



## **Ceded Territory Boundary GIS Version 2.1**

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## Introduction

There is a need to provide an accurate, well-documented GIS coverage of the ceded territory boundaries to tribal members, tribal governments, state and federal agencies, organizations, students, and others. Most existing GIS ceded territory coverages lack adequate metadata for public distribution.

GLIFWC's GIS coverage of inland ceded territory boundaries was initially developed in 1996. The process used a combination of historical maps, treaty language, and contemporary legal agreements and court decisions to select existing GIS line segments (primarily TIGER/Line files) to depict the boundaries. Brief metadata entries for these files were compiled by Klugman (1996). A GIS coverage for the Great Lakes portion of the ceded territory boundaries was later developed by Falck in 2003 (unpubl.). The process used the treaty language to select existing GIS line segments (primarily state and international boundaries) or draw segments according to descriptions in the treaty (*e.g.* "thence north to...") to depict the boundaries. However, no metadata was developed for this coverage. Subsequent edits to these files have also gone undocumented, with the exception of the southern boundary of the 1837 and 1842 ceded territories in Wisconsin. This portion of the ceded territory GIS coverage was reviewed and documented by Gilbert et al. (2008).

Several errors have been resolved and documented in this version of the ceded territory GIS database. Although most of these errors occurred at large scales, or were errors of omission, resolution of these errors reduces confusion or improper use of these data by those unfamiliar with their limitations. Common errors included:

- Individual line segments comprising the ceded territory GIS files could not be linked back to their original source data
- Discrepancies between legal references, historical maps and the ceded territory GIS line segments were not adequately documented.
- Boundary line segments did not correspond to the legal references and reference maps when zoomed in to larger scales.
- Gaps between line segments.
- Individual line segments comprising the ceded territory GIS files were not labeled with the corresponding landscape features they depict.

## Methods

Existing GIS coverages for both inland and Great Lakes ceded territory boundaries were reviewed as well as historical maps, treaty language, legal agreements, and court decisions and each GIS line segment was assigned a legal reference (Table 1), a reference map (Table 2), source data (Table 3), and a feature label where appropriate. In cases where the source data was indiscernible, or where the existing line segment clearly did not correspond with the legal references and reference maps, line segments were edited or replaced. Small gaps between line segments (< 10 meters) were removed by extending the line segments to the nearest vertice or

**Table 1.** Legal references used to select and justify ceded territory GIS line segments.

<b>Legal Reference</b>	<b>Date</b>
Treaty with the Chippewa, art. 1, May 6, 1836, 7 Stat. 503	1836
Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536	1837
Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591	1842
Treaty with the Chippewa, art. 1, Sept. 30, 1854, 10 Stat. 1109	1854
1985 Great Lakes Consent Order	1985
Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988)	1988
2000 Great Lakes Consent Decree	2000
2007 Inland Consent Decree	2007
Voigt treaty off-reservation conservation code (revised 10/2013) Sec. 3.27(1)(e): Guide to the southern boundary of the Wisconsin portion of the 1837 and 1842 ceded territories. Version 4.0. 2008. Great Lakes Indian Fish and Wildlife Commission. Odanah, Wisconsin, USA.	2008

**Table 2.** Reference maps used to select and justify ceded territory GIS line segments.

<b>Reference Map</b>	<b>Date</b>
Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	1896
U.S. v. Michigan, 471 F. Supp. 192 (W.D. Mich. 1979), Appendix 1	1979
1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	1988
LCO v. Wisconsin, 775 F. Supp. 321 (W.D. Wis. 1991), Joint Exhibit 54	1991
2000 Great Lakes Consent Decree, Figure 7	2000
2000 Great Lakes Consent Decree, Figure 8	2000
2000 Great Lakes Consent Decree, Figure 9	2000
2007 Inland Consent Decree, Appendix A	2007

