



ND GIS Technical Committee Update

ND GIS Users Conference
September 28, 2015
Bob Nutsch
Information Technology Department
State of North Dakota



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Agenda

Executive GISTC Report

Purpose

Recent Activities

Current & Upcoming Work

Other Stuff

Roundtable Discussion

A scenic view of a forest with a stream and a waterfall. The foreground shows a calm stream reflecting the surrounding greenery. In the background, a waterfall cascades over rocks, surrounded by dense evergreen trees. The overall atmosphere is peaceful and natural.

Purpose

A scenic landscape featuring a waterfall cascading over a rocky cliff. The foreground is dominated by the dark, textured branches of evergreen trees. The background shows a dense forest of tall, thin evergreens under a bright sky. The overall scene is natural and serene.

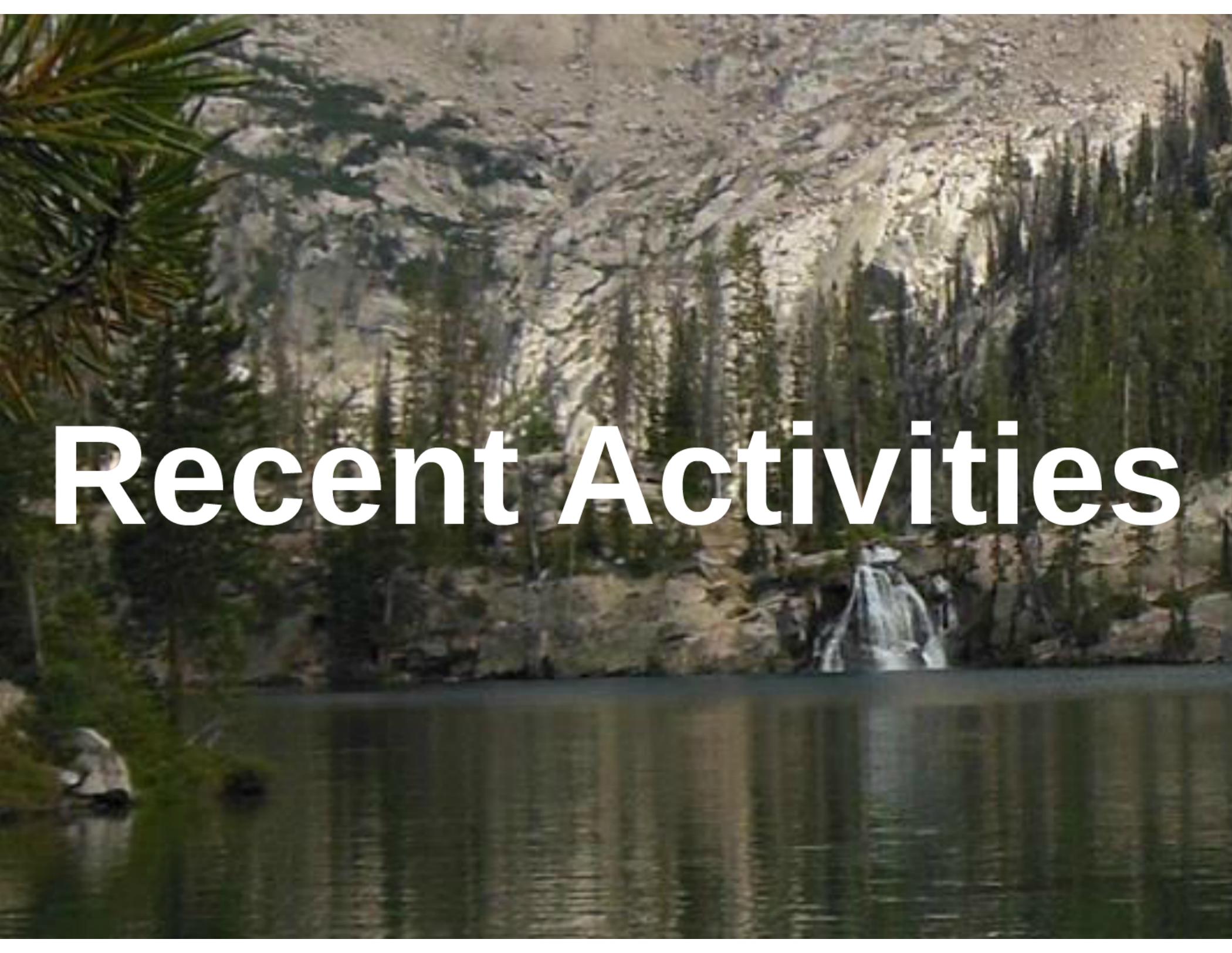
Why Are We Here??

