

Natural Resources Values Information System
(NRVIS)

Data Class User Guide
for

MNR Sign Site

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Introduction

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Additional Information

For more information about this document, please contact NRVIS Support at (705) 755-1650 or nrvs.support.mnr@ontario.ca

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Preface:

These guidelines are intended to help NRVIS users add, maintain and use information in this data class within the proper context it was intended for.

Many OMNR Districts have signage within their boundaries that are either maintained, or are of interest to the OMNR. This NRVIS data class provides a common repository and standard for inventorying and storing MNR sign site information.

General Business Area Rules:

This section describes general business area rules associated with signage types found in an MNR District.

Signs may be posted in more than one language	
Most posted MNR have additional language wording.	
Only the English wording of the sign will be stored in the data class. Additional languages will be identified by name only.	
Data Class Usage: See ‘Sign Text English’ and ‘Other Sign Language’	
One ‘point’ per sign rule in MNR Sign Site data class.	
For ease of maintenance, signs will be managed on an individual basis in NRVIS, with one point added for every sign, even when there are multiple signs at the same site or in close proximity to one another.	
Data Class Usage: ARCGIS spatial conflict resolution capabilities will represent these sites visually to prevent the ‘stacking’ or ‘clutter’ for these features.	
Site visits are often made to where an MNR Sign is posted.	
Scheduled site visits are often carried out to verify the condition of a sign, or to perform routine maintenance such as updating wording (dates), minor repairs discovered on site etc.	
Data Class Usage: Sign Site Visit Detail	

Signs may reference a time period for which a regulation is in effect.	
The calendar dates must be periodically updated to reflect the period when regulations are in effect.	
Data Class Usage: See 'Sign Floating Date Indicator'	
Temporary signs are out of scope for the MNR Sign Site layer.	
Temporary signage locations, such as the smaller signs seen in the right-hand photo will not be stored in this data class.	
Some signs restrict access to named places/features.	
A few signs restrict the public from accessing certain named areas (e.g. lakes) via a road that the sign is posted.	
Data Class Usage: The NRVIS Common Table 'Database Reference- Internal Reference' can be used to associate objects from other data classes to an MNR Sign Site in NRVIS (e.g. MNR Road Segment, Water Area)	
Most signs conform to MGS/MNR Visual Identity standards and directives.	
Sign content (wording, size, logo placement etc.) usually follow a template that conforms to the MGS/MNR Visual Identity standards and directives. http://intra.visualidentity.mbs.gov.on.ca/logos-2.html	
Data Class Usage: Visual Identity Indicator.	
Signs are not always posted near roads	
Some signs (e.g. Fish Sanctuary signs) are posted in the immediate vicinity in a waterbody.	
Photographs are often taken of posted signs.	
Districts often take and file photographs of posted signs (due diligence, inventory etc...)	
Data Class Usage: Sign Photograph Indicator. Photograph references may be stored in the NRVIS Common Table – Supporting Material. The file name location of the photograph may be documented in this table, including the url if the photograph was posted to ODMS, or to a folder at the District server level. <i>It's suggested that users assign file names that will ease photograph retrieval e.g. sign-identifier + sequential photo number.</i>	

Suggested Guidelines for Maintaining MNR Sign Sites in NRVIS

Data Collection: Spatial capture of sign locations

- Pre-assign sign identifiers where possible. Suggested practice is to also affix or write the sign identifier on the sign itself, especially where there is more than one sign posted at a site.
- Capture the location of the sign using the best available source at the time. GPS is preferable, but other sources (maps) are acceptable as long as an appropriate relative accuracy and data source is documented.
- One spatial location per sign will be captured, even if there are several signs located at the same site. Classify the sign under the appropriate signage business area name and Sign Purpose. When the business area type is 'Other', identify the business area in the 'Other Business Area Name' field.
- Attributes may be captured on ARCPAD forms where possible for main sign and site visit attributes. Where applicable, document any relevant site visit details.

Conversion: In the District Office.

- Once data is collected, staff will prepare and perform any necessary conversions prior to loading the information into NRVIS.

