

Parcel Ownership and Geologic Map Index GIS Dataset of North Country National Scenic Trail Gaps 634 and 659 and Vicinity, Minnesota (NPS, GRD, GRSI, NOCO, NOCO digital map) adapted from a U.S. Geological Survey 3DHP Hydrography dataset by Jonesi, Thunen, and Buto (2024), St. Louis County Tax Parcel Data by St. Louis County Government (2025), Lake County Tax Parcel Data by Minnesota Geospatial Commons (2025), and a North Country National Scenic Trail KMZ dataset by the North Country Trail Association (2025).

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What does this data set describe?

Title:

Parcel Ownership and Geologic Map Index GIS Dataset of North Country National Scenic Trail Gaps 634 and 659 and Vicinity, Minnesota (NPS, GRD, GRSI, NOCO, NOCO digital map) adapted from a U.S. Geological Survey 3DHP Hydrography dataset by Jonesi, Thunen, and Buto (2024), St. Louis County Tax Parcel Data by St. Louis County Government (2025), Lake County Tax Parcel Data by Minnesota Geospatial Commons (2025), and a North Country National Scenic Trail KMZ dataset by the North Country Trail Association (2025).

Abstract:

The Parcel Ownership and Geologic Map Index GIS Dataset of North Country National Scenic Trail Gaps 634 and 659 and Vicinity, Minnesota is composed of GIS data layers and GIS tables, and is available in the following GSRI-supported GIS data formats: 1.) an ESRI file geodatabase (noco_minnesota_gaps_634_659.gdb) and 2.) an Open Geospatial Consortium (OGC) geopackage (noco_minnesota_gaps_634_659.gpkg), and 3.) a 2.2 KMZ/KML file (noco_minnesota_gaps_634_659.kmz) for use in Google Earth, however, this format version of the map is limited in data layers presented. The file geodatabase format is supported with a ArcGIS Pro 3.X map file (.mapx) file (NOCO_Minnesota_Gaps_634_and_659_Parcel_Ownership_and_Geologic_Map_Index.mapx). The OGC geopackage is supported with a QGIS project (.qgz) file (NOCO_Minnesota_Gaps_634_and_659_Parcel_Ownership_and_Geologic_Map_Index.qgz) with limited symbology. In addition to the GIS data and supporting map file, two additional files are included: 1.) a readme file (noco_gsri_readme.pdf) and 2.) a user-friendly FAQ PDF version of the metadata (noco_gaps_634_659_metadata_faq.pdf). The noco_grsi_readme.pdf provides a description of the North Country National Scenic Trail Gaps 634 and 659 data package and is a good entry point for using the GIS data. The data were completed as a component of the Geologic and Soil Resources Inventory (GSRI) program, a National Park Service (NPS) Inventory and Monitoring (I&M) Division funded program that is administered by the NPS Geologic Resources Division (GRD). For a complete listing of GSRI products visit the GSRI publications webpage: <https://www.nps.gov/subjects/geology/geologic-resources-inventory-products.htm>. For more information about the Geologic and Soil Resources Inventory Program visit the GSRI webpage: <https://www.nps.gov/subjects/geology/gri.htm>. At the bottom of that webpage is a "Contact Us" link if you need additional information. You may also directly contact the program coordinator, Rebecca Port (rebecca_port@nps.gov) for support or inquiries about this data. Detailed information concerning the sources used for this dataset and their contribution to the GSRI product are listed in the Source Citation section(s) of this metadata record (noco_gaps_634_659_metadata.txt or noco_gaps_634_659_metadata_faq.pdf). This dataset integrates spatial data from multiple sources with varying scales and resolutions, including county parcel data (variable scale) and USGS 3D Hydrography Program data. The data are not uniform in scale and should be used with consideration of the original source limitations. Users of this data should thus not assume the location of features is exactly where they are portrayed in ArcGIS Pro or other software used to display this dataset.

