assigned to a survey by the Fisheries Office conducting the survey. Based on the FN2 designation of xxx_SSyy_zzzzzzzzzz; where xxx is the Fisheries Office, SS is the survey type; yy is the survey year and zzzzzzzzzz is a user-defined identification. The FN3 Data Dictionary provides a list of permissible values for Fisheries Office and survey type. Example: The code for an index netting project on Rice Lake that was carried out by the Kawartha Lakes FAU in 2002 is: KLA_IA02_RI6 Example: The code for a broad-scale monitoring netting project on Alder Lake in 2008 is Z15_BS08_Alder00

OSAP_SITE_CODE	VARCHAR2(8)	No	SITE_CODE
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A unique user defined code assigned to a sampling site on a stream in accordance with site naming conventions as listed in the OSAP (Ontario Stream Assessment Protocol) 2007. The OSAP site code must be unique and cannot exceed eight digits and can be a combination of letters and numbers. It is recommended that site codes use abbreviations that best describe the location of the site. For example, a site on Wilmot Creek, downstream of the 3rd Concession, could be "3CDW".

OSAP_STREAM_CODE	VARCHAR2(25)	No	STREAM_COD
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The "Stream Code" allows differentiation between streams with similar names (i.e., Trout Creek). The "Stream Code" may be recorded in HabProgs (database that holds the OSAP data). Make sure that the correct Stream has been retrieved by checking the descriptive fields for the stream, otherwise data may end up attached to the wrong "Trout Creek". If the stream being surveyed is not in HabProgs, contact the database manager to obtain an appropriate "Stream Code".

SCIENTIFIC_COLLECTOR_LIC_NUM	VARCHAR2(10)	No	LIC_NUM
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The license number assigned to the License to Collect Fish for Scientific Purposes under the Fish and Wildlife Conservation Act (FWCA). It is a 7 digit computer generated number assigned from the Electronic License Information System (ELIS). Prior to ELIS it was typically an 8 digit character field with the first 2 digits alpha and the remaining 6

digits were numeric and defined by the user.

SCIENTIFIC_COLLECTOR_REP_NUM	VARCHAR2(10)	No	REP_NUM
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Multiple waterbodies and sites within these waterbodies may be surveyed. A scientific collectors report is required for each collection site within a waterbody and is recorded on the report.

GEOG_UNIT_DESCR	VARCHAR2 (2000)	No	GUNT_DES
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Detailed description of the Geographic Unit.

SENSITIVITY_CLASS	VARCHAR2(15)	Yes	SENS_CLASS
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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
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The date that the sensitivity classification was established.

SENSITIVITY_RATIONALE	VARCHAR2(50)	Yes	SENS_RAT
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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
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Description of the reason(s) for the information classification when "Other" is selected as the rationale.

VERIFICATION_STATUS_FLG	VARCHAR2(10)	No	VERISTT_FL
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An indication as to whether a qualified employee has verified the existence of the geographic unit.

VERIFICATION_STATUS_DATE	DATE	No	VERISTT_DT
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Date that the geographic unit was verified/validated.

BUSINESS_EFF_DATE_FLG	VARCHAR2(10)	No	BUSEFFDTFL
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Indication of whether the business effective date is an actual or estimated value.

BUSINESS_EFFECTIVE_DATE	DATE	No	BUS_EFF_DT
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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
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A date indicating when the record was determined to be invalid.

GENERAL_COMMENTS	VARCHAR2 (2000)	No	GNL_CMT
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General comments.

GEOMETRY_UPDATE_DATETIME	DATE	No	GEO_UPD_DT
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Date/time the geometry was created or last modified in the source database.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

Geometry attribute.

ARA_MASTER_FISH_LIST

Look up table for list of fish species in Ontario.

Column Name	Column Type	Mandatory	Short Name	Valid Values
COMMON_NAME	VARCHAR2 (75)	Yes	COMMON_NAM	
The common name of a fish species according to the MNR Master Fish Species Code Numbers and Names List.				
COMMON_NAME_FR	VARCHAR2 (75)	No	COM_NAME_F	
The French equivalent of the (English) Common Name e.g. "truite brune" for "Brown Trout".				
COMMON_NAME_FR_DEF	VARCHAR2 (75)	No	COM_NM_FRD	
French common names prefixed by its definite article (le, la etc.) e.g. "carpe noire" (Black Carp) becomes "la carpe noire".				
SCIENTIFIC_NAME	VARCHAR2 (100)	Yes	SCIENTIFIC	
The scientific name of a fish species according to the MNR Master Fish Species Code Numbers and Names List.				
TAXON_GROUP_LOWER	VARCHAR2 (75)	Yes	TX_GRP_LWR	
The lower taxonomic grouping of a species to differentiate crustaceans, bivalves, gastropods, ray-finned fishes, lampreys etc. Values are used for survey data filtering purposes.				
MNR_FISH_CODE	NUMBER (4,0)	No	FISH_CODE	
The code number of a fish species according to the OMNR Master Fish Species Code Numbers and Names List.				
SPECIES_ELEMENT_ID	NUMBER (13,0)	No	ELEMENT_ID	
A business value that uniquely identifies a specific species, or an assemblage of species such as vegetation communities and wildlife concentration areas according to a recognized standard within Natural Heritage Information Centre (NHIC) databases.				
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.				

ARA_SURVEYOR_AGENCY_LIST

Look up table of agencies that could conduct a survey.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SURVEYOR_AGENCY	VARCHAR2 (50)	Yes	AGENCY	

The agency or organization who performed the survey, including government, partner agencies, non-government, academic, individuals, tourist operators etc. and/or the position of the person from the organization. Individual names should not be captured here.

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.