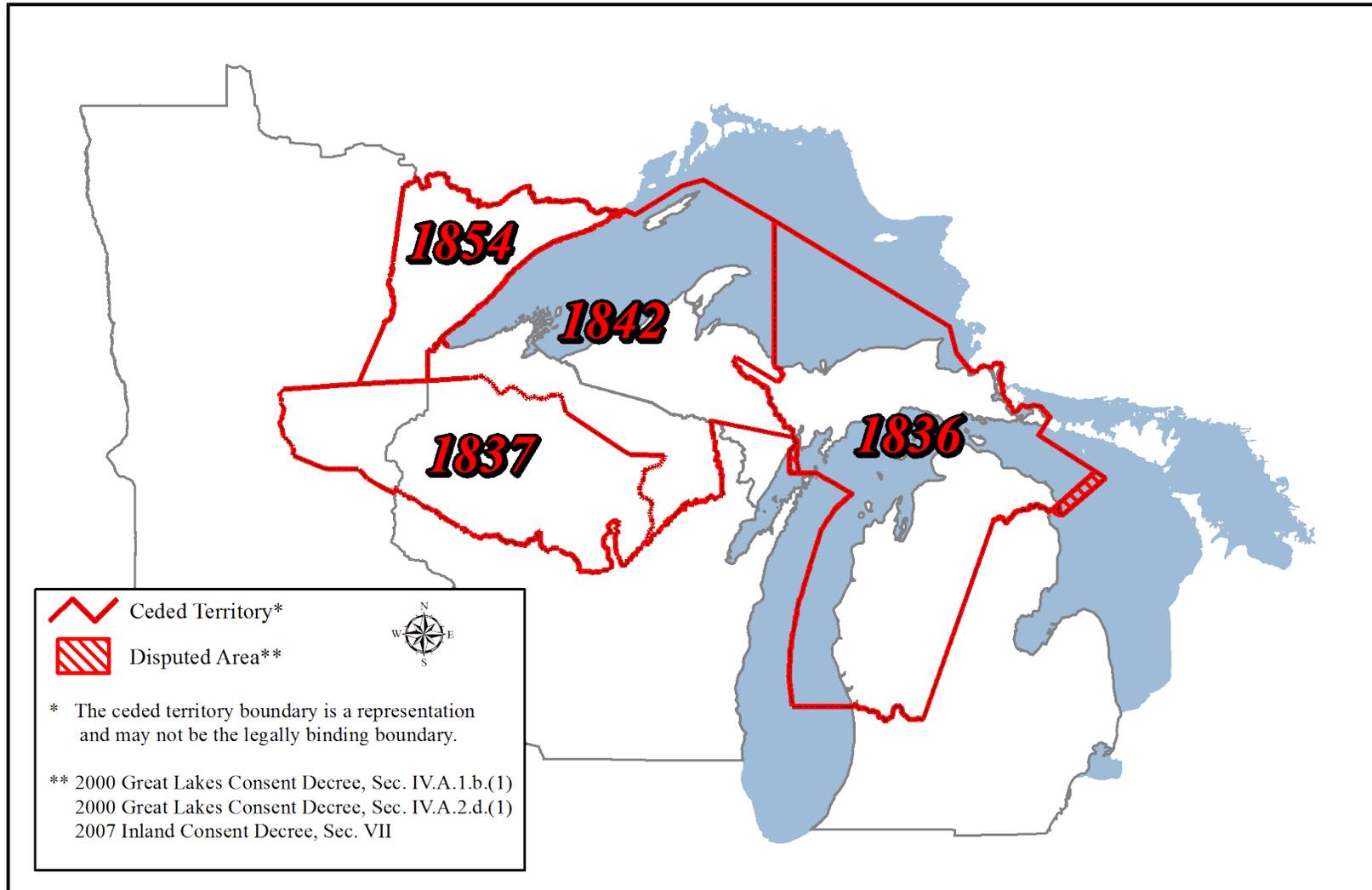
**Table 3.** Data sources used to extract GIS line segments depicting ceded territory boundaries.

<b>Data Source</b>
U.S. Census Bureau TIGER/Line Files, 1994
U.S. Census Bureau TIGER/Line Files, 1995
National Hydrography Dataset (NHD) v. 2.20
DOC, NOAA, NOS, OCS, Shipping Lanes in U.S. Waters
NOAA Maritime Limits and Boundaries of United States of America 2013
USGS National Boundary Dataset (NBD) for Michigan 20140401 State or Territory File GDB 10.1

moving the vertice. Larger gaps between line segments (10-40 meters) were removed by inserting a line segment between the dangling vertices and labeled as “GAP” in the attribute table. Polygons were created from the line segments using an XY tolerance of 1 meter. The master copy of the ceded territory GIS database is housed in GLIFWC's PostgreSQL PostGIS spatial database.

### **Results**

A shapefile format of the lines and polygons (Figures 1-5) was bundled with a metadata document (Appendix A) and made available for download at <http://data.glifwc.org/ceded/>. This website also hosts an interactive map of the ceded territories and provides links to a ceded territory web map service (WMS), treaties, legal references, reference maps, and metadata for the source data comprising the ceded territory boundary segments. Appendix B corresponds to the line segments depicted in Figures 2-5 and summarizes metadata found in the shapefile's attribute table for the individual line segments.