Loading: (into NRVIS)

- **Note:** Prior to loading field-captured sign locations into NRVIS, users *should verify* that that the same sign point does not already exist in the database in order to prevent duplication.
- Users have the option of using various tools available in NRVIS to load data into the MNR Sign Site data class (e.g. import shapefile, coordinates etc.)
- Any associations of an MNR Sign Site feature to common tables e.g. 'Supporting Material' for photograph and/or sign authorization references. Internal Database references (NRVIS waterbodies, road segments) can also be made at this time.
- Any references to material (photos) stored on servers or PCs should include the full address (e.g. \\mnrwawfp00001\programs\pics\signs\SLK-003-01.jpg), and *not* an alias drive letter (e.g. 'O' Drive)
- If other MNR Business areas wish to include their signage information in NRVIS, it will be up to the discretion of each respective MNR District whether:
 - The District GIS Tech or GSO loads the data into NRVIS on their behalf or,
 - The Business Area obtains NRVIS edit rights to the data class, but check-in will be done by the District GIS Tech and/or GSO.

Maintaining:

- Subsequent site visit details will be maintained directly in NRVIS by the user.
- Since there may be several different signs at the same location (e.g. on the same post), the points will often be 'stacked' on top of one another in NRVIS. The user should exercise care during spatial selections to ensure that the proper sign is selected for editing.

- When a sign is removed from a site, the corresponding point feature will be deleted in NRVIS. Please note that site visit details and associated information stored in the NRVIS common tables (e.g. Database Reference – Internal, Supporting Material) will be lost once the point is deleted.
- It will be left up to the individual MNR District and business areas to determine if the associated common table information is important enough for retention and exported prior to the feature being deleted from the NRVIS database.

Guidelines Re: Road Barrier data class (Barrier type = Sign) vs. MNR Sign Site.

In addition to ‘gate’, the NRVIS Road Barrier point data class has a barrier type of ‘sign’. The following rule should be used to determine where features should, or should not be duplicated in both data classes.



An access control sign posted near a road barrier. Since the gate is the primary barrier type, it would be spatially maintained in the NRVIS Road Barrier data class, while the sign's location will reside in the MNR Sign Site Data Class.



In the absence of a gate, the sign becomes the primary road barrier, and the sign's location will be duplicated in both data classes.

Using NRVIS MNR Sign Site data:

There are several ways that users may use/find required information in this data class.

Signage Business Area Name: (mandatory)

The value chosen to go in this field represents the business area responsible for posting/maintaining the sign. Permissible values are chosen from a picklist.

Signage Business Area	Context
Aviation and Forest Fire Management	Signage posted/maintained by OMNR's Aviation and Forest Fire Management Branch.
Fish and Wildlife	Signage posted/maintained by OMNR's Aviation and Fish and Wildlife Branch.
Lands and Waters	Signage posted/maintained by OMNR's Lands and Waters Branch.
Ontario Parks	Signage posted/maintained by OMNR's Ontario Parks program.
Other Business Area	Signage posted/maintained by a business area other than what is currently available in the listing of permissible values.

When a value of 'Other Business Area' is chosen, the user must identify the name of the business area in the following field...

Other Business Area Name: (conditional mandatory)

The values in this field will be periodically reviewed to determine whether new business area values are to be appended into the Signage Business Area Name lookup table.

Sign Identifier: (mandatory)

Uniquely assigning an identifier to every sign in your district's signage inventory is important. The management of identifiers will be left up to each respective district. Because there are variability between districts and to some extent the business areas in how identifiers are derived, we will only suggest that a standard format be developed.

For example: CCC-NNN whereas:

CCC 3 character District Code prefix e.g. DRY (Dryden District)

- Separator (hyphen)

NNN 3 digit unique sequential sign number with leading zeroes. E.g. 003

Using the example above, the sign identifier is 'DRY-003'

Sign Purpose: (mandatory)

The following general categories into which signs fall into can be useful if a user wished to query the data class for specific intended sign purposes. Example: locations of all signs categorized under 'Access Control'.

Users may choose the following sign purposes from a picklist.

Sign Purpose	Context
Access_Control	Signs whose purpose is to control or restrict access (e.g. road closure)
Enforcement	Signs related to enforcement (e.g. fish sanctuaries, moose management etc.)
General_Information	Provides general information (e.g. 'This site is permanently closed')
Recreation	Signage associated with outdoor recreation and activities (e.g.: no camping, camping permit required by non-residents etc.)
Safety/Prevention	Signs posted as safety/prevention notices (e.g. water crossing removed, danger-open pit, use at own risk etc.)

Visual Identity Indicator: (mandatory Yes/No – default: 'Yes')

Can be used to find 'legacy' or ad-hoc signs that do not follow the OMNR's visual identity program (size, content etc.)