ARA_SURVEY_METHOD_LIST

Look up table for aquatic resource area survey methods.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SURVEY_METHOD	VARCHAR2 (75)	Yes	METHOD	
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The name of the survey (e.g. Aquatic Habitat Inventory) or survey method used (e.g. Fall Walleye Index Netting, Ontario Stream Assessment Protocol) to collect the data for the aquatic resource area. This attribute should be populated for survey points to indicate the type of work conducted to obtain the information used to create the aquatic resource area. Angling - Non Standard Survey Broadcast Netting - Non Standard Survey BSM - Broad-scale Monitoring BTIN - Brook Trout Index Gill Netting Standard Survey Creel - Non Standard Survey Dip Nets - Non Standard Survey Eel Pots - Non Standard Survey Electrofishing - Non Standard Survey ESTN - End of Spring Trap Netting Standard Survey Fish Ladder - Non Standard Survey FWIN - Fall Walleye Index Gill Netting Standard Survey Fyke Net - Non Standard Survey Gillnet - Non Standard Survey Minnow Trap - Non Standard Survey Mixed gear - Combination of gears - Non Standard Survey NORDIC - Nordic Index Gill Netting Standard Survey NSCIN - Near-shore Community Index Netting Standard Survey Observed - Anecdotal record from trusted source - Non Standard Survey OSAP - Ontario Stream Assessment Protocol Electrofishing Standard Survey Other - Non Standard Survey RIN - Riverine Index Gill Netting Standard Survey Seine - Non Standard Survey SLIN - Spring Littoral Index Gill Netting Standard Survey SPIN - Summer Profundal Index Gill Netting Standard Survey Trap net - Non Standard Survey Trawl - Non Standard Survey Unknown - Unknown

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.

ARA_SURVEY_SPECIES

Information related to each fish species associated with each survey. It is also used to generate the "Fish Species Summary" attribute in the ARA Survey Point table.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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ARA_SURVEY_POINT_ID	NUMBER (13,0)	Yes	SURVEY_ID	
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A unique number for each aquatic resource area. System Generated.

COMMON_NAME	VARCHAR2 (75)	Yes	COM_NAME	'Abbreviate Pondsnail', 'Alewife', 'Alosa sp.', 'Alpine Peaclam', 'Amazon Sailfin Catfish', 'Ameiurus sp.', ... (See ARA_MASTER_FISH_LIST table)
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The common name of a fish species according to the MNR Master Fish Species Code Numbers and Names List.

VERIFICATION_STATUS	VARCHAR2	No	VER_STATUS	'Verified', 'Unverified'
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An indication as to whether a qualified individual has verified the existence of the species.

VERIFICATION_SOURCE	VARCHAR2 (35)	No	VER_SOURCE	'Conservation Authority', 'Consulting Company', 'Department of Fisheries and Oceans', 'Ministry of Natural Resources', 'Other', 'Royal Ontario Museum', ... (See ARA_VERIFICATION_SOURCE_LIST table)
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The agency or organization that verified the fish species record. Possible entries: Royal Ontario Museum Department of Fisheries and Oceans Conservation Authority Ministry of Natural Resources Consulting Company University Unknown Other

VERIFICATION_SRCE_OTHER_DESCR	VARCHAR2 (50)	No	VER_SRCE_O
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This attribute is filled in here if the option "Other" was selected from the "Species Verification Source" attribute. The description should state the organization that verified the fish species.

VERIFIER_QUALIFICATIONS	VARCHAR2 (30)	No	VER_QUAL	'Biologist or Technician', 'Conservation Officer', 'Local Angler or Naturalist', 'Other', 'Taxonomist' (See ARA_VERIFIER_QUALIF_LIST table)
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The qualifications of the individual who identified the fish species.

VERIFIER_QUALIF_OTHER_DESCR	VARCHAR2 (50)	No	VER_QUAL_O
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Description of the qualifications of the person who verified the existence of the species. This attribute is filled in if the option "Other" was selected from the "Species Verifier Qualifications" attribute.

COMMENTS	VARCHAR2 (2000)	No	COMMENTS
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Unstructured description, additional notes, or further explanation.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

ARA_VERIFICATION_SOURCE_LIST

Look up table listing organizations that could verify the presence of a species.

Column Name	Column Type	Mandatory	Short Name	Valid Values
VERIFICATION_SOURCE	VARCHAR2 (35)	Yes	VER_SOURCE	

The agency or organization that verified the fish species record. Possible entries: Royal Ontario Museum Department of Fisheries and Oceans Conservation Authority Ministry of Natural Resources Consulting Company University Unknown Other

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE
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Date/time that the record was expired from use.

ARA_VERIFIER_QUALIF_LIST

Look up table listing qualifications of individuals that could verify presence of a species.

Column Name	Column Type	Mandatory	Short Name	Valid Values
VERIFIER_QUALIFICATIONS	VARCHAR2 (30)	Yes	VER_QUAL	
The qualifications of the individual who identified the fish species. Options Include: Taxonomist , Biologist or Technician, Conservation Officer, Local Angler or Naturalist, Other				
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.				

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
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OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
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A unique numeric provincial identifier assigned to each object.

PARTY_IDENT	VARCHAR2 (25)	Yes	PARTY_ID	
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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	
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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)
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The role that an organization or an individual plays.

CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
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System-generated column denoting the concrete class which this record is part of.

ROLE_DETAIL	VARCHAR2 (200)	No	DETAIL	
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Additional details about the role.

START_DATE	DATE	No	START_DATE	
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The date when a Party starts to play a Role.

END_DATE	DATE	No	END_DATE	
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The date when a Party ceases to play a Role.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
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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
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OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
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A unique numeric provincial identifier assigned to each object.

SOURCE_NAME	VARCHAR2	Yes	SOURCE_NAM	'AFFM Provincial
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The name of the source.

SOURCE_DETAIL	VARCHAR2 (254)	Yes	SOURCE_DET
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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
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Unique abbreviation of the concrete class name (primary key)

SOURCE_DESCR	VARCHAR2 (2000)	No	SOURCE_DES
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Text providing details about the source.