**Figure 1.** Ceded territory GIS line segments.

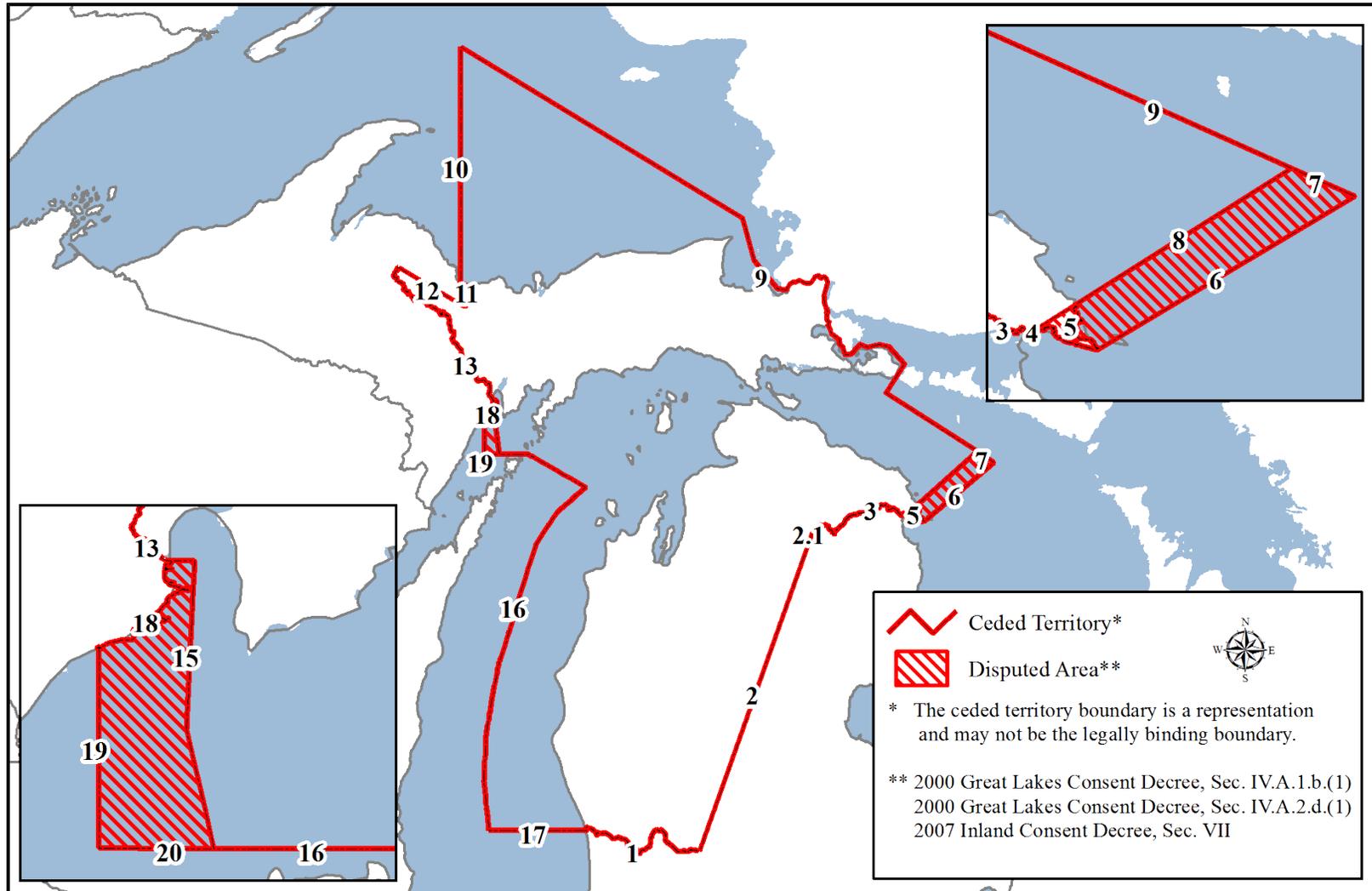


Figure 2. 1836 ceded territory GIS line segments. See Appendix B for detailed descriptions.