Sign Posting Date (mandatory) **and Sign Posting Date Modifier:** (mandatory)

Together, these attributes can aid users determine the locations of old or new signs. The recorded sign posting date is entered to calendar date standard (YYYY-MM-DD), and is qualified by the following modifiers. At the very minimum, a year should be

known. Enter a value of '01' for the month/day if these dates are not known, and choose one of the modifiers from the picklist other than 'Actual'.

Sign Posting Date Modifier	Context
Actual	The actual full calendar date for posting the sign is known.
After	The precise posting date of the sign is unknown, but was likely posted after a known year.
Approximate	On partial information about the posting date is known, e.g. year, or year and month.
Before	The precise posting date of the sign is unknown, but was likely posted before a known year.

Sign Text English: (optional)

When populated, provides the user with the exact English wording found on the sign.

Users may also query this field to find the locations of specific types of signs. In NRVIS, when querying this field for specific information the user should use the 'Like' operator with wildcards e.g. '%Fish Sanctuary%' (Kevin Casselman)

Sign Floating Date Indicator: (mandatory Yes/No – default: 'No')

Can be used to determine sign sites where a site visit is required to change dates for certain times of the year (e.g. road access, moose hunting etc.). Can be used to coordinate site visits to update signs.

Sign Photograph Indicator: (mandatory Yes/No – default: 'No')

Can be used to determine sites where photographs are required, and when flagged as 'Yes', that a photograph does exist for the sign and is filed either on the District server, or posted to ODMS. References to the file's location can be found in the NRVIS Common Table: 'Supporting Material'.

It will be left to each District's discretion, but we also suggest using a file naming standard for cataloguing your signage photographs.

e.g.: Sign Identifier-NN whereas:

Sign Identifier	Value from the 'Sign Identifier' field.
-	Separator (hyphen)
NN	2 digit sequential number assigned to each subsequent sign photograph, with leading zeroes for file sorting purposes. E.g. 003

Again, using the previous Sign identifier example, photographs taken at a site could be assigned a filename of DRY-003-01.jpg, DRY-003-02.jpg etc. You may also wish to include the date that the photograph was taken in the filename e.g. DRY-003-01(2005-10-11).jpg

Sign Authorization Indicator (mandatory Yes/No – default: 'No')

For enforcement purposes, all signs require proper authorization to be valid and for charges to hold up in a court of Law. When flagged as 'Yes', it indicates that an authority

document has been filed for the sign. Users may reference the authority document's name/filename and location in the NRVIS Common Table: 'Supporting Material'.

Maintenance Priority Ranking: (optional):

Identifies by ranking, the maintenance priority assigned to a sign site. This information can collectively in turn be used to create a signage inspection schedule for field crews. Permissible values are described as follows:

- High: Signs whose maintenance is legally a high priority for an OMNR District. Annual inspections of these signs are recommended/necessary.
- Medium: Signs whose presence and legibility are legally required to enforce a regulation (e.g. by a Conservation Officer). Inspections every one to three years are recommended.
- Low: Signs, where because of their general purpose, only require inspections every one to five years.

Misc Sign Properties (optional)

Optionally used to store miscellaneous details about a sign, such as sizes, material, posting details (nailed to tree, 4X4) etc. The contents of this field may be useful for replacing a sign, if it was removed from the site and is now missing.

MNR Sign Additional Language Name

Only the name of the languages other than English will be identified. It is suggested that users refer to photographs taken of the sign to see the actual text and layout of non-English languages.

Additional Sign Language Name (mandatory) and Other Language Name

Can be used to find the locations of signage written in a language in addition or other than English (e.g. Ojigi-Cree). 'Other Language Name' may be used to identify a language that is not available in the picklist. Periodic review of the contents of this field will determine whether additional languages should be added to the picklist.

Sign Language Name	Context
Cree	
French	DEFAULT
Ogi-Cree	
Ojibwa	
Other	A language that is not available in this listing. Identify this language in the 'Other Language Name' field.

MNR Sign Site Visit Detail:

MNR staff will be able to document details for subsequent site visits to where a sign is posted.

Site Visit Date: (mandatory) Can be used to find the most recent date of a site visit to a sign site. This information may be useful to schedule future inspections. The date format is YYYY-MM-DD

MNR Staff Member Name:(mandatory) Identified the main staff member who conducted the site visit. Identifying this person does not contrive FIPPA rules (confirmed with Information Access Services).

