

Unclassified

# Land Information Ontario Data Description

# Municipal Boundary – Upper Tier and District

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# LIO Class Catalogue

# **Municipal Boundary - Upper Tier and District**

Class Short Name: MUNIC

Version Number: 1

#### Class Description:

Geographic areas that consist of district and upper tier municipalities. Upper Tier Municipality: geographic areas that consist of two or more Lower Tier Municipality District (also known as Unorganized Area): That part of Ontario without municipal organization, though they will have assessment information under local school boards. These are typically found in northern Ontario. First Nation Lands will form holes in the municipal boundary coverage, where these areas exist.

**Abstract Class Name:** SPMNTPOLY

# Abstract Class Description:

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

#### Tables in LIO Class:

# **Municipal Boundary - Upper Tier and District**

## MUNIC\_BND\_UPPER\_AND\_DIST\_FT

A jurisdictional area based upon the assumption of municipal responsibilities set out under the Municipal Act and other Provincial legislation. In this data class there are two types of municipal units (Upper Tier and District (Unorganized Area)). An Upper Tier Municipality is a geographic area that consists of two or more Lower Tier Municipalities. A District is considered to be a geographic area without municipal organization. These are typically found in northern Ontario. First Nation Lands will form holes in the municipal boundary coverage, where these areas exist.

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.			
CLASS_SUBTYPE	VARCHAR2 (75)	Yes	SUBTYPE		
The data class subtype - Original GEO	OG_UNIT_TYF	PE_NAME.			
CLASS_SUBTYPE_NUM	NUMBER (7,0)	Yes	STYPE_NUM		
The data class subtype number - Orig	ginal GEOG_L	JNIT_TYPE_N	JM.		
OFFICIAL_MUNICIPAL_NAME	VARCHAR2 (100)	Yes	MUN_NAME		
Official name of a municipality detern	nined by MM/	AH (Ministry o	f Municipal Affa	irs and Housing)	
MUNID	VARCHAR2 (5)	Yes	MUNID		
An arbitrary 5 digit code used in the Ministry of Municipal Affairs and Housings Municipal Analysis and Retrieval System (MARS) data base to uniquely identify a Municipal Unit					
MAH_CODE	VARCHAR2 (5)	Yes	MAH_CODE		

Municipal Affairs and Housing (MAH) municipal code (also known as TEIGA (Treasury Economics and Inter-Governmental Affairs) code). The code is unique over time. That is, even through status changes and new municipalities come into being as a result of amalgamations, previously used codes are retired, and never re-used. This code is used for structured sorts. It must be unique within the Ministry of Municipal Affairs and Housings Municipal Analysis and Retrieval System (MARS) database. Because this code changes when the status of the municipality changes, it is not used as a unique identifier. This code is carried as a historical reference and to link to older data systems.

MUNICIPAL_AREA_EXTENT_TYPE	VARCHAR2 Yes (10)	EXTENT_T	Mainland, Water, Islands
The type of geography for a municipa	l area.		

VARCHAR2 No (4)

ASSESS\_C

A municipal code provided by the Municipal Property and Assessment Corporation (MPAC) (formerly Ministry of Revenue). It is also known as the Revenue Code. The four-digit code made up of two portions: the first two digits describe the geographic Upper Tier in which the municipality is located, the second pair of digits uniquely describe the Lower Tier Municipality within the geographic Upper Tier. Since MPAC maintains assessment data only at the Lower Tier level, this code has been made-up for Upper Tier Municipalities in the Municipal Analysis and R etrieval System (MARS) data base. The code in MARS also had to be made-up for the new City of Toronto after the 1998 amalgamation, since MPAC continued to carry the codes of the former municipalities.

MUNICIPAL\_NAME\_PREFIX

VARCHAR2 No (50)

NAME\_PREF

The prefix of the name for a municipality. For example The prefix of "City of Hamilton" would be "City of"

MUNICIPAL\_NAME\_SHORTFORM

VARCHAR2 No (50)

NAME\_SHORT

The shortform of the name for a municipality. For example, the shortform of "City of Hamilton" would be "Hamilton"

GEOG\_UNIT\_DESCR

VARCHAR2 No (2000)

**GUNT\_DES** 

Detailed description of the Geographic Unit.