METHOD_DESCR	VARCHAR2 (2000)	No	METHOD
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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
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How the source contributes to the feature's definition.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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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
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OGF_ID	NUMBER (13,0)	Yes	OGF_ID
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A unique numeric provincial identifier assigned to each object.

MATERIAL_NAME	VARCHAR2 (200)	Yes	NAME
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A name or brief description of the material.

MATERIAL_LOCATION	VARCHAR2 (200)	Yes	LOCATION
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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 (8)	Yes	CLASS_NAME
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System-generated column denoting the concrete class which this record is part of.

URL_ENG	VARCHAR2 (500)	No	URL_ENG
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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
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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
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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
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EXT_REF_TYPE_CODE	VARCHAR2 (8)	Yes	EXT_REF_TY	
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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	
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Description of the type of external reference.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
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Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	
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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
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ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	
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The role that an organization or an individual plays.

ROLE_TYPE_DESCR	VARCHAR2 (2000)	Yes	DESCR	
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Description of Role Type.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
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Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	
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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. It may be an observation, possibly resulting from a field survey or an ad hoc 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:
ARA_MASTER_FISH_LIST

COMMON NAME	COMMON NAME FR	COMMON NAME FR DEF	SCIENTIFIC NAME	TAXON GROUP LOWER	MNR FISH CODE	SPECIES ELEMENT ID	EXPIRY DATETIME
Abbreviate Pondsnaill			Stagnicola apicina	gastropods		188533	
Alewife	gaspureau	le gaspureau	Alosa pseudoharengus	ray-finned fishes	61	180517	
Alosa sp.	Alosa espèce		Alosa sp.	ray-finned fishes	64		
Alpine Peaclam			Pisidium conventus	bivalves		181439	
Amazon Sailfin Catfish	plecostoma del Amazonas	le plecostoma del Amazonas	Pterygoplichthys pardalis	ray-finned fishes	472		
Ameiurus sp.	Ameiurus espèce		Ameiurus sp.	ray-finned fishes	243		
American Brook Lamprey	lamproie de l'est	le lamproie de l'est	Lethenteron appendix	lampreys	11	180501	
American Eel	anguille d'Amérique	l'anguille d'Amérique	Anguilla rostrata	ray-finned fishes	251	180516	
American Shad	alose savoureuse	l'alose savoureuse	Alosa sapidissima	ray-finned fishes	62	180518	
Appalachian Brook crayfish			Cambarus bartonii	crustaceans		180789	
Arctic Char	omble chevalier	l'omble chevalier	Salvelinus alpinus	ray-finned fishes	79	180540	
Arctic Fingernailclam			Sphaerium nitidum	bivalves		181460	
Arctic Grayling	ombre arctique	l'ombre arctique	Thymallus arcticus	ray-finned fishes	111	180543	
Arctic Pondsnaill			Stagnicola arctica	gastropods		181611	
Ash Gyro			Gyraulus parvus	gastropods		181622	
Asian Clam			Corbicula fluminea	bivalves		1010792	
Atlantic Salmon x Brown Trout	truite brune x saumon Atlantique		Salmo trutta x Salmo salar	ray-finned fishes	421		
Atlantic Salmon	saumon Atlantique	le saumon Atlantique	Salmo salar	ray-finned fishes	77	17083	
Aurora Trout	omble de fontaine aurora	l'omble de fontaine aurora	Salvelinus fontinalis timagamiensis	ray-finned fishes	83	182557	
Baitfish	poisson appât	les poisson appât	Baitfish	ray-finned fishes	997		
Banded Killifish	fondule barré	le fondule	Fundulus diaphanus	ray-finned	261	180616	

		barré		fishes			
Banded Mysterysnail			Viviparus georgianus	gastropods		181590	
Banded Physa			Physella vinosa	gastropods		188550	
Big-eared Radix			Radix auricularia	gastropods		16780	
Bighead Carp	carpe à grosse tête	la carpe à grosse tête	Hypophthalmichthys nobilis	ray-finned fishes	632		
Bigmouth Buffalo	buffalo à grande bouche	le buffalo à grande bouche	Ictiobus cyprinellus	ray-finned fishes	166	180595	
Black Buffalo	buffalo noir	le buffalo noir	Ictiobus niger	ray-finned fishes	174	180596	
Black Bullhead x Brown Bullhead	barbotte noire x barbotte brune		Ameiurus melas x Ameiurus nebulosus	ray-finned fishes	651		
Black Bullhead	barbotte noire	la barbotte noire	Ameiurus melas	ray-finned fishes	231	180611	
Black Carp	carpe noire	la carpe noire	Mylopharyngodon piceus	ray-finned fishes	633		
Black Crappie	marigane noire	la marigane noire	Pomoxis nigromaculatus	ray-finned fishes	319	180637	
Black Redhorse	chevalier noir	le chevalier noir	Moxostoma duquesnei	ray-finned fishes	169	180600	
Black Sandshell			Ligumia recta	bivalves		181415	
Blackchin Shiner	menton noir	le menton noir	Notropis heterodon	ray-finned fishes	199	180566	
Blackfin Cisco	cisco à nageoires noires	le cisco à nageoires noires	Coregonus nigripinnis	ray-finned fishes	97	180527	
Blacknose Dace x Creek Chub	naseux noir x mulet à cornes		Rhinichthys atratulus x Semotilus atromaculatus	ray-finned fishes	621		
Blacknose Dace	naseux noir	le naseux noir	Rhinichthys atratulus	ray-finned fishes	210	180577	
Blacknose Shiner	museau noir	le museau noir	Notropis heterolepis	ray-finned fishes	200	180567	
Blackside Darter	dard noir	le dard noir	Percina maculata	ray-finned fishes	344	180649	
Blackstripe Topminnow	fondule rayé noir	le fondule rayé noir	Fundulus notatus	ray-finned fishes	262	180617	
Bloater	cisco de fumage	le cisco de fumage	Coregonus hoyi	ray-finned fishes	94	180524	
Blueback Herring	alose d'été	l'alose d'été	Alosa aestivalis	ray-finned fishes	65		
Bluegill	crapet arlequin	le crapet arlequin	Lepomis macrochirus	ray-finned fishes	314	180632	
Bluntnose	ventre-pourri	le ventre-	Pimephales notatus	ray-finned	208	180575	

