

Land Information Ontario Data Description

Research Polygon

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LIO Class Description

Research Polygon

Class Short Name: RESPOLY

Version Number: 2

Class Description:

A Research Polygon is a feature representing a geographic area (polygon), where some form of biotic research observation, test, trial, measure, or monitoring activity has, or will take place. The mapped features in this layer can be derived existing feature geometry (e.g. plantation), or as generated feature geometry (e.g. 11.28 meter diameter circular plot around a centre post). This layer will also store research areas which represent formalized groupings where research occurs. There will be significant overlaps between features in this layer. This data class is one of three primitive data classes: Research Point (RESPOINT), Research Line (RESLINE), and Research Polygon (RESPOLY).

Abstract Class Name: SPMNTUREGION

Abstract Class

Description:

Spatial Multi-Non-Tessellating-Unconstrained Region: An object is represented by ONE or MORE polygons. Polygons MAY overlap WITHOUT any restrictions. HOLES within and GAPS between polygons ARE allowed. Example: Forest "Insect Damage Area". Mapped "Spruce Budworm" defoliated areas may overlap "Forest Tent Caterpillar" damaged areas. Likewise, mapped "Gypsy Moth" tree mortality areas may overlap mapped other "Gypsy Moth" defoliated areas from current and previous years.

Metadata URL:

Tables in LIO Class: Research Polygon

RESEARCH_POLYGON_FT

A Research Polygon is a feature representing a geographic area (polygon), where some form of biotic research observation, test, trial, measure, or monitoring activity has, or will take place. The mapped features in this layer can be derived existing feature geometry (e.g. plantation), or as generated feature geometry (e.g. 11.28 meter diameter circular plot around a centre post). This layer will also store research areas which represent formalized groupings where research occurs. There will be significant overlaps between features in this layer. This data class is one of three primitive data classes: Research Point (RESPOINT), Research Line (RESLINE), and Research Polygon (RESPOLY).

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER(13,0)	Yes	OGF_ID	
Ontario Geospatial Feature Identifier (OGF_ID). A unique numeric provincial identifier assigned to each object.				
PLOT_IDENT	VARCHAR2(100)	Yes	PLOT_IDENT	
Unique stable business identifier assigned by the program area to every research plot feature. Refer to user-guide for value formatting instructions.				
PLOT_ALIAS	VARCHAR2(254)	No	PLOT_ALIAS	
Local client or alternative name for the research plot.				
STUDY_NAME	VARCHAR2(100)	Yes	STUDY_NAME	
Foreign Key (FK) STUDY_NAME reference to parent RESEARCH_STUDY table record. The official name of the study.				
PROGRAM_ACRONYM	VARCHAR2(15)	No	PROG_ACRO	
Free text describing an acronym that the program area is referred by, for example: ELC (Ecological Land Classification Program). The content of this field are mainly used for record filtering purposes, and also imply program ownership of the research plot.				
CONTACT_1_NAME	VARCHAR2(100)	Yes	CONTACT_1	
First Reference: Identifies the name of the person to contact about the research plot. Foreign Key (FK) CONTACT_NAME reference to parent RESEARCH_CONTACT table record.				
CONTACT_2_NAME	VARCHAR2(100)	No	CONTACT_2	
Second Reference: Where applicable, identifies the name of the person to contact about the research plot. Foreign Key (FK) CONTACT_NAME reference to parent RESEARCH_CONTACT table record.				
LOCATION_ACCURACY_METERS	NUMBER(4,0)	Yes	ACC_METERS	BETWEEN 1 AND 5000

Estimated positional accuracy in meters (no decimals). Valid value range is between 1 and 5000 meters.

PROTECTION_PRESCRIPTION_IDENT	VARCHAR2(100)	No	PRES_IDENT
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Foreign Key (FK) PROTECTION_PRESCRIPTION_IDENT reference to parent RESEARCH_PROTECTION table record.

PROTECTION_END_DATE	DATE	Yes	PROT_END
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Date beyond which the requirement for protection is expected to end. Defaults to current date. For permanent plots set date to 31 December 9999. Comparing this attribute value to the current system date becomes a constraint on the values of the Research Protection ID.

PROTECTION_BUFFER_DIST	NUMBER(4,0)	Yes	PROT_DIST
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Buffer distance (in meters) required for protection of this Research Plot. The extent of the Source Feature will be buffered by this value to create a protected value polygon. DEFAULT: 0

PREDISTURB_NOTIFY_END_DATE	DATE	Yes	PRE_END
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Date beyond which the planned disturbance notification no longer applies. Defaults to current date for new records(meaning that no predisturbance notification is required). If there is no end date (e.g. the plot is permanent) then the default maximum date is entered (see user manual).