Sign Condition: (mandatory) Documents the sign's condition found at the time of the site visit. This information may be useful to keep track of sign site locations where signs are repeatedly damaged (e.g. vandalized, stolen).

Sign Condition	Context
Damaged	Sign is defaced, damaged or knocked down by vandals, weather, animals or vehicles.
Good	Sign is in good condition (structurally sound and legible).
Missing	Sign cannot be found in the immediate vicinity or where it was originally posted.

Site Activity Completed: (mandatory) Sometimes, remedial action is done on-site based on the sign's condition at the time of the site visit.

Site Activity Completed	Context
None	No action taken.
Repair	Repairs to the sign were completed on site.
Repair and Update	Sign repairs and updates to sign wording were completed on site.
Replace	A replacement sign was erected to replace the one that was damaged or missing.
Update	Sign wording updated (e.g. road access restriction dates)
Brushing	Removal of brush to improve sign visibility.

Additional Action Required: (mandatory) Sometimes, remedial action cannot be done or completed on site, and requires a future visit based on the recommended action. This information can be used to prioritize future site visits where remedial action is required.

Additional Action Required	Context
None	No action is required at this time.
Repair	Sign must be repaired (details found in 'Inspection Comments')
Repair and Update	Repairs and sign wording updates are required.
Replace	Sign must be replaced.
Update	Text on sign (esp. dates) requires updating.
Brushing	Removal of brush is required to improve sign visibility.

Site Visit Comments:(optional) Stores additional details about the site visit, including any qualifying remarks about the signs' condition, site activity completed or required, etc.

Total Site Visit and Travel Time: (optional) used by Districts where there is a cost associated with site visits and travel. When used, the total round trip in hours should be documented (e.g. 1.5 hours)

Examples of Populated NRVIS MNR Sign Site Attributes

Examples of typical MNR Signs found in a District, and how their attributes can be documented in NRVIS.

Fish Sanctuary Sign Note that the date on this sign is 'fixed' (permanent)



MNR Sign Site	
Geog Unit Type:	Fish and Wildlife Signage
Sign Identifier:	SSM-341
Sign Purpose:	Enforcement
Visual Identity Indicator:	☒
Sign Posting Date:	2006-06-07
Sign Posting Date Modifier:	Actual
Sign Text English	Provincial Fish Sanctuary No Fishing Closed Mar.15 to June 15
Sign Floating Date Indicator:	☐
Sign Photograph Indicator:	☒
Sign Authorization Indicator:	☒
Maintenance Priority Ranking	Medium
Misc Sign Properties	Sign nailed to tree in NE Bay of Tunnel Lake.
Additional Sign Language	
Signage Language Name:	French
Supporting Material (Common Table)	
CT Material Name:	SSM-341-01.jpg
CT Material Location:	ODMS
CT URL English:	http://mnronline.mnr.gov.on.ca/odms/attachment_id=1&document_id=9343
Supporting Material (Common Table)	
CT Material Name:	Authorization-SSM-341.doc
CT Material Location:	Enforcement Section SSM District Office

Water Crossing Warning

MNR Sign Site	
Geog Unit Type:	Lands and Waters Signage
Sign Identifier:	SLK-003
Sign Purpose:	Safety/Prevention
Visual Identity Indicator:	☒
Sign Posting Date:	2003-01-01
Sign Posting Date Modifier:	Approximate
Sign Text English	Danger Water Crossing Removed Do not proceed.
Sign Floating Date Indicator:	☐
Sign Photograph Indicator:	☒
Sign Authorization Indicator	☐
Maintenance Priority Ranking	Low
Misc Sign Properties	Posted on 2 8' pressure-treated 4X4s.
Additional Sign Language	
Signage Language Name:	French
Supporting Material (Common Table)	
CT Material Name:	SLK-003-01.jpg
CT Material Location:	\\mnrwawfp00001\programs\pics\signs\SLK-003-01.jpg