- An overview of GIS activities within state government
- An opportunity for you to provide feedback to the Executive GISTC
- Executive GISTC – 13 agencies

Executive GISTC

- State Water Commission – Rod Bassler
- Dept. of Health – Ann Fritz
- Dept. of Transportation – Brian Bieber
- Game and Fish – Brian Hosek
- Geological Survey – Elroy Kadrmas
- Parks and Recreation – Chris Dirk
- Information Technology Department – Bob Nutsch
- Department of Trust Lands* – Jayden Pascua
- Public Service Commission* – Matt Fischer
- Oil & Gas Division* – Brock Wahl
- Dept. Of Emergency Services* – Phil Peterschick
- Dept. of Agriculture* – Jim Hansen
- Army National Guard* - Jeremy Hutchinson





Recent Activities

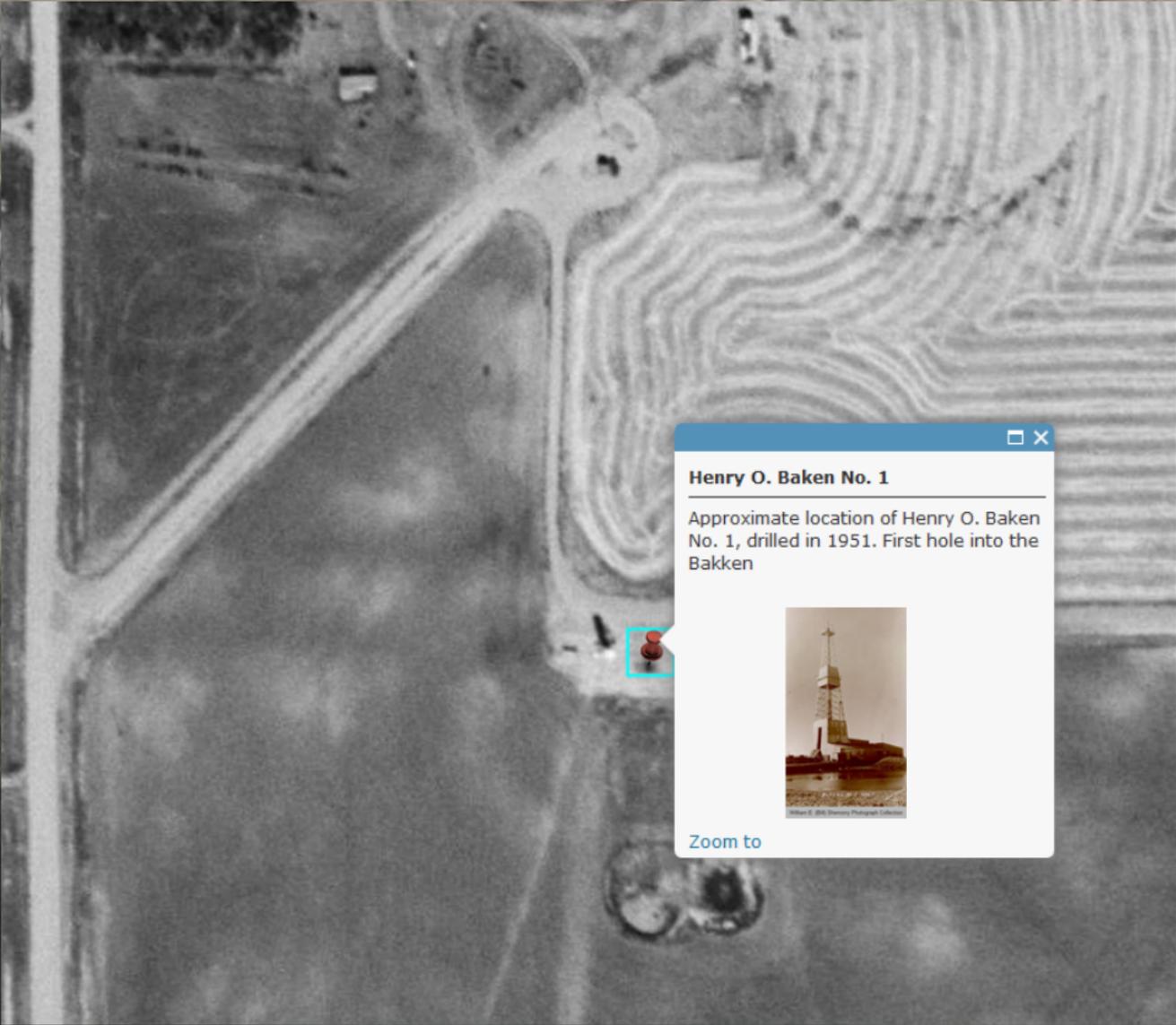
Historical Imagery

- 1957-1962
- 1.25-foot pixel resolution
- Aerial Photography Field Office scans at 1200 DPI
- State Water Commission georeferences
- All counties have been processed
- Slow going - missing files
- Next steps
 - Post existing counties to the Hub
 - Document/purchase missing files

Caution:

- Photos have been georeferenced with a minimum number of data points.
- They have not been rectified
- There will be photo anomalies
- There will be mis-matches between photos





Henry O. Bakken No. 1

Approximate location of Henry O. Bakken No. 1, drilled in 1951. First hole into the Bakken



Zoom to

Visual ND

- ArcGIS Online
- Agencies directly/indirectly use - publish their content
- Company hired through the State IT Vendor Pool:
 - develop datasets, maps, applications