PREDISTURB_NOTIFY_PERIOD	NUMBER(4,0)	Yes	PRE_PERIOD
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Number of days before which the plot contact must be informed of any planned disturbance to plot. Defaults to 0 (zero) for new records. This time period is intended to give the plot owner an opportunity to remeasure the plot before disturbance occurs or to plan for remeasurement after disturbance. A value of zero indicates that no notification is required.

PREDISTURB_NOTIFY_BUFFER_DIST	NUMBER(4,0)	Yes	PRE_DIST
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Buffer distance (in meters) used to create a predisturbance notification area of this Research Plot. The extent of the Source Feature will be buffered by this value to create a predisturbance notification polygon. DEFAULT: 0

POSTDISTURB_NOTIFY_END_DATE	DATE	Yes	POST_END
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Date that post disturbance notification no longer applies. Defaults to current date (meaning that no post-disturbance notification is required). If there is no end date (e.g. the plot is permanent) then the default maximum date is entered (see user manual)

POSTDISTURB_NOTIFY_BUFFER_DIST	NUMBER(4,0)	Yes	POST_DIST
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Buffer distance (in meters) used to create a postdisturbance notification area of this Research Plot. The extent of the Source Feature will be buffered by this value to create a postdisturbance notification polygon. DEFAULT: 0

PLOT_ESTABLISHED_DATE	DATE	Yes	ESTAB_DATE
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Date the plot was established

PLOT_MARKER_DESCR	VARCHAR2(254)	No	PLOT_DESCR
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Description of main plot marker properties for easy recognition in the field.

LOCATION_DESCR	VARCHAR2(254)	No	LOCATION
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Description of the area where the site is located (e.g. End of Flee Rd. in Button TWP).

PLOT_ACCESS_NOTE	VARCHAR2(254)	No	PLOT_ACCES
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Notes related to accessing of the plot. Could include items like the need for 4x4 and ATV, instructions on how to find the primary marker, and any instructions pertaining to obtaining access to the property e.g. contacting landowner for permission.

GENERAL_COMMENTS	VARCHAR2(254)	No	COMMENTS
General comments relating specifically to this plot, and of importance to the management of this research value.			
VERIFICATION_IND	VARCHAR2(3)	Yes	VERIF_IND 'Yes', 'No'
A Yes/No indicator if spatial location has been verified by the plot owner to be true and accurate. DEFAULT: No			
VERIFICATION_DATE	DATE	No	VERIF_DT
Date spatial location was verified.			
GEOMETRY_UPDATE_DATETIME	DATE	No	GEO_UPT_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
ESRI geometry feature system field.			

RESEARCH_CONTACT

Designated point of contact for a research plot or its related data. NONSPATIAL Class supporting the following SPATIAL data classes: Research Line (RESLINE), Research Point (RESPOINT), Research Polygon (RESPOLY).

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
Ontario Geospatial Feature Identifier (OGF_ID). A unique numeric provincial identifier assigned to each object.				
CONTACT_NAME	VARCHAR2 (100)	Yes	CONT_NAME	
Full name and position of Research Contact for the related plot(s). Format: Last Name, First Name, position title (e.g. Doe, John Q, Principle Investigator). If preferred, name may be omitted but a detailed position title must be provided that is specific enough to uniquely identify the responsible party (i.e. "Sault Ste. Marie District, North Shore Area, Sr. Lands Tech"). NOTE: Contact Name values MUST be unique in this table. Include middle initial(s) where required to ensure contact name uniqueness. This column has been defined as an Alternate Key (AK) to facilitate bulk data load imports into the LIO Editor and to display important information to the user without the need to join tables or reference OGF_IDs. Consult the User Guide for further direction.				
EMAIL	VARCHAR2 (40)	No	EMAIL	

Where available, the email address of the contact.

PHONE	VARCHAR2 (25)	No	PHONE
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Contact telephone number. (Area Code) 555-5555 x555.

AGENCY_NAME	VARCHAR2 (50)	Yes	AGENCY
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The full name of the agency that the contact is affiliated with. (e.g. Canadian Forest Service, Science and Research Branch - MNRF, Ministry of Environment, unknown, not applicable).

PROGRAM_NAME	VARCHAR2 (50)	Yes	PROG_NAME
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The full program name the contact is affiliated with. (e.g. Ecological Land Classification Program, Woodlands Operations, unknown, not applicable).

ADDRESS	VARCHAR2 (254)	No	ADDRESS
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General physical or mailing address of the contact. See user guide for content and formatting details.