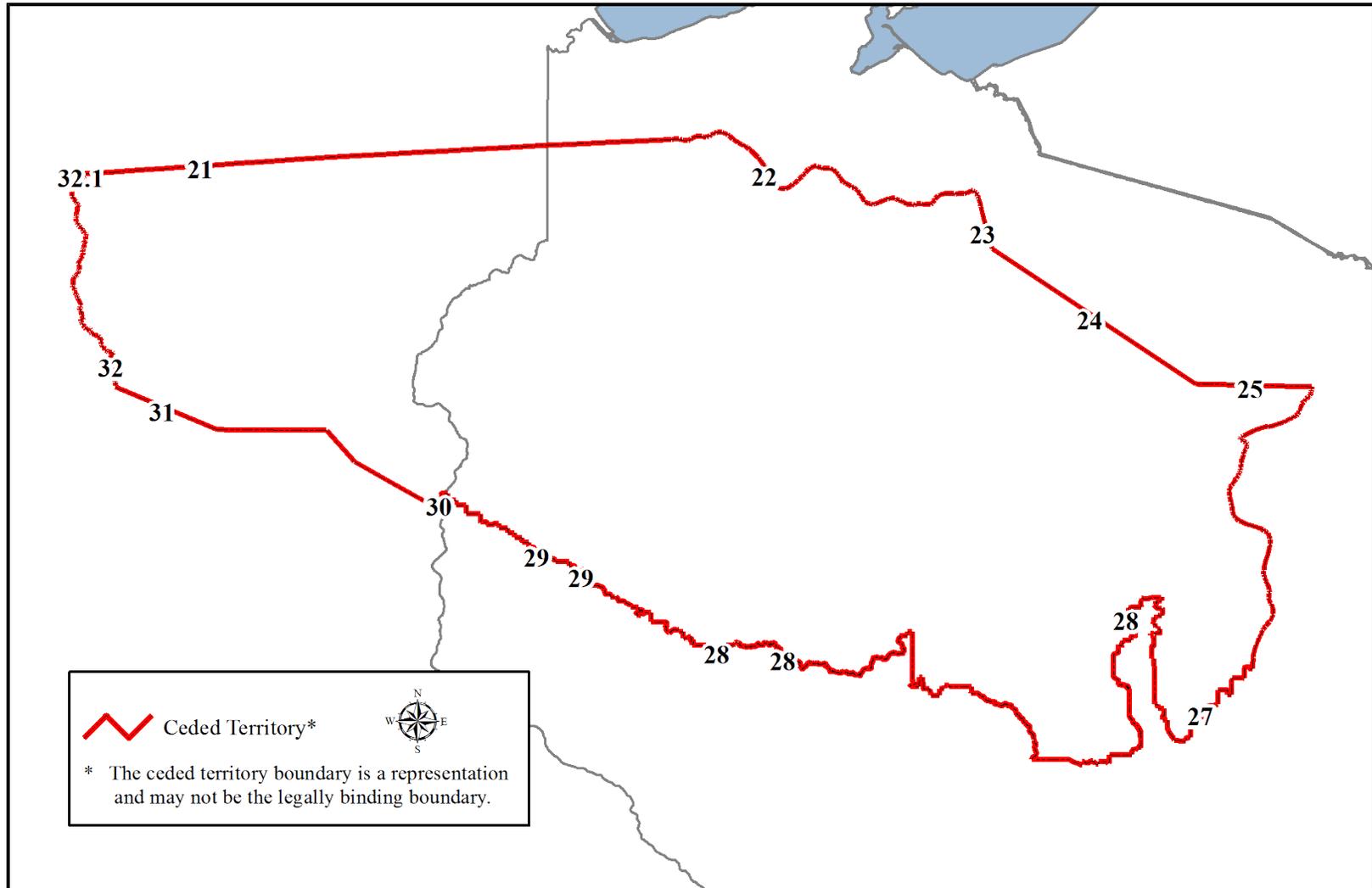


Figure 3. 1837 ceded territory GIS line segments. See Appendix B for detailed descriptions.





### **Acknowledgments**

Neil Kmiecik, Biological Services Director and Dawn White, Mining Specialist, provided helpful suggestions to improve earlier drafts of this report. Philomena Kebec, Policy Analyst, reviewed and commented on earlier drafts and provided significant research to locate the legal references cited in this report.

### **References**

Klugman, S. 1996. Great Lakes Indian Fish and Wildlife Commission Ceded Territory GIS Database. Great Lakes Indian Fish and Wildlife Commission, Odanah, Wisconsin, USA.

Gilbert, J. M. Falck, J. Coleman, and D. Olson. 2008. Guide to the southern boundary of the Wisconsin portion of the 1837 and 1842 ceded territories. Version 4.0. Administrative Report 13-07. Great Lakes Indian Fish and Wildlife Commission, Odanah, Wisconsin, USA.

## Appendix A. Metadata: Ceded Territories v2.1 Lines

- [Identification Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Metadata Reference Information](#)

### *Identification Information:*

#### *Citation:*

##### *Citation Information:*

*Publication Date:* 20150109

##### *Title:*

Ceded Territory Boundary (Treaties of 1836, 1837, 1842 and 1854)

*Geospatial Data Presentation Form:* vector digital data

*Online Linkage:* <http://data.glifwc.org/ceded>

### *Description:*

#### *Abstract:*

These data represent the boundaries of the 1836, 1837, 1842 and 1854 treaty areas of the Ojibwe ceded territories in Michigan, Minnesota and Wisconsin.

#### *Purpose:*

The purpose of these data are to provide a spatial representation of the ceded territory boundaries of the treaties of 1836, 1837, 1842 and 1854 as delineated in Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591, Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988), LCO v. Wisconsin, 775 F.Supp. 321 (W.D. Wis. 1991), 2000 Great Lakes Consent Decree, and 2007 Inland Consent Decree.