GEOMETRY\_UPDATE\_DATETIME

GEO\_UPD\_DT

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

DATE

**EFFECTIVE\_DATETIME** 

DATE Yes

EFF\_DATE

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

## CLASS\_DATABASE\_REFERENCE

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

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

A unique numeric provincial identifier assigned to each object.

INTERNAL\_EXTERNAL\_FLG VARCHAR2 Yes INT\_EXT Internal, External (10)

A flag indicating if the database being referenced is internal (NRVIS/LIO) or external.

DATABASE\_REFERENCE\_IDENT VARCHAR2 Yes IDENT (50)

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 Yes CLASS\_NAME (8)

Static short name that will be used by for the concrete class.

DATABASE\_REFERENCE\_DETAIL VARCHAR2 No DETAIL (2000)

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 No CLASS\_NAME (8)

The static short name that is used by the related concrete class.

EXT\_REF\_TYPE\_CODE VARCHAR2 No EXT\_TYPE (8)

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

TYPE\_OTHER\_DESCR VARCHAR2 No OTH\_DESCR (60)

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 assi	gned to each	object.
JUSTIFICATION_REASON	VARCHAR2 (2000)	Yes	REASON
Reason for justification of th	e existence of	a geographic	feature.
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME
System-generated column d	enoting the da	ata class whicl	n this record is part of.
JUSTIFICATION_DATE	DATE	Yes	JUSTIF_DT
Date that the geographic fea	ature was justi	fied.	
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
Date/time the record was cr	eated or last r	modified in the	e 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 provincia	al identifier ass	signed 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 reco	ord 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 charac	cter strings.			
FIELD_VALUE_INTEGER	NUMBER (5,0)	No	VALUE_I	
A field used to store intege	er values (sma	II numbers).		
FIELD_VALUE_DOUBLE	NUMBER (10,3)	No	VALUE_D	
A field used to store decim	al data with up	o to two decim	nals.	
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was of	created or last	modified in th	ne source datab	pase.

## CLASS\_PARTY\_ROLE

A link to an external contact database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provin	cial identifier as	ssigned to eac	h object.	
PARTY_I DENT	VARCHAR2 (25)	Yes	PARTY_ID	

An identifier for a party (group or individual). It should reference an identifier in an external database which would contain further information. The identifier should not contain personal information (i.e. Social Insurance Number, Outdoors Card Number, phone number, name etc.).

PARTY_DATABASE	VARCHAR2 (100)	Yes	PARTY_DB	
The database that conta	ains the party ir	nformation.		
ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	Affiliated With, Approver, Authority Holder, Claim Holder, Contact, Contractor,
				 (See ROLE_TYPE_LIST table)

The role that an organization or an individual plays.

CLASS\_SHORT\_NAME VARCHAR2 Yes CLASS\_NAME (8)

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

ROLE\_DETAIL VARCHAR2 No **DETAIL** (200)

Additional details about the role.

START\_DATE DATE No START\_DATE

The date when a Party starts to play a Role.

**END\_DATE** DATE **END\_DATE** No

The date when a Party ceases to play a Role.

EFFECTIVE\_DATETIME DATE Yes EFF\_DATE

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

## CLASS\_SOURCE

Intersection table between the data class and Source List table.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincia	l identifier assi	igned to each	object.	
SOURCE_NAME	VARCHAR2 (100)	Yes	SOURCE_NAM	AFFM Provincial Administrative Maps.

(100)Aerial Photography, Aerial Survey, Book/Publication, CIR Photograpy, City of Ottawa Borehole Database, ...

(See SOURCE\_LIST table)

The name of the source.

SOURCE_DETAIL	VARCHAR2	Yes	SOURCE_DET	
	(254)			

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	Yes	CLASS_NAME
	(8)		

Unique abbreviation of the concrete class name (primary key)

SOURCE_DESCR	VARCHAR2	No	SOURCE_DES
	(2000)		

Text providing details about the source.

METHOD_DESCR	VARCHAR2	No	METHOD
	(2000)		

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 VAI	RCHAR2 No	APPLICABIL
(20	))	

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
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric prov	vincial identifier a	assigned to eac	h object.	
MATERIAL_NAME	VARCHAR2 (200)	Yes	NAME	
A name or brief descri	ption of the mate	erial.		