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

RESEARCH_POLY_ACTIVITY

Time-stamped record of any significant activity relating to the geometry or tabular record, ownership, management, measurement of a research plot or plot part.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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PLOT_IDENT	VARCHAR2 (100)	Yes	PLOT_IDENT
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Foreign Key (FK) PLOT_IDENT reference to parent RESEARCH_POLYGON_FT table record. NOTE: PLOT_IDENT is being used as a key to facilitate business area importing of externally-prepared data directly into the LIO Editor without managing OGF_IDs.

ACTIVITY_DATETIME	DATE	Yes	ACT_DATE
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Best approximation of the date of occurrence the activity or event being described.

ACTIVITY_TYPE	VARCHAR2 (50)	Yes	ACT_TYPE
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Free text short description of the type of activity on the research plot. (e.g. inspection, measurement, retired). For additional information please refer to the user guide.

ACTIVITY_DESCR	VARCHAR2 (254)	Yes	ACT_DESCR
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Description of the activity (e.g. Plot was monumented 2016-04-12, Plot was burnt and no longer of value to this study).

AUTHOR	VARCHAR2	Yes	AUTHOR
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(50)

Free-text field identifying the author of the activity description note (e.g. ?name and position?, Owner, Sponsor, and Custodian).

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

RESEARCH_POLY_NOTE

Time-stamped notes about a specific research plot.

Column Name	Column Type	Mandatory	Short Name	Valid Values
PLOT_IDENT	VARCHAR2 (100)	Yes	PLOT_IDENT	

Foreign Key (FK) PLOT_IDENT reference to parent RESEARCH_POLYGON_FT table record. NOTE: PLOT_IDENT is being used as a key to facilitate business area importing of externally-prepared data directly into the LIO Editor without managing OGF_IDs.

PLOT_NOTE_DATETIME	DATE	Yes	NOTE_DATE
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Date of the note.

PLOT_NOTE_TYPE	VARCHAR2 (25)	Yes	NOTE_TYPE
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Client-defined type of activity pertaining to the note (e.g. Publication, Status).

PLOT_NOTE_TEXT	VARCHAR2 (254)	Yes	NOTE_TEXT
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Text of the note.

AUTHOR	VARCHAR2 (50)	Yes	AUTHOR
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Free-text identifying author of the note e.g. Hearst Management Unit Forester, Owner, Sponsor, and Custodian.

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

RESEARCH_PROTECTION

Custom or Standard Protection Prescriptions that may be applied to one or more research source features. NONSPATIAL Class supporting the following SPATIAL data classes: Research Line (RESLINE), Research Point (RESPOINT), Research Polygon (RESPOLY).

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

Ontario Geospatial Feature Identifier (OGF_ID). A unique numeric provincial identifier assigned to each object.

PROGRAM_ACRONYM	VARCHAR2 (15)	Yes	PROG_ACRO
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Free text describing an acronym that the program area is referred by. Example: "ELC" for Ecological Land Classification Program. The contents of this field are mainly used for record filtering purposes. NOTE: This value also implies program ownership and controllership of this protection prescription.

PROTECTION_PRESCRIPTION_IDENT	VARCHAR2 (100)	Yes	PRES_IDENT
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A name for the Protection Prescription. Each prescription is defined by and specific to the plot publisher. Suggested format is a concatenation of "Program Acronym" - "program-specific protection prescription name" (e.g. ELC - Full Protection). This will assist users to select the prescription by name for a number of plots. NOTE: Each Protection Prescription Identifier MUST be unique in this table. This column has been defined as an Alternate Key (AK) to facilitate bulk data load imports into the LIO Editor and to display important information to the user without the need to join tables or reference OGF_IDs.

PROTECTION_PRESCRIPTION_DETAIL	VARCHAR2 (2000)	Yes	PRES_DET
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Specific details of the protection prescription

PROTECTION_PRESCRIPTION_DATE	DATE	Yes	PRES_DATE
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Date the prescription was created. Defaults to current date for new records.

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

RESEARCH_STUDY

A research initiative or activity organized under a single name (e.g. ELC Baseline Data Collection - NWR - 1985-1987). Typically, a research agency can have numerous research programs, each of which may have numerous research study initiatives (studies), each of which may have numerous research study plots. Research Study is a higher order of organization for Research Plots. NONSPATIAL Class supporting the following SPATIAL data classes: Research Line (RESLINE), Research Point (RESPOINT), Research Polygon (RESPOLY).

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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Ontario Geospatial Feature Identifier (OGF_ID). A unique numeric provincial identifier assigned to each object.