Supplemental Information:

The data layers (feature classes) that comprise the Parcel Ownership and Geologic Map Index GIS Dataset of North Country National Scenic Trail Gaps 634 and 659 and Vicinity, Minnesota include: USGS 3DHP Hydro Areas (hydro_areas), USGS 3DHP Hydro Lines (hydro_lines), Lake and St. Louis County Parcels (parcel_areas), Trail Trace (noco_trail), and Geologic Map Footprints (noco_map_footprints). In addition to the data layers, there is a Source Map Information Table (ncmnmap) containing references for all sources used. For the KML/KMZ format only some of the data layers are available. The KML/KMZ format contains on-line links to the GSRI program and its products, the GSRI NOCO readme document, and the FAQ metadata pertaining to this dataset/map. The GIS data projection is NAD83, UTM Zone 15N. The KML/KMZ format the data is projected upon export to WGS84 Geographic, the native coordinate system used by Google Earth.

1. How should this data set be cited?

National Park Service (NPS) Geologic and Soil Resources Inventory (GSRI) program, 20251216, Parcel Ownership and Geologic Map Index GIS Dataset of North Country National Scenic Trail Gaps 634 and 659 and Vicinity, Minnesota (NPS, GRD, GRSI, NOCO, NOCO digital map) adapted from a U.S. Geological Survey 3DHP Hydrography dataset by Jonesi, Thunen, and Buto (2024), St. Louis County Tax Parcel Data by St. Louis County Government (2025), Lake County Tax Parcel Data by Minnesota Geospatial Commons (2025), and a North Country National Scenic Trail KMZ dataset by the North Country Trail Association (2025)..

2. What geographic area does the data set cover?

West_Bounding_Coordinate: -92.56
East_Bounding_Coordinate: -91.35
North_Bounding_Coordinate: 48.16
South_Bounding_Coordinate: 47.53

3. What does it look like?

Not applicable
No browse graphic provided

4. Does the data set describe conditions during a particular time period?

Calendar_Date: 06-Jan-2026
Currentness_Reference: ground condition

5. What is the general form of this data set?

Geospatial_Data_Presentation_Form: map

6. How does the data set represent geographic features?

- a. **How are geographic features stored in the data set?**
- b. **What coordinate system is used to represent geographic features?**

Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 15
Transverse_Mercator:
Scale_Factor_at_Central_Meridian: 0.999600
Longitude_of_Central_Meridian: -87.0
Latitude_of_Projection_Origin: 0.000000
False_Easting: 500000.000000
False_Northing: 0.000000

Planar coordinates are encoded using coordinate pair
Abscissae (x-coordinates) are specified to the nearest 0.000007
Ordinates (y-coordinates) are specified to the nearest 0.000007
Planar coordinates are specified in meters

The horizontal datum used is North American Datum of 1983.
The ellipsoid used is Geodetic Reference System 80.
The semi-major axis of the ellipsoid used is 6378137.000000.
The flattening of the ellipsoid used is 1/298.257222.

7. **How does the data set describe geographic features?**

Entity_and_Attribute_Overview:
Feature class and table attribute field parameters, definitions and domains were custom developed for this project.
Entity_and_Attribute_Detail_Citation: NA

Who produced the data set?

1. **Who are the originators of the data set?** (may include formal authors, digital compilers, and editors)
 - o National Park Service (NPS) Geologic and Soil Resources Inventory (GSRI) program
2. **Who also contributed to the data set?**

James R. Chappell, Ron Karpilo, Cullen Scheland, Trista Thornberry-Ehrlich, and Tim Henderson (NPS Geologic and Soil Inventory Program)

3. **To whom should users address questions about the data?**

Rebecca Port
National Park Service Geologic Resources Division

Inventory Coordinator
1 Denver Federal Center, Bldg 50
Denver, Colorado 80225
USA

(720) 425-2320 (voice)
rebecca_port@nps.gov

Hours_of_Service: 8:00 a.m. to 5:00 p.m. (MST), Monday - Friday

Why was the data set created?

The data are intended to assist NPS personnel in the protection and management of North Country National Scenic Trail.

How was the data set created?

1. From what previous works were the data drawn?

USGS_3DHP (source 1 of 4)

Jonesi, A.B., Thunen, D.R., and Buto, S.G., 2024, USGS 3D Hydrography Program (3DHP) Data Collaboration Announcement Projects from Fiscal Year 2024 to Present: Data Release U.S. Geological Survey 3DHP data release, U.S. Geological Survey (USGS), Reston, Virginia.