 - provide training & workshops
 - provide mentorship
 - provide administrative assistance

Interns

- Part-time summer and school year
- Data maintenance
- Game and Fish
- State Water Commission
- Information Technology Department

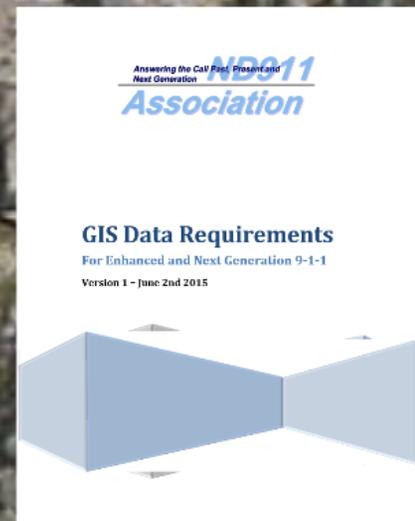


An aerial photograph of a mountain valley. The foreground is filled with a dense forest of tall, thin evergreen trees. The middle ground shows a rocky, sloping hillside. The upper part of the valley is a wide, flat area covered in light-colored rocks and debris, with several irregular patches of snow or ice scattered across it. The overall scene is rugged and mountainous.

Current & Upcoming Work

NG9-1-1

- GISTC Working Group
 - GISTC + DES + NDACo
- Data workflow
 - Update frequency
 - Horizontal accuracy



System Upgrades

- Standard Things
 - ArcGIS Server
 - FME Server
 - Geodatabase
- Responsive design for mobile
 - Hub Explorer 
 - Data Download 
- Overhaul!
 - Visual ND
 - Hub Data Portal

North Dakota Hub Explorer

Enter Address

52

McLean

Sheridan

Mercer

Oliver

Burleigh

BISMARCK

83

Morton

0 15 30mi

Move Mouse for Coordinates

www.nd.gov



Step 1: Select Extent

Clipping Method:

- Full Extent
- Draw Boundary
- County Boundary

Full extent of data will be used

Step 2: Set Output Parameters

Coordinate System:

NAD83 North Dakota State Planes, So

Format:

Esri Shapefile (SHP)

Layers to Download:

- Abandoned Mines
- Airport Runways
- Airports
- Ambulance Service Areas
- Ambulance Service Locations
- Antena Structures
- Aquifers