Minnow		pourri		fishes			
Boreal Fossaria			Galba galbana	gastropods		181606	
Boreal Marstonia			Marstonia lustrica	gastropods		181596	
Bowfin	poisson-castor	le poisson-castor	Amia calva	ray-finned fishes	51	180515	
Bowfins	poissons-castors	les poissons-castors	AMIIDAE	ray-finned fishes	50		
Brassy Minnow	méné laiton	le méné laiton	Hybognathus hankinsoni	ray-finned fishes	189	180557	
Bridle Shiner	méné d'herbe	le méné d'herbe	Notropis bifrenatus	ray-finned fishes	197	180564	
Brindled Madtom	chat-fou tacheté	le chat-fou tacheté	Noturus miurus	ray-finned fishes	237	180608	
Brook Silverside	crayon d'argent	le crayon d'argent	Labidesthes sicculus	ray-finned fishes	361	180620	
Brook Stickleback	épinoche à cinq épines	l'épinoche à cinq épines	Culaea inconstans	ray-finned fishes	281	180622	
Brook Trout	omble de fontaine	l'omble de fontaine	Salvelinus fontinalis	ray-finned fishes	80	180541	
Brown Bullhead	barbotte brune	la barbotte brune	Ameiurus nebulosus	ray-finned fishes	233	180613	
Brown Trout	truite brune	la truite brune	Salmo trutta	ray-finned fishes	78	180539	
Buffalo Pebblesnail			Gillia altilis	gastropods		1007348	
Bugle Sprite			Micromenetus dilatatus	gastropods		1004391	
Burbot	lotte	la lotte	Lota lota	ray-finned fishes	271	180615	
CATOSTOMIDAE hybrids	catostome hybrides		CATOSTOMIDAE hybrids	ray-finned fishes	550		
CENTRARCHIDAE hybrids	crapet hybrides		CENTRARCHIDAE hybrids	ray-finned fishes	700		
COREGONINAE hybrids	corégone hybrides		COREGONINAE hybrids	ray-finned fishes	450		
COTTIDAE hybrids	chabot hybrides		COTTIDAE hybrids	ray-finned fishes	800		
CYPRINIDAE hybrids	cyprins hybrides		CYPRINIDAE hybrids	ray-finned fishes	600		
Calabash Pondsnaill			Stagnicola walkariana	gastropods		188540	
Canadian Dusksynail			Lyogyrus walkeri	gastropods		181593	
Capacious Manitoba Ramshorn			Planorbella corpulenta corpulenta	gastropods		181629	

Carps and Minnows	carpes et cyprins	les carpes et cyprins	CYPRINIDAE	ray-finned fishes	180		
Catostomus sp.	Catostomus espèce		Catostomus sp.	ray-finned fishes	176		
Central Mudminnow	umbre de vase	l'umbre de vase	Umbra limi	ray-finned fishes	141	180546	
Central Stoneroller	roule-caillou	le roule-caillou	Campostoma anomalum	ray-finned fishes	216	180550	
Chain Pickerel	brochet maillé	le brochet maillé	Esox niger	ray-finned fishes	135	1004422	
Channel Catfish	barbue de rivière	la barbue de rivière	Ictalurus punctatus	ray-finned fishes	234	180604	
Channel Darter	fouille-roche gris	Fouille-roche gris	Percina copelandi	ray-finned fishes	343	180648	
Characins	characidés	les characidés	CHARACIDAE	ray-finned fishes	460		
Chestnut Lamprey	lamproie brune	le lamproie brune	Ichthyomyzon castaneus	lampreys	16	201323	
Chinese Mysterysnail			Cipangopaludina chinensis	gastropods		181589	
Chinook Salmon	saumon chinook	le saumon chinook	Oncorhynchus tshawytscha	ray-finned fishes	75	180534	
Chrosomus hybrids	Chrosomus hybrides		Chrosomus hybrids	ray-finned fishes	602		
Chrosomus sp.	Chrosomus espèce		Chrosomus sp.	ray-finned fishes	221		
Chub	chevaine	le chevaine	Coregonus sp. (Cisco species other than C. artedi)	ray-finned fishes	103		
Chum Salmon	saumon kéta	le saumon kéta	Oncorhynchus keta	ray-finned fishes	72	180531	
Cichlids	les cichlidés	les cichlidés	CICHLIDAE	ray-finned fishes	480		
Cisco	cisco de lac	le cisco de lac	Coregonus artedi	ray-finned fishes	93	180522	
Cods	morues	les morues	GADIDAE	ray-finned fishes	270		
Coho Salmon x Chinook Salmon	saumon coho x saumon chinook		Oncorhynchus kisutch x Oncorhynchus tshawytscha	ray-finned fishes	423		
Coho Salmon	saumon coho	le saumon coho	Oncorhynchus kisutch	ray-finned fishes	73	180532	
Coldwater Pondsnaill			Stagnicola woodruffi	gastropods		188541	
Common Carp	carpe	la carpe	Cyprinus carpio	ray-finned fishes	186	180555	
Common Shiner x Brassy	méné à nageoires		Luxilus cornutus x Hybognathus	ray-finned fishes	615		