Multiple Signs + Site Visit Detail

MNR Sign Site	
Geog Unit Type:	Other Business Area Signage
Sign Identifier:	WAW-110
Sign Purpose:	Enforcement
Visual Identity Indicator:	☒
Sign Posting Date:	2005-05-01
Sign Posting Date Modifier:	Approximate
Sign Text English	Chapleau Crown Game Preserve Hunting, trapping, possession of firearms or traps prohibited.
Sign Floating Date Indicator:	☐
Sign Photograph Indicator:	☒
Sign Authorization Identifier:	☐
Maintenance Priority Ranking	Medium
Misc Sign Properties	
Additional Sign Language	
Signage Language Name:	French
Supporting Material (Common Table)	
CT Material Name:	WAW-110,111-01.jpg
CT Material Location:	\\mnrwawfp00001\programs\pics\signs\WAW-110,111-01.jpg

MNR Sign Site	
Geog Unit Type:	Lands and Waters Signage
Sign Identifier:	WAW-112
Sign Purpose:	Recreation
Visual Identity Indicator:	☒
Sign Posting Date:	2005-05-01
Sign Posting Date Modifier:	Approximate
Sign Text English	Crown land camping permit required by non-residents of Canada. Available at local licence issuers or MNR offices
Sign Floating Date Indicator:	☐
Sign Photograph Indicator:	☒
Sign Authorization Identifier:	☐
Maintenance Priority Ranking	Medium
Misc Sign Properties	
Additional Sign Language	
Signage Language Name:	French
Supporting Material (Common Table)	
CT Material Name:	WAW-110,111-01.jpg
CT Material Location:	\\mnrwawfp00001\programs\pics\signs\WAW-110,111-01.jpg
Supporting Material (Common Table)	
CT Material Name:	WAW-110,111-02.jpg
CT Material Location:	\\mnrwawfp00001\programs\pics\signs\WAW-110,111-02.jpg
Sign Site Visit Detail (WAW-112)	
Site Visit Date:	2005-11-15
MNR Staff Member Name:	Anna Lyst
Sign Condition:	Good
Site Activity Completed	None
Additional Action Required	None
Total Site Visit and Travel Time:	3 hrs
Sign Site Visit Detail (WAW-112)	
Site Visit Date:	2006-10-31
MNR Staff Member Name:	Anna Lyst
Sign Condition:	Damaged
Site Activity Completed	None
Additional Action Required	Replace
Site Visit Comments	Sign was vandalized. Someone cut out part of the sign. See photo WAW-110,111-02.jpg
Total Site Visit and Travel Time:	2.5 hrs

Access Control Signs

MNR Sign Site	
Geog Unit Type:	Lands and Waters Signage
Sign Identifier:	WAW-002
Sign Purpose:	Access Control
Visual Identity Indicator:	☒
Sign Posting Date:	2006-06-07
Sign Posting Date Modifier:	Actual
Sign Text English	NOTICE Use of this road to access the following lakes is prohibited. McEwen Foot Mank Roderic Tikamaganda Public Lands Act
Sign Floating Date Indicator:	☐
Sign Photograph Indicator:	☒
Sign Authorization Indicator:	☐
Maintenance Priority Ranking	Low
Misc Sign Properties	
Additional Sign Language	
Signage Language Name:	French
Supporting Material (Common Table)	
CT Material Name:	WAW-002-01.jpg
CT Material Location:	\\mnrwawfp00001\programs\pics\signs\WAW-002-01.jpg

MNR Sign Site	
Geog Unit Type:	Lands and Waters Signage
Sign Identifier:	TIM-112
Sign Purpose:	Access Control
Visual Identity Indicator:	☒
Sign Posting Date:	2000-01-01
Sign Posting Date Modifier:	Before
Sign Text English	NOTICE Closed to public vehicular travel from October __ to October __,yyyy Pursuant to the Public Lands Act
Sign Floating Date Indicator:	☒
Sign Photograph Indicator:	☒
Sign Authorization Indicator:	☐
Maintenance Priority Ranking	Low
Misc Sign Properties	
Additional Sign Language	
Signage Language Name:	French
Supporting Material (Common Table)	
CT Material Name:	TIM-112-01.jpg
CT Material Location:	\\mnrwawfp00001\programs\pics\signs\TIM-112-01.jpg

Document Control

Version	Date	Author/Editor	Comments
DRAFT	April 19, 2007	James Gratton	Draft was reviewed and approved by MNR Signs NRVIS Working Group. Recommended changes are reflected in this document.
DRAFT	May 04, 2007	James Gratton	Document updated to reflect comments made by broader NRVIS user community and Kevin Casselman.
1.0	May 15, 2007	James Gratton	Updated to reflect peer and implementation review recommendations.
2.0	July 8, 2008	James Gratton	Guide updated to reflect updated model

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