Type_of_Source_Media: online

Source_Scale_Denominator: 24000

Source_Contribution:

Source data were downloaded from the original provider's website and imported into a GIS environment. The data were projected to a Universal Transverse Mercator (UTM) coordinate system referenced to the North American Datum of 1983 (NAD83) to ensure consistency with other project datasets. The data were then clipped to the project area of interest. See process step section for additional information on how this source was used.

Lake County Tax Parcel Data (source 2 of 4)

Commons, Minnesota Geospatial , 2025, Lake County, Minnesota Tax Parcel Data: Data Release Minnesota Geospatial Commons, Minnesota Geospatial Commons, Lake County, Minnesota.

Type_of_Source_Media: online

Source_Contribution:

Source data were downloaded from the original provider's website and imported into a GIS environment. The data were projected to a Universal Transverse Mercator (UTM) coordinate system referenced to the North American Datum of 1983 (NAD83) to ensure

consistency with other project datasets. The data were then clipped to the project area of interest. See process step section for additional information on how this source was used.
St. Louis Tax Parcel Data (source 3 of 4)

St. Louis County Government, 2025, St. Louis County, Minnesota Tax
Parcel Data: Data Release St. Louis County Government, St. Louis
County Government, St. Louis County, Minnesota.

Type_of_Source_Media: online

Source_Contribution:

Source data were downloaded from the original provider's website and imported into a GIS environment. The data were projected to a Universal Transverse Mercator (UTM) coordinate system referenced to the North American Datum of 1983 (NAD83) to ensure consistency with other project datasets. The data were then clipped to the project area of interest. See process step section for additional information on how this source was used.
NCTA_Trail (source 4 of 4)

North Country Trail Association, 2025, North Country National Scenic
Trail Trace Feature Service: Data Release North Country Trail
Association data release, North Country Trail Association (NCTA),
Lowell, Michigan.

Type_of_Source_Media: online

Source_Contribution:

Source data were downloaded from the original provider's website and imported into a GIS environment. The data were projected to a Universal Transverse Mercator (UTM) coordinate system referenced to the North American Datum of 1983 (NAD83) to ensure consistency with other project datasets. The data were then clipped to the project area of interest. See process step section for additional information on how this source was used.

2. **How were the data generated, processed, and modified?**

Date: 06-Jan-2026 (process 1 of 1)

Attribute data were reviewed and modified to improve consistency and usability across the dataset. This included standardizing field names, data types, and coded values; removing duplicate or extraneous attributes; and populating or correcting attribute values where source documentation allowed. USGS 3DHP data was clipped to the project area of interest. Quality control checks were performed to identify missing or invalid attribute values, geometry errors, and inconsistencies between attributes and spatial features. Errors identified during quality control were corrected where possible. Parcel data was clipped to include parcels intersecting gap areas and modified to remove private information and fields were thinned to only convey ownership and parcel IDs. Geologic map footprints were converted or digitized from geologic map data intersecting gap areas and attributed with relevant publication information. KML/KMZ, OGC GeoPackage, and QGIS project files were produced from the finalized file geodatabase and ArcGIS Pro map document. No changes were made to the fundamental meaning or intended use of the source data.

Person who carried out this activity:

Rebecca Port
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Hours_of_Service: 8:00 a.m. to 5:00 p.m. (MST), Monday - Friday

Data sources used in this process:

- USGS_3DHP, USGS_3DEP, Kalamazoo County Tax Parcel Data, NRCS_SSURGO, NCTA_Trail, NPS_Admin_Boundaries

3. **What similar or related data should the user be aware of?**

National Park Service Geologic and Soil Resources Inventory (GSRI) program, 20260106, Metadata for the Parcel Ownership and Geologic Map Index GIS Dataset of North Country National Scenic Trail Gaps 634 and 659 and Vicinity, Minnesota (NPS, GRD, GRSI, NOCO, NOCO digital map).

How reliable are the data; what problems remain in the data set?

1. **How well have the observations been checked?**

Feature and table attribution was derived and checked with the source map(s). Attribution was checked (QCd) for errors. Users of this data are advised to FULLY and CAREFULLY READ the "DISTRIBUTION LIABILITY" section of this metadata before using the data.