Minnow	rouges x méné laiton		hankinsoni				
Common Shiner x Creek Chub	méné à nageoires rouges x mullet à cornes		Luxilus cornutus x Semotilus atromaculatus	ray-finned fishes	612		
Common Shiner x Longnose Dace	méné à nageoires rouges x naseux des rapides		Luxilus cornutus x Rhinichthys cataractae	ray-finned fishes	613		
Common Shiner x River Chub	méné à nageoires rouges x méné baton		Luxilus cornutus x Nocomis micropogon	ray-finned fishes	614		
Common Shiner x Rosyface Shiner	méné à nageoires rouges x tête rose		Luxilus cornutus x Notropis rubellus	ray-finned fishes	611		
Common Shiner	méné à nageoires rouges	le méné à nageoires rouges	Luxilus cornutus	ray-finned fishes	198	180585	
Coregonus sp.	Coregonus espèce		Coregonus sp.	ray-finned fishes	106		
Corpulent Rams- horn			Planorbella corpulenta	gastropods		181628	
Cottus sp.	Cottus espèce		Cottus sp.	ray-finned fishes	385		
Creek Chub x Redside Dace	mulet à cornes x méné long		Semotilus atromaculatus x Clinostomus elongatus	ray-finned fishes	624		
Creek Chub	mulet à cornes	le mullet à cornes	Semotilus atromaculatus	ray-finned fishes	212	180580	
Creek Heelsplitter			Lasmigona compressa	bivalves		181411	
Creeper			Strophitus undulatus	bivalves		181425	
Creeping Ancyliid			Ferrissia rivularis	gastropods		181634	
Cutlip Minnow	bec-de-lièvre	le bec-de- lièvre	Exoglossum maxillingua	ray-finned fishes	188	180556	
Cylindrical Papershell			Anodontoides ferussacianus	bivalves		181396	
Deepwater Sculpin	chabot de profondeur	le chabot de profondeur	Myoxocephalus thompsonii	ray-finned fishes	384	180507	
Deertoe			Truncilla truncata	bivalves		181428	
Delta Hydrobe			Probythinella emarginata	gastropods		181597	
Devil crayfish			Cambarus diogenes	crustaceans		180788	
Digger crayfish			Fallicambarus	crustaceans		180795	

			fodiens				
Disc Gyro			Gyraulus circumstriatus	gastropods		181619	
Drums	tambours	les tambours	SCIAENIDAE	ray-finned fishes	370		
Dusky Ancyloid			Laevapex fuscus	gastropods		181635	
Dusky Fossaria			Galba dalli	gastropods		181604	
ESOCIDAE hybrids	brochet hybrides		ESOCIDAE hybrids	ray-finned fishes	500		
Eastern Elliptio			Elliptio complanata	bivalves		181398	
Eastern Floater			Pyganodon cataracta	bivalves		181464	
Eastern Lampmussel			Lampsilis radiata radiata	bivalves		181407	
Eastern Pondmussel			Ligumia nasuta	bivalves		181414	
Eastern Sand Darter	dard de sable	le dard de sable	Ammocrypta pellucida	ray-finned fishes	335	180645	
Eastern Silvery Minnow	méné d'argent	le méné d'argent	Hybognathus regius	ray-finned fishes	190	180558	
Elephantear			Elliptio crassidens	bivalves		220543	
Elktoe			Alasmidonta marginata	bivalves		181391	
Emerald Shiner	méné émeraude	le méné émeraude	Notropis atherinoides	ray-finned fishes	196	180563	
Esox sp.	Esox espèce	Esox espèce	Esox sp.	ray-finned fishes	134		
Etheostoma sp.	Etheostoma espèce		Etheostoma sp.	ray-finned fishes	348		
European Fingernailclam			Sphaerium corneum	bivalves		181458	
European Flounder	plie d'Europe	le plie d'Europe	Platichthys flesus	ray-finned fishes	396	185398	
European Stream Valvata			Valvata piscinalis	gastropods		181584	
Fallfish	ouitouche	l'ouitouche	Semotilus corporalis	ray-finned fishes	213	180581	
Fantail Darter	dard barré	le dard barré	Etheostoma flabellare	ray-finned fishes	339	180641	
Fat Peaclam			Pisidium rotundatum	bivalves		181452	
Fathead Minnow x Bluntnose Minnow	tête-de-boule x ventre-pourri		Pimephales promelas x Pimephales notatus	ray-finned fishes	620		
Fathead Minnow	tête-de-boule	le tête-de-boule	Pimephales promelas	ray-finned fishes	209	180576	
Fatmucket			Lampsilis	bivalves		181409	

			siliquoidea				
Fawnsfoot			Truncilla donaciformis	bivalves		181427	
File Rams-horn			Planorbella pilsbryi	gastropods		188558	
Finescale Dace x Northern Pearl Dace	ventre citron x mulet perlé du nord		Chrosomus neogaeus x Margariscus nachtriebi	ray-finned fishes	605		
Finescale Dace	ventre citron	le ventre citron	Chrosomus neogaeus	ray-finned fishes	183	180574	
Flathead Catfish	barbue à tête plate	la barbue à tête plate	Pylodictis olivaris	ray-finned fishes	239	180610	
Flexed Gyro			Gyraulus deflectus	gastropods		181621	
Florida Gar	lépisosté de Floride	le lépisosté de Floride	Lepisosteus platyrhinchus	ray-finned fishes	44	180514	
Flutedshell			Lasmigona costata	bivalves		181412	
Fossaria rustica			Galba rustica	gastropods		188528	
Fourhorn Sculpin	chaboisseau à quatre cornes	le chaboisseau à quatre cornes	Myoxocephalus quadricornis	ray-finned fishes	387	180506	
Fourspine Stickleback	épinoche à quatre épines	l'épinoche à quatre épines	Apeltes quadracus	ray-finned fishes	284	180621	
Fragile Ancyloid			Ferrissia fragilis	gastropods		181632	
Fragile Papershell			Leptodea fragilis	bivalves		181413	
Freshwater Drum	malachigan	le malachigan	Aplodinotus grunniens	ray-finned fishes	371	180655	
Freshwater Eels	anguilles	les anguilles	ANGUILLIDAE	ray-finned fishes	250		
Freshwater Tubenose Goby	gobie à nez tubulaire	la gobie à nez tubulaire	Proterorhinus marmoratus	ray-finned fishes	367	185397	
Fringed Valvata			Valvata lewisi	gastropods		188575	
Gars	lépisostés	les lépisostés	LEPISOSTEIDAE	ray-finned fishes	40		
Gatineau Tadpole Snail			Physa gyrina lachfordi	gastropods		200204	
Ghost Shiner	méné fantôme	le méné fantôme	Notropis buchanani	ray-finned fishes	218	180565	
Giant Floater			Pyganodon grandis	bivalves		181465	
Giant Northern Peaclam			Pisidium idahoense	bivalves		181446	
Gizzard Shad	alose à gésier	l'alose à gésier	Dorosoma cepedianum	ray-finned fishes	63	180519	
Glass Physa			Physa skinneri	gastropods		188543	