STUDY_NAME	VARCHAR2 (100)	Yes	STUDY_NAME
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The official name of the study. Study Name values must be unique in the Research Study table. NOTE: This column has been defined as an Alternate Key (AK) to facilitate bulk data load imports into the LIO Editor and to display important information to the user without the need to join tables or reference OGF_IDs.

STUDY_ACRONYM	VARCHAR2 (15)	No	STUDY_ACRO
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The short form (acronym) for a study commonly referred to by field staff e.g. NEBIE, FEC-NWO. Study Acronym values must be unique in the Research Study table.

OWNER_CONTACT	VARCHAR2 (100)	Yes	OWNER_CONT
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Name and/or Position of the study contact, e.g. Doe, John; Research Scientist.

OWNER_ACRONYM	VARCHAR2 (15)	No	OWNER_ACRO
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The short form (acronym) for the study owner commonly referred to by field staff (e.g. GY-NE meaning Growth and Yield - Northeast Region).

OWNER_PROGRAM	VARCHAR2 (50)	Yes	OWNER_PROG
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The full program name that the Study is owned by, e.g. Ecological Land Classification Program of Ontario.

OWNER_AGENCY	VARCHAR2 (50)	Yes	OWNER_AGEN
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Specify the overarching agency which the Owner Program is administered by (e.g. Natural Resource Information Management Section, Ontario Ministry of Natural Resources and Forestry).

STUDY_SPONSOR	VARCHAR2 (254)	Yes	SPONSOR
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Name, position, program and agency who vouches that the associated objects are deemed to be in support of MNR's business interests. The sponsor agrees to adopt responsibility for the lifecycle of sponsored data class features should they become orphaned.

STUDY_START_DATE	DATE	Yes	START_DATE
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The actual or best estimate of the date on which the study began.

STUDY_END_DATE	DATE	Yes	END_DATE
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The date that the study is scheduled to end. NOTE: This date does not affect or imply the end of any protection or notification for the Research Plots associated with this study. Protection and Notification lifecycle information is detailed at the individual Research Plot level.

STUDY_DESCR	VARCHAR2 (2000)	No	DESCR
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A brief overview of the research study, e.g. purpose, goals, etc.

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

RESEARCH_STUDY_NOTE

Time stamped notes specific to a Research Study

Column Name	Column Type	Mandatory	Short Name	Valid Values
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STUDY_NAME	VARCHAR2 (100)	Yes	STUDY_NAME	
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Foreign Key (FK) STUDY_NAME reference to parent RESEARCH_STUDY table record.

STUDY_NOTE_DATETIME	DATE	Yes	NOTE_DATE
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Datetime pertaining to the note.

STUDY_NOTE_TYPE	VARCHAR2 (50)	Yes	NOTE_TYPE
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Type of activity pertaining to the note (e.g. Publication, Status, Other)

STUDY_NOTE_TEXT	VARCHAR2 (2000)	Yes	NOTE_TEXT
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Free text study note.

AUTHOR	VARCHAR2 (100)	Yes	AUTHOR
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Note Author (e.g. John Doe, Hearst Management Unit Forester, Owner, Sponsor, Custodian)

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

**LIO Table Relationships for Class:
Research Polygon**

RESEARCH_POLYGON_FT	$\overleftarrow{\hspace{1cm}}$ RESEARCH_POLYGON_FT.CONTACT_1_NAME = RESEARCH_CONTACT.CONTACT_NAME	RESEARCH_CONTACT		
	$\overrightarrow{\hspace{1cm}}$ RESEARCH_POLY_ACTIVITY.PLOT_IDENT = RESEARCH_POLYGON_FT.PLOT_IDENT	RESEARCH_POLY_ACTIVITY		
	$\overrightarrow{\hspace{1cm}}$ RESEARCH_POLY_NOTE.PLOT_IDENT = RESEARCH_POLYGON_FT.PLOT_IDENT	RESEARCH_POLY_NOTE		
	$\overleftarrow{\hspace{1cm}}$ RESEARCH_POLYGON_FT.PROTECTION_PRESCRIPTION_IDENT = RESEARCH_PROTECTION.PROTECTION_PRESCRIPTION_IDENT	RESEARCH_PROTECTION		
	$\overleftarrow{\hspace{1cm}}$ RESEARCH_POLYGON_FT.STUDY_NAME = RESEARCH_STUDY.STUDY_NAME	RESEARCH_STUDY	$\overrightarrow{\hspace{1cm}}$ RESEARCH_STUDY_NOTE.STUDY_NAME = RESEARCH_STUDY.STUDY_NAME	RESEARCH_NOTE