### *Time Period of Content:*

#### *Time Period Information:*

##### *Range of Dates/Times:*

*Beginning Date:* 20150109

*Ending Date:* 20150109

*Currentness Reference:* Unknown

### *Status:*

*Progress:* Complete

*Maintenance and Update Frequency:* None planned

*Spatial\_Domain:*

*Bounding\_Coordinates:*

*West\_Bounding\_Coordinate:* -94.397159

*East\_Bounding\_Coordinate:* -82.640296

*North\_Bounding\_Coordinate:* 48.365687

*South\_Bounding\_Coordinate:* 42.910991

*Keywords:*

*Theme:*

*Theme\_Keyword\_Thesaurus:* None

*Theme\_Keyword:* Treaty of 1836

*Theme\_Keyword:* Treaty of 1837

*Theme\_Keyword:* Treaty of 1842

*Theme\_Keyword:* Treaty of 1854

*Theme\_Keyword:* Ceded Territory

*Theme\_Keyword:* Chippewa

*Theme\_Keyword:* Ojibwe

*Theme:*

*Theme\_Keyword\_Thesaurus:* ISO 19115 Topic Categories

*Theme\_Keyword:* boundaries

*Place:*

*Place\_Keyword\_Thesaurus:* None

*Place\_Keyword:* Michigan

*Place\_Keyword:* Minnesota

*Place\_Keyword:* Wisconsin

*Access\_Constraints:* None

*Use\_Constraints:*

The Great Lakes Indian Fish and Wildlife Commission, its member tribes, its employees and agents assume no responsibility or liability for anyone's use of these data. By using these data, you agree that you are entirely responsible for your use of these data and that you will hold harmless the Great Lakes Indian Fish and Wildlife Commission, its member tribes, its employees and its authorized agents from any and all consequences, including all damages, costs, expenses, and attorneys fees, resulting from your use of the these data. The ceded territory boundary is a representation and may not be legally binding.

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* Great Lakes Indian Fish and Wildlife  
Commission

*Contact\_Person:* Miles Falck

*Contact\_Position:* Wildlife Biologist

*Contact\_Address:*

*Address\_Type:* mailing and physical

*Address:* 72682 Maple Street, P.O. Box 9

*City:* Odanah

*State\_or\_Province:* WI

*Postal\_Code:* 54861

*Country:* US

*Contact\_Voice\_Telephone:* 715.682.6619 ext.2124

*Contact\_Electronic\_Mail\_Address:* miles@glifwc.org

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* Great Lakes Indian Fish and Wildlife  
Commission

*Contact\_Person:* Miles Falck

*Contact\_Position:* Wildlife Biologist

*Contact\_Address:*

*Address\_Type:* mailing and physical

*Address:* 72682 Maple Street, P.O. Box 9

*City:* Odanah

*State\_or\_Province:* WI

*Postal\_Code:* 54861

*Country:* US

*Contact\_Voice\_Telephone:* 715.682.6619 ext.2124

*Contact\_Electronic\_Mail\_Address:* miles@glifwc.org

*Data\_Set\_Credit:* Great Lakes Indian Fish & Wildlife Commission

*Spatial\_Data\_Organization\_Information:*

*Direct\_Spatial\_Reference\_Method:* Vector

*Point\_and\_Vector\_Object\_Information:*

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* String

*Point\_and\_Vector\_Object\_Count:* 1020

*Spatial\_Reference\_Information:*

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*Longitude\_Resolution:* 8.983152841195215e-009

*Geographic\_Coordinate\_Units:* Decimal Degrees

*Geodetic\_Model:*

*Horizontal\_Datum\_Name:* D WGS 1984

*Ellipsoid\_Name:* WGS 1984

*Semi-major\_Axis:* 6378137.0

*Denominator\_of\_Flattening\_Ratio:* 298.257223563

*Entity\_and\_Attribute\_Information:*

*Detailed\_Description:*

*Entity\_Type:*

*Entity\_Type\_Label:* Ceded\_Territories\_v2\_1\_Lines

*Entity\_Type\_Definition:* Line segment of ceded territories.

*Entity\_Type\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* SHAPE

*Attribute\_Definition:* Feature geometry.

*Attribute\_Definition\_Source:* Esri

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Coordinates defining the features.

*Attribute:*

*Attribute\_Label:* SEGMENT\_ID

*Attribute\_Definition:* Sequential identifier for segment.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* TREATY

*Attribute\_Definition:* Year of treaty.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* FEATURE

*Attribute\_Definition:*

Feature category (road, waterbody, railroad ROW, straight line, etc).

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* FEAT\_LABEL

*Attribute\_Definition:* Feature name where available.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

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*Attribute\_Definition:* Source of feature label.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* NOTES

*Attribute\_Definition:* Notes on spatial feature.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* CT1836

*Attribute\_Definition:*

A binary value of whether or not the line feature is part of the boundary of the Treaty of 1836.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

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*Attribute\_Definition:*

A binary value of whether or not the line feature is part of the boundary of the Treaty of 1837.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* CT1842

*Attribute\_Definition:*

A binary value of whether or not the line feature is part of the boundary of the Treaty of 1842.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* CT1854

*Attribute\_Definition:*

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*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* MI

*Attribute\_Definition:*

A binary value of whether or not the line feature is within the state of Michigan.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* MN

*Attribute\_Definition:*

A binary value of whether or not the line feature is within the state of Minnesota.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* WI

*Attribute\_Definition:*

A binary value of whether or not the line feature is within the state of Wisconsin.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

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*Attribute\_Definition:*

A binary value of whether or not the line feature is disputed between the tribes and state of Michigan.