Globe Siltsnail			Birgella subglobosus	gastropods		181594	
Globular Peaclam			Pisidium ventricosum	bivalves		181456	
Gobies	gobies	les gobies	GOBIIDAE	ray-finned fishes	365		
Golden Redhorse	suceur doré	le suceur doré	Moxostoma erythrurum	ray-finned fishes	170	180601	
Golden Shiner	méné jaune	le méné jaune	Notemigonus crysoleucas	ray-finned fishes	194	180561	
Goldeye	laquaiche aux yeux d'or	la laquaiche aux yeux d'or	Hiodon alosoides	ray-finned fishes	151	180520	
Goldfish x Carp	carassin x carpe		Carassius auratus x Cyprinus carpio	ray-finned fishes	601		
Goldfish	carassin	le carassin	Carassius auratus	ray-finned fishes	181	180551	
Graceful Fossaria			Galba exigua	gastropods		181605	
Grass Carp	carpe de roseau	la carpe de roseau	Ctenopharyngodon idella	ray-finned fishes	219	180554	
Grass Pickerel	brochet vermiculé	le brochet vermiculé	Esox americanus vermiculatus	ray-finned fishes	133	17293	
Gravel Pyrg			Marstonia letsoni	gastropods		194235	
Grayling subfamily	sous-famille des ombres	sous-famille des ombres	THYMALLINAE	ray-finned fishes	110		
Greater Redhorse	chevalier jaune	le chevalier jaune	Moxostoma valenciennesi	ray-finned fishes	172	180603	
Green Sunfish x Bluegill	crapet vert x crapet arlequin		Lepomis cyanellus x Lepomis macrochirus	ray-finned fishes	705		
Green Sunfish x Northern Sunfish	crapet vert x crapet à longues oreilles		Lepomis cyanellus x Lepomis peltastes	ray-finned fishes	704		
Green Sunfish x Pumpkinseed	crapet vert x crapet-soleil		Lepomis cyanellus x Lepomis gibbosus	ray-finned fishes	703		
Green Sunfish	crapet vert	le crapet vert	Lepomis cyanellus	ray-finned fishes	312	180628	
Greenside Darter	dard vert	le dard vert	Etheostoma blennioides	ray-finned fishes	336	180638	
Grooved Fingernailclam			Sphaerium simile	bivalves		181462	
Henslow Peaclam			Pisidium henslowanum	bivalves		181445	
Herrings	harengs	les harengs	CLUPEIDAE	ray-finned fishes	60		
Herrington Fingernailclam			Sphaerium occidentale	bivalves		181461	

Hickorynut			Obovaria olivaria	bivalves		181417	
Hornyhead Chub	tête à taches rouges	le tête à taches rouges	Nocomis biguttatus	ray-finned fishes	192	180559	
Humpbacked Peaclam			Pisidium supinum	bivalves		181454	
Hybognathus sp.	Hybognathus espèce		Hybognathus sp.	ray-finned fishes	222		
Ichthyomyzon sp.	Ichthyomyzon espèce		Ichthyomyzon sp.	ray-finned fishes	15	1005285	
Ictiobus hybrids	Ictiobus hybrides		Ictiobus hybrids	ray-finned fishes	551		
Ictiobus sp.	Ictiobus espèce		Ictiobus sp.	ray-finned fishes	178		
Iowa Darter	dard à ventre jaune	le dard à ventre jaune	Etheostoma exile	ray-finned fishes	338	180640	
Jaguar Guapote			Cichlasoma managuense	ray-finned fishes	482	180657	
Johnny Darter x Tesselated Darter	raseux-de-terre noir 'x raseux-de-terre gris		Etheostoma nigrum/Etheostoma olmsted	ray-finned fishes	351		
Johnny Darter	raseux-de-terre noir	le raseux-de-terre noir	Etheostoma nigrum	ray-finned fishes	341	180643	
Kidneyshell			Ptychobranchus fasciolaris	bivalves		181421	
Kiyi	cisco kiyi	le cisco kiyi	Coregonus kiyi	ray-finned fishes	96	180526	
Lake Chub	méné de lac	le méné de lac	Couesius plumbeus	ray-finned fishes	185	180553	
Lake Chubsucker	sucet de lac	le sucet de lac	Erimyzon sucetta	ray-finned fishes	164	180593	
Lake Fingernailclam			Musculium lacustre	bivalves		181431	
Lake Sturgeon	esturgeon jaune	l'esturgeon jaune	Acipenser fulvescens	ray-finned fishes	31	180510	
Lake Superior Ramshorn			Helisoma anceps royalense	gastropods		181624	
Lake Trout	touladi	le touladi	Salvelinus namaycush	ray-finned fishes	81	180542	
Lake Whitefish x Cisco	grand corégone x cisco de lac		Coregonus clupeaformis x Coregonus artedi	ray-finned fishes	451		
Lake Whitefish	grand corégone	le grand corégone	Coregonus clupeaformis	ray-finned fishes	91	180523	
Lampreys	lamproies	les lamproies	PETROMYZONTIDAE	lampreys	10		