MATERIAL_LOCATION	VARCHAR2	Yes	LOCATION
	(200)		

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

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

URL\_ENG VARCHAR2 No URL\_ENG (500)

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 No URL\_FRE (500)

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

**EFFECTIVE\_DATETIME** DATE Yes EFF\_DATE

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

## EXTERNAL\_REF\_TYPE\_LIST

List of valid EXTERNAL\_REFERENCE\_TYPE codes.

Column Name	Column Type	Mandatory	Short Name Valid Values
EXT_REF_TYPE_CODE	VARCHAR2 (8)	Yes	EXT_REF_TY
The type of external datal	pase that the id	lentifier perta	ins to e.g. LUPS, LIS, Other.
EXT_REF_TYPE_DESCR	VARCHAR2 (60)	Yes	EXT_REF_TY
Description of the type of	external refere	ence.	
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

(2000)

Date/time that the record was expired from use.

#### ROLE\_TYPE\_LIST

List of valid party role types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	
The role that an organiza	ation or an indiv	vidual plays.		
ROLE_TYPE_DESCR	VARCHAR2	Yes	DESCR	

Description of Role Type.

EFFECTIVE\_DATETIME DATE Yes EFF\_DATE

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

**EXPIRY\_DATETIME** DATE NO EXP\_DATE

Date/time that the record was expired from use.

#### SOURCE\_LIST

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

Column Name	Column Type	Mandatory	Short Name	Valid Values
SOURCE_NAME	VARCHAR2 (100)	Yes	NAME	
The name of the source.				
SOURCE_DATE	VARCHAR2 (50)	No	SRC_DATE	
The date of the source.				
SOURCE_ORIGINATOR	VARCHAR2 (75)	No	ORIGINATOR	

The originator or author of the source. Includes the author(s) of a book; the originator(s) of a survey or project, etc.Examples: Smith, J. Smith, J. and Jones, K. Smith, J., Jones, K. and White, T. Anon. (where no author identified) OMNR (where authorship is corporate) Northwest District (lead and delivered the data collection project)

SOURCE\_SCALE VARCHAR2 No SCALE (15)

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 No H\_DATUM (10)

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 No V\_DATUM (30)

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 No PROJECTION (40)

The name of a systematic representation of all or part of the surface of the Earth on a plane or developable surface.

**EFFECTIVE\_DATETIME** DATE Yes EFF\_DATE

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

**EXPIRY\_DATETIME** DATE NO EXP\_DATE

Date/time that the record was expired from use.

# LIO Lookup Table Values:

# EXTERNAL\_REF\_TYPE\_LIST

EXT REF TYPE CODE	EXT REF TYPE DESCR	EXPIRY DATETIME
ALPS	Aggregate Licence Permit Database	
AMIS	Abandoned Mines Database	
ARFIS	Algonquin Region Forest Database	
BCD	Biological and Conservation Database	
DTDB	Digital Topographic Database	
FISHARC	Fisheries Data Archive	
FISHLIB	Fisheries Information Library	
FRI	Forest Resources Inventory Database	
IF	Internal Filing	
LIS	Land Index System	
LUP	Land Use Permit	
NADB	Natural Areas Database	
NTDB	National Topographic Database	
NWEIMS	Wetland Evaluation Information Management Database (North)	
ОВМ	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 Photograpy		Ministry of Natural Resources					
City of Ottawa Borehole Database	1883 - 2006	City of Ottawa	Varies		Mean Average Sea Level	Geodetic and UTM	
Digital File							
Digital Map							
Field Survey\Site Visit							
File System/Filing Cabinet Information							
Forest Resources Inventory		Ministry of Natural Resources		NAD27		UTM	
GPS Data Collection							
Hard Copy/Paper Map							
IKONOS Multispectral		Ministry of Natural Resources					
IKONOS Panchromatic		Ministry of Natural Resources					
IRS Multispectral		Ministry of Natural Resources					
IRS Panchromatic		Ministry of Natural Resources					
IRS Pansharpened		Ministry of Natural Resources					

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

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