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*Attribute\_Definition:*

Legal reference used to identify location of the line segment.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* MAP\_REF

*Attribute\_Definition:*

Reference map used to identify location of line segment.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* DATA\_SRC

*Attribute\_Definition:*

Original source data of line segment.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* DATA\_RES

*Attribute\_Definition:*

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*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* METHOD

*Attribute\_Definition:* Method used to create the feature.

*Attribute\_Definition\_Source:* GLIFWC

*Attribute:*

*Attribute\_Label:* TREATYLANG

*Attribute\_Definition:*

Language in treaty used to identify location of the line segment.

*Attribute\_Definition\_Source:* GLIFWC

*Metadata\_Reference\_Information:*

*Metadata\_Date:* 20150109

*Metadata\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* Great Lakes Indian Fish and Wildlife  
Commission

*Contact\_Person:* Miles Falck

*Contact\_Position:* Wildlife Biologist

*Contact\_Address:*

*Address\_Type:* mailing and physical

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*City:* Odanah

*State\_or\_Province:* WI

*Postal\_Code:* 54861

*Country:* US

*Contact\_Voice\_Telephone:* 715.682.6619 ext.2124

*Contact\_Electronic\_Mail\_Address:* miles@glifwc.org

*Metadata\_Standard\_Name:* FGDC Content Standard for Digital Geospatial Metadata

*Metadata\_Standard\_Version:* FGDC-STD-001-1998

*Metadata\_Time\_Convention:* local time

*Metadata\_Access\_Constraints:*

None.

**Appendix B.** Detailed descriptions of ceded territory GIS line segments.

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
1	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features	Beginning at the mouth of Grand river of Lake Michigan on the north bank thereof, and following up the same to the line called for, in the first article of the treaty of Chicago of the 29th of August 1821,	
2	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	GLIFWC	straight line segment connecting coordinates from 2007 ICD	thence, in a direct line, to the head of Thunder-bay river,	
2.1	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	GLIFWC	legal reference and reference map used to identify segment endpoints		Straight line segment from last vertice of Thunder Bay River (NHD v2.20) to coordinates from 2007 ICD.
3	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features	thence with the line established by the treaty of Saganaw of the 24th of September 1819, to the mouth of said river,	
4	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	GLIFWC	straight line segment connecting coordinates from 2007 ICD		
5		U.S. v. Michigan, 471 F. Supp. 192 (W.D. Mich. 1979), Appendix 1	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features	thence northeast to the boundary line in Lake Huron between the United States and the British province of Upper Canada,	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
6	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 8	GLIFWC	georeferenced reference map used to draw straight line segment to international boundary		thence northeast to the boundary line in Lake Huron between the United States and the British province of Upper Canada,
7	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 8	NOAA Maritime Limits and Boundaries of United States of America 2013	legal reference and reference map used to select source data features		thence northwestwardly, following the said line, as established by the commissioners acting under the treaty of Ghent, through the straits, and river St. Mary's, to a point in Lake Superior north of the mouth of Gitchy Seebing, or Chocolate river,
8	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 8	GLIFWC	legal reference and reference map used to identify segment endpoints		
9	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 8-9	NOAA Maritime Limits and Boundaries of United States of America 2013	treaty language, legal reference and reference map used to select source data features		thence northwestwardly, following the said line, as established by the commissioners acting under the treaty of Ghent, through the straits, and river St. Mary's, to a point in Lake Superior north of the mouth of Gitchy Seebing, or Chocolate river,
10	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 9	GLIFWC (-87.352866 longitude WGS84)	treaty language, legal reference and reference map used to identify segment endpoints		thence south to the mouth of said river
11	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features		and up its channel to the source thereof,