2. **How accurate are the geographic locations?**

Horizontal positional accuracy varies by data source and reflects the original accuracy of the contributing datasets. County parcel data were obtained from local government sources and vary in positional accuracy and scale by jurisdiction; no independent accuracy assessment was performed. Hydrographic features were sourced from the U.S. Geological Survey 3D Hydrography Program (3DHP) and reflect the positional accuracy of the underlying elevation and imagery used in their compilation. No additional horizontal accuracy assessment was conducted for the compiled dataset, and users should consult the original source metadata and apply individual layers in accordance with their intended scale and accuracy.

3. **How accurate are the heights or depths?**

No vertical coordinates are present in this GSRI digital dataset.

4. **Where are the gaps in the data? What is missing?**

All data is considered complete to the extent of the source map(s).

5. **How consistent are the relationships among the observations, including topology?**

GIS data in ESRI file geodatabase, OGC geopackage, and 2.2 KML/KMZ file formats.

How can someone get a copy of the data set?

Are there legal restrictions on access or use of the data?

Access_Constraints: None

Use_Constraints:

This dataset integrates spatial data from multiple sources with varying scales and resolutions, including county parcel data (variable scale) and USGS 3D Hydrography Program data. The data are not uniform in scale and should be used with consideration of the original source limitations. Users of this data should thus not assume the location of features is exactly where they are portrayed in ArcGIS Pro or other software used to display this dataset.

1. **Who distributes the data set?** (Distributor 1 of 1)

Rebecca Port
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Hours_of_Service: 8:00 a.m. to 5:00 p.m. (MST), Monday - Friday

Contact_Instructions:

GSRI data are available at: <http://irma.nps.gov/App/Reference/Search>

2. **What's the catalog number I need to order this data set?**

3. What legal disclaimers am I supposed to read?

The National Park Service shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data and related graphics are not legal documents and are not intended to be used as such.

The information contained in these data is dynamic and may change over time. The data are not better than the original sources from which they were derived. It is the responsibility of the data user to use the data appropriately and consistent within the limitations of geospatial data in general and these data in particular. The related graphics are intended to aid the data user in acquiring relevant data; it is not appropriate to use the related graphics as data.

The National Park Service gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data. It is strongly recommended that these data are directly acquired from an NPS server and not indirectly through other sources which may have changed the data in some way. Although these data have been processed successfully on a computer system at the National Park Service, no warranty, expressed or implied is made regarding the utility of the data on another system or for general scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies to both to individual use of the data and aggregate use with other data.

4. How can I download or order the data?

- **Availability in digital form:**

Data format: GDB (version ArcGIS Pro 3.0) GIS (file geodatabase format) data package with a Pro map (.mapx) file
(noco_gsri_mn_gaps_gdb_pro.zip) Size: 9.2

Network links: NPS Data Store, <https://irma.nps.gov/DataStore/>

Data format: GPKG (version OGC geopackage) GIS (geopackage format) data package with a QGIS project (.qgz) file
(noco_gsri_mn_gaps_gpkg.zip) Size: 9.57

Network links: NPS Data Store, <https://irma.nps.gov/DataStore/>

Data format: KML/KMZ (version 2.2) Google Earth (kml/kmz format) data package (noco_gsri_mn_gaps_kml.zip) Size: 5.33

Network links: NPS Data Store, <https://irma.nps.gov/DataStore/>

Data format: PDF (version 9) GIS Readme Document Size: 0.1

Network links: NPS Data Store, <https://irma.nps.gov/DataStore/>

Data format: PDF (version 9) FAQ Metadata File Size: 98.3

Network links: NPS Data Store, <https://irma.nps.gov/DataStore/>

- **Cost to order the data:** None
- **Special instructions:**

Search for the GSRI map, then download the GSRI data at:
<https://irma.nps.gov/DataStore/>

Who wrote the metadata?

Dates:

Last modified: 06-Jan-2026

Metadata author:

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Metadata standard:

FGDC Content Standards for Digital Geospatial Metadata (FGDC-STD-001-1998)

Metadata extensions used:

- [<http://www.fgdc.gov/standards/>](http://www.fgdc.gov/standards/)

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