Lance Aplexa			Aplexa elongata	gastropods		181615	
Largemouth Bass	achigan à grande bouche	l'achigan à grande bouche	Micropterus salmoides	ray-finned fishes	317	180635	
Least Darter	petit dard	le petit dard	Etheostoma microperca	ray-finned fishes	340	180642	
Lepisosteus sp.	Lepisosteus espèce		Lepisosteus sp.	ray-finned fishes	43		
Lepomis hybrids	Lepomis hybrides		Lepomis hybrids	ray-finned fishes	701		
Lepomis sp.	Lepomis espèce		Lepomis sp.	ray-finned fishes	320		
Lilliput			Toxolasma parvum	bivalves		181426	
Liver Elimia			Elimia livescens	gastropods		181599	
Logperch x Blackside Darter	fouille-roche zébré x dard noir		Percina caprodes x Percina maculata	ray-finned fishes	753		
Logperch x Channel Darter	fouille-roche zébré x barbue de rivière		Percina caprodes x Percina copelandi	ray-finned fishes	752		
Logperch	fouille-roche zébré	le fouille-roche zébré	Percina caprodes	ray-finned fishes	342	180647	
Long Fingernailclam			Musculium transversum	bivalves		181434	
Longnose Dace x Lake Chub	naseux des rapides x méné de lac		Rhinichthys cataractae x Couesius plumbeus	ray-finned fishes	623		
Longnose Dace x River Chub	naseux des rapides x méné baton		Rhinichthys cataractae x Nocomis micropogon	ray-finned fishes	622		
Longnose Dace	naseux des rapides	le naseux des rapides	Rhinichthys cataractae	ray-finned fishes	211	180578	
Longnose Gar	lépisosté osseux	le lépisosté osseux	Lepisosteus osseus	ray-finned fishes	41	180513	
Longnose Sucker	meunier rouge	le meunier rouge	Catostomus catostomus	ray-finned fishes	162	180591	
Loosely Coiled Valve-snail			Valvata sincera	gastropods		181585	
Low-spined Ramshorn			Planorbella campanulata collinsi	gastropods		181627	
Lumpfish	grosse poule de mer	le grosse poule de mer	Cyclopterus lumpus	ray-finned fishes	391	16905	
Lumpfishes and Snailfishes	poules de mer	les poules de mer	CYCLOPTERIDAE	ray-finned fishes	390		
Luxilus sp.	Luxilus espèce		Luxilus sp.	ray-finned fishes	229		

MORONIDAE hybrids	bars hybrides		MORONIDAE hybrids	ray-finned fishes	690		
Mammoth Lymnaea			Bulimnaea megasoma	gastropods		181603	
Mapleleaf			Quadrula quadrula	bivalves		181423	
Margined Madtom	chat-fou liséré	le chat-fou liséré	Noturus insignis	ray-finned fishes	238	180607	
Marsh Pondsnail			Stagnicola elodes	gastropods		181614	
Marsh Rams-horn			Planorbella trivolvis	gastropods		188559	
Meadow Rams-horn			Planorbula campestris	gastropods		194217	
Micropterus sp.	Micropterus espèce		Micropterus sp.	ray-finned fishes	321		
Midland Siltsnail			Cincinnatia integra	gastropods		181595	
Mimic Lymnaea			Pseudosuccinea columella	gastropods		181610	
Mimic Shiner	méné pâle	le méné pâle	Notropis volucellus	ray-finned fishes	206	180572	
Mooneye	laquaiche argentée	la laquaiche argentée	Hiodon tergisus	ray-finned fishes	152	180521	
Mooneyes	laquaiches	les laquaiches	HIODONTIDAE	ray-finned fishes	150		
Morone hybrids	Morone hybrides		Morone hybrids	ray-finned fishes	691		
Morone sp.	Morone espèce		Morone sp.	ray-finned fishes	303		
Mottled Sculpin x Slimy Sculpin	chabot tacheté x chabot visqueux		Cottus bairdii x Cottus cognatus	ray-finned fishes	801		
Mottled Sculpin	chabot tacheté	le chabot tacheté	Cottus bairdii	ray-finned fishes	381	180503	
Moxostoma sp.	Moxostoma espèce		Moxostoma sp.	ray-finned fishes	177		
Mucket			Actinonaias ligamentina	bivalves		181390	
Mud Amnicola			Amnicola limosa	gastropods		181592	
Mud Bithynia			Bithynia tentaculata	gastropods		181591	
Muskellunge	maskinongé	le maskinongé	Esox masquinongy	ray-finned fishes	132	180549	
Myoxocephalus sp.	Myoxocephalus espèce		Myoxocephalus sp.	ray-finned fishes	386		
New World Silversides	poissons d'argent	les poissons d'argent	ATHERINOPSIDAE	ray-finned fishes	360		
New Zealand Mudsnaill			Potamopyrgus antipodarum	gastropods		200812	
Ninespine	épinoche à	l'épinoche à	Pungitius pungitius	ray-finned	283	180624	

Stickleback	neuf épines	neuf épines		fishes			
Nipigon Cisco	cisco	le cisco	Coregonus nipigon	ray-finned fishes	98	17079	
Nocomis sp.	Nocomis espèce		Nocomis sp.	ray-finned fishes	223		
North American Catfish hybrids	barbottes et barbues hybrides		North American Catfish hybrids	ray-finned fishes	650		
North American Catfishes	barbottes et barbues	les barbottes et barbues	ICTALURIDAE	ray-finned fishes	230		

* Not a complete list.

LIO Lookup Table Values:

ARA_SURVEYOR_AGENCY_LIST

SURVEYOR AGENCY	EXPIRY DATETIME
Ausable Bayfield Conservation Authority	
Cataraqui Region Conservation Authority	
Catfish Creek Conservation Authority	
Central Lake Ontario Conservation Authority	
Conservation Halton	
Consulting Company	
Credit Valley Conservation	
Crowe Valley Conservation	
Department of Fisheries and Oceans	
Environment Canada	
Essex Region Conservation Authority	
Ganaraska Region Conservation Authority	
Grand River Conservation Authority	
Grey Sauble Conservation Authority	
Hamilton Conservation Authority	
Kawartha Conservation	
Kettle Creek Conservation Authority	
Lake Simcoe Region Conservation Authority	
Lakehead Region Conservation Authority	
Long Point Region Conservation Authority	
Lower Thames Valley Conservation Authority	
Lower Trent Conservation	
Maitland Valley Conservation Authority	
Mattagami Region Conservation Authority	
Ministry of Environment	
Ministry of Natural Resources	
Ministry of Transportation	
Mississippi Valley Conservation	
Niagara Peninsula Conservation Authority	
Nickel District Conservation Authority	

Non-government organization	
North Bay-Mattawa Conservation Authority	
Nottawasaga Valley Conservation Authority	
Ontario Federation of Anglers and Hunters	
Other	
Otonabee Conservation	
Parks Canada	
Quinte Conservation	
Raisin Region Conservation Authority	
Rideau Valley Conservation Authority	
Royal Ontario Museum	
Saugeen Conservation	
Sault Ste Marie Region Conservation Authority	
South Nation Conservation	
St. Clair Region Conservation Authority	
Toronto and Region Conservation Authority	
Trout Unlimited	
University or College	
Upper Thames River Conservation Authority	

LIO Lookup Table Values:
ARA_SURVEY_METHOD_LIST

SURVEY METHOD	EXPIRY DATETIME
Angling - Non Standard Survey	
BSM - Broad-scale Monitoring	
BTIN - Brook Trout Index Gill Netting Standard Survey	
Broadcast Netting - Non Standard Survey	
Creel - Non Standard Survey	
Dip Nets - Non Standard Survey	
ESTN - End of Spring Trap Netting Standard Survey	
Eel Pots - Non Standard Survey	
Electrofishing - Non Standard Survey	
FWIN - Fall Walleye Index Gill Netting Standard Survey	
Fish Ladder - Non Standard Survey	
Fyke Net - Non Standard Survey	
Gillnet - Non Standard Survey	
Minnow Trap - Non Standard Survey	
Mixed gear - Combination of gears - Non Standard Survey	
NORDIC - Nordic Index Gill Netting Standard Survey	
NSCIN - Near-shore Community Index Netting Standard Survey	
OSAP - Ontario Stream Assessment Protocol Electrofishing Standard Survey	
Observed - Anecdotal record from trusted source - Non Standard Survey	
Other - Non Standard Survey	
RIN - Riverine Index Gill Netting Standard Survey	
SLIN - Spring Littoral Index Gill Netting Standard Survey	
SPIN - Summer Profundal Index Gill Netting Standard Survey	
Seine - Non Standard Survey	
Trap net - Non Standard Survey	
Trawl - Non Standard Survey	
Unknown - Unknown	

LIO Lookup Table Values:

ARA_VERIFICATION_SOURCE_LIST

VERIFICATION SOURCE	EXPIRY DATETIME
Conservation Authority	
Consulting Company	
Department of Fisheries and Oceans	
Ministry of Natural Resources	
Other	
Royal Ontario Museum	
University or College	
Unknown	

LIO Lookup Table Values:

ARA_VERIFIER_QUALIF_LIST

VERIFIER QUALIFICATIONS	EXPIRY DATETIME
Biologist or Technician	
Conservation Officer	
Local Angler or Naturalist	
Other	
Taxonomist	

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:

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 Photography		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							
Google Street View		Google Inc.					
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 Assessment 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 Resources	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

LIO Table Relationships for Class:
Aquatic Resource Area Survey Point

ARA_SURVEY_POINT_FT	←----- ARA_SURVEY_POINT_FT.SURVEYOR_AGENCY = ARA_SURVEYOR_AGENCY_LIST.SURVEYOR_AGENCY	ARA_SURVEYOR_AGENCY_LIST		
	←----- ARA_SURVEY_POINT_FT.SURVEY_METHOD = ARA_SURVEY_METHOD_LIST.SURVEY_METHOD	ARA_SURVEY_METHOD_LIST		
	-----→ ARA_SURVEY_SPECIES.ARA_SURVEY_POINT_ID = ARA_SURVEY_POINT_FT.OGF_ID	ARA_SURVEY_SPECIES	←----- ARA_SURVEY_SPECIES.COMMON_NAME = ARA_MASTER_FISH_LIST.COMMON_NAME	ARA_MASTER_FISH_LIST
			←----- ARA_SURVEY_SPECIES.VERIFICATION_SOURCE = ARA_VERIFICATION_SOURCE_LIST.VERIFICATION_SOURCE	ARA_VERIFICATION_SOURCE_LIST
			←----- ARA_SURVEY_SPECIES.VERIFIER_QUALIFICATIONS = ARA_VERIFIER_QUALIF_LIST.VERIFIER_QUALIFICATIONS	ARA_VERIFIER_QUALIF_LIST
	-----→ CLASS_DATABASE_REFERENCE.OGF_ID = ARA_SURVEY_POINT_FT.OGF_ID	CLASS_DATABASE_REFERENCE		
	-----→ CLASS_JUSTIFICATION.OGF_ID = ARA_SURVEY_POINT_FT.OGF_ID	CLASS_JUSTIFICATION		
	-----→ CLASS_OTHER_INFORMATION.OGF_ID = ARA_SURVEY_POINT_FT.OGF_ID	CLASS_OTHER_INFORMATION		
	-----→ CLASS_PARTY_ROLE.OGF_ID = ARA_SURVEY_POINT_FT.OGF_ID	CLASS_PARTY_ROLE		
	-----→ CLASS_SOURCE.OGF_ID = ARA_SURVEY_POINT_FT.OGF_ID	CLASS_SOURCE	←----- CLASS_SOURCE.SOURCE_NAME = SOURCE_LIST.SOURCE_NAME	SOURCE_LIST
	-----→ CLASS_SUPPORTING_MATERIAL.OGF_ID = ARA_SURVEY_POINT_FT.OGF_ID	CLASS_SUPPORTING_MATERIAL		