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
11.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		Straight line from last vertice to coordinates from 2007 ICD.
12	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	GLIFWC	straight line segment connecting coordinates from 2007 ICD	thence, in a direct line to the head of the Skonawba river of Green bay,	
12.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		Straight line segment connecting shoreline of Wolf Lake NHD v2.20 to 2007 ICD coordinates.
13	2007 Inland Consent Decree	2007 Inland Consent Decree, Appendix A	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features	thence down the south bank of said river to its mouth,	
14	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 7	GLIFWC (45.776855 latitude WGS84)	treaty language, legal reference and reference map used to identify segment endpoints	thence, in a direct line, through the ship channel into Green bay, to the outer part thereof,	
14.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		extended shipping lane to latitude = 45.776855 (WGS84)
15	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 7	DOC, NOAA, NOS, OCS, Shipping Lanes in U.S. Waters	treaty language, legal reference and reference map used to select source data features	thence, in a direct line, through the ship channel into Green bay, to the outer part thereof,	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
16	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 7	USGS National Boundary Dataset (NBD) for Michigan 20140401 State or Territory FileGDB 10.1	treaty language, legal reference and reference map used to select source data features	thence south to a point in Lake Michigan west of the north cape, or entrance of Grand river,	
17	2000 Great Lakes Consent Decree	2000 Great Lakes Consent Decree, Figure 7	GLIFWC (43.058621 latitude WGS84)	treaty language, legal reference and reference map used to identify segment endpoints	and thence east to the place of beginning, at the cape aforesaid, comprehending all the lands and islands, within these limits, not hereinafter reserved.	
18	1985 Great Lakes Consent Order	U.S. v. Michigan, 471 F. Supp. 192 (W.D. Mich. 1979), Appendix 1	National Hydrography Dataset (NHD) v 2.20	legal reference and reference map used to select source data features		
19	1985 Great Lakes Consent Order	U.S. v. Michigan, 471 F. Supp. 192 (W.D. Mich. 1979), Appendix 1	GLIFWC (-87.139941 longitude WGS84)	legal reference and reference map used to identify segment endpoints		
20	1985 Great Lakes Consent Order	U.S. v. Michigan, 471 F. Supp. 192 (W.D. Mich. 1979), Appendix 1	USGS National Boundary Dataset (NBD) for Michigan 20140401 State or Territory FileGDB 10.1	legal reference and reference map used to select source data features		
21	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	legal reference, reference map and source data used to identify segment endpoints	The said Chippewa nation cede to the United States all that tract of country included within the following boundaries: Beginning at the junction of the Crow Wing and Mississippi rivers, between twenty and thirty miles above where the Mississippi is crossed by the forty-sixth parallel of north latitude, and running thence to the north point of Lake St. Croix, one of the sources of the St. Croix river;	Straight line segment between Crow Wing X Mississippi Rivers to Upper St. Croix Lake using NHD v2.20

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
22	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	digitized on screen using georeferenced Royce map as a guide at 1:100,000	thence to and along the dividing ridge between the waters of Lake Superior and those of the Mississippi, to the sources of the Ocha-sua-sepe a tributary of the Chippewa river;	
23	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	treaty language and reference map used to identify segment endpoints	thence to a point on the Chippewa river, twenty miles below the outlet of Lake De Flambeau;	
24	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	treaty language and reference map used to identify segment endpoints	thence to the junction of the Wisconsin and Pelican rivers	
25	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	treaty language and reference map used to identify segment endpoints	thence on an east course twenty-five miles	
26	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	digitized on screen using georeferenced Royce map as a guide at 1:100,000	thence southerly, on a course parallel with that of the Wisconsin river, to the line dividing the territories of the Chippewas and Menomonies;	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
27	Voigt treaty off-reservation conservation code (revised 10/2013) Sec. 3.27(1)(e): Guide to the southern boundary of the Wisconsin portion of the 1837 and 1842 ceded territories. Version 4.0. 2008. Great Lakes Indian Fish and Wildlife Commission. Odanah, Wisconsin, USA.	LCO v. Wisconsin, 775 F. Supp. 321 (W.D. Wis. 1991), Joint Exhibit 54	U.S. Census Bureau TIGER/Line Files, 1995	treaty language, legal reference and reference map used to select source data features	thence to the Plover Portage	
28	Voigt treaty off-reservation conservation code (revised 10/2013) Sec. 3.27(1)(e): Guide to the southern boundary of the Wisconsin portion of the 1837 and 1842 ceded territories. Version 4.0. 2008. Great Lakes Indian Fish and Wildlife Commission. Odanah, Wisconsin, USA.	LCO v. Wisconsin, 775 F. Supp. 321 (W.D. Wis. 1991), Joint Exhibit 54	U.S. Census Bureau TIGER/Line Files, 1995	treaty language, legal reference and reference map used to select source data features	thence along the southern boundary of the Chippewa country, to the commencement of the boundary line dividing it from that of the Sioux, half a days march below the falls on the Chippewa river;	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
28.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
28.2			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
29	Voigt treaty off-reservation conservation code (revised 10/2013) Sec. 3.27(1)(e): Guide to the southern boundary of the Wisconsin portion of the 1837 and 1842 ceded territories. Version 4.0. 2008. Great Lakes Indian Fish and Wildlife Commission. Odanah, Wisconsin, USA.	LCO v. Wisconsin, 775 F. Supp. 321 (W.D. Wis. 1991), Joint Exhibit 54	U.S. Census Bureau TIGER/Line Files, 1995	treaty language, legal reference and reference map used to select source data features	thence with said boundary line to the mouth of Wah-tap river, at its junction with the Mississippi;	
29.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
29.2			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
29.3			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
30			National Hydrography Dataset (NHD) v 2.20	St. Croix River was used to connect WT's Guide to CT v.4 to Treaty of 1837 in Minnesota		
31	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	treaty language and reference map used to identify segment endpoints	thence with said boundary line to the mouth of Wah-tap river, at its junction with the Mississippi;	
32	Treaty with the Chippewa, art. 1, July 29, 1837, 7 Stat. 536.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features	and thence up the Mississippi to the place of beginning.	
32.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		Straight line segment from NHD v2.20 Mississippi River line to flowline intersection of Mississippi River and Crow Wing River.
33	Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591.		NOAA Maritime Limits and Boundaries of United States of America 2013	treaty language, legal reference and reference map used to select source data features	thence up said Lake Superior, to the mouth of the St. Louis, or Fond du Lac river (including all the islands in said lake);	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
34	Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	National Hydrography Dataset (NHD) v 2.20	treaty language, legal reference and reference map used to select source data features	thence up said Lake Superior, to the mouth of the St. Louis, or Fond du Lac river (including all the islands in said lake);	
35	Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	U.S. Census Bureau TIGER/Line Files, 1994	treaty language, legal reference and reference map used to select source data features	thence up said river to the American Fur Company's trading post, at the southwardly bend thereof, about 22 miles from its mouth;	
36	Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	U.S. Census Bureau TIGER/Line Files, 1994	treaty language, legal reference and reference map used to select source data features	thence south to intersect the line of the treaty of 29th July 1837, with the Chippewas of the Mississippi;	
37	Voigt treaty off-reservation conservation code (revised 10/2013) Sec. 3.27(1)(e): Guide to the southern boundary of the Wisconsin portion of the 1837 and 1842 ceded territories. Version 4.0. 2008. Great Lakes Indian Fish and Wildlife Commission. Odanah, Wisconsin, USA.	LCO v. Wisconsin, 775 F. Supp. 321 (W.D. Wis. 1991), Joint Exhibit 54	U.S. Census Bureau TIGER/Line Files, 1995	treaty language, legal reference and reference map used to select source data features	thence northeastwardly, along the boundary line, between the Chippewas and Menomonees, to its eastern termination, (established by the treaty held with the Chippewas, Menomonees, and Winnebagoes, at Butte des Morts, August 11th 1827) on the Skonawby river of Green Bay;	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
37.05			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
37.1			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
37.2			GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
37.3			National Hydrography Dataset (NHD) v 2.20	Brule River was used to connect WI's Guide to CT v.4 to Treaty of 1842 in Michigan		
38	Treaty with the Chippewa, art. 1, Oct. 4, 1842, 7 Stat. 591.	Indian Land Cessions in the United States, compiled by Charles C. Royce. Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896-97. (Part 2)	GLIFWC	treaty language and reference map used to identify segment endpoints	thence northeastwardly, along the boundary line, between the Chippewas and Menomonees, to its eastern termination, (established by the treaty held with the Chippewas, Menomonees, and Winnebagoes, at Butte des Morts, August 11th 1827) on the Skonawby river of Green Bay;	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
39	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	U.S. Census Bureau TIGER/Line Files, 1994	treaty language, legal reference and reference map used to select source data features	The Chippewas of Lake Superior hereby cede to the United States all the lands heretofore owned by them in common with the Chippewas of the Mississippi, lying east of the following boundary-line, to wit: Beginning at a point, where the east branch of Snake River crosses the southern boundary-line of the Chippewa country, running thence up the said branch to its source,	
40	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	GLIFWC	treaty language, legal reference and reference map used to select source data features	thence nearly north, in a straight line, to the mouth of East Savannah River,	
41	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	U.S. Census Bureau TIGER/Line Files, 1994	treaty language, legal reference and reference map used to select source data features	thence up the St. Louis River to the mouth of East Swan River,	
42	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	U.S. Census Bureau TIGER/Line Files, 1994	treaty language, legal reference and reference map used to select source data features	thence up the East Swan River to its source,	
42.1	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	GLIFWC	treaty language, legal reference and reference map used to identify segment endpoints		
43	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	GLIFWC	treaty language, legal reference and reference map used to select source data features	thence in a straight line to the most westerly bend of Vermillion River,	

Segment ID	Legal Reference	Map Reference	Data Source	Mapping Method	Treaty Language	Notes
44	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	U.S. Census Bureau TIGER/Line Files, 1994	treaty language, legal reference and reference map used to select source data features	and thence down the Vermillion River to its mouth.	
45	Grand Portage v. Minnesota, No. 4-85-1090 (D. Minn. 1988).	1854 Treaty Boundary ( <a href="http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf">http://www.1854treatyauthority.org/documents/maps/map-detailed.pdf</a> )	NOAA Maritime Limits and Boundaries of United States of America 2013	treaty language, legal reference and reference map used to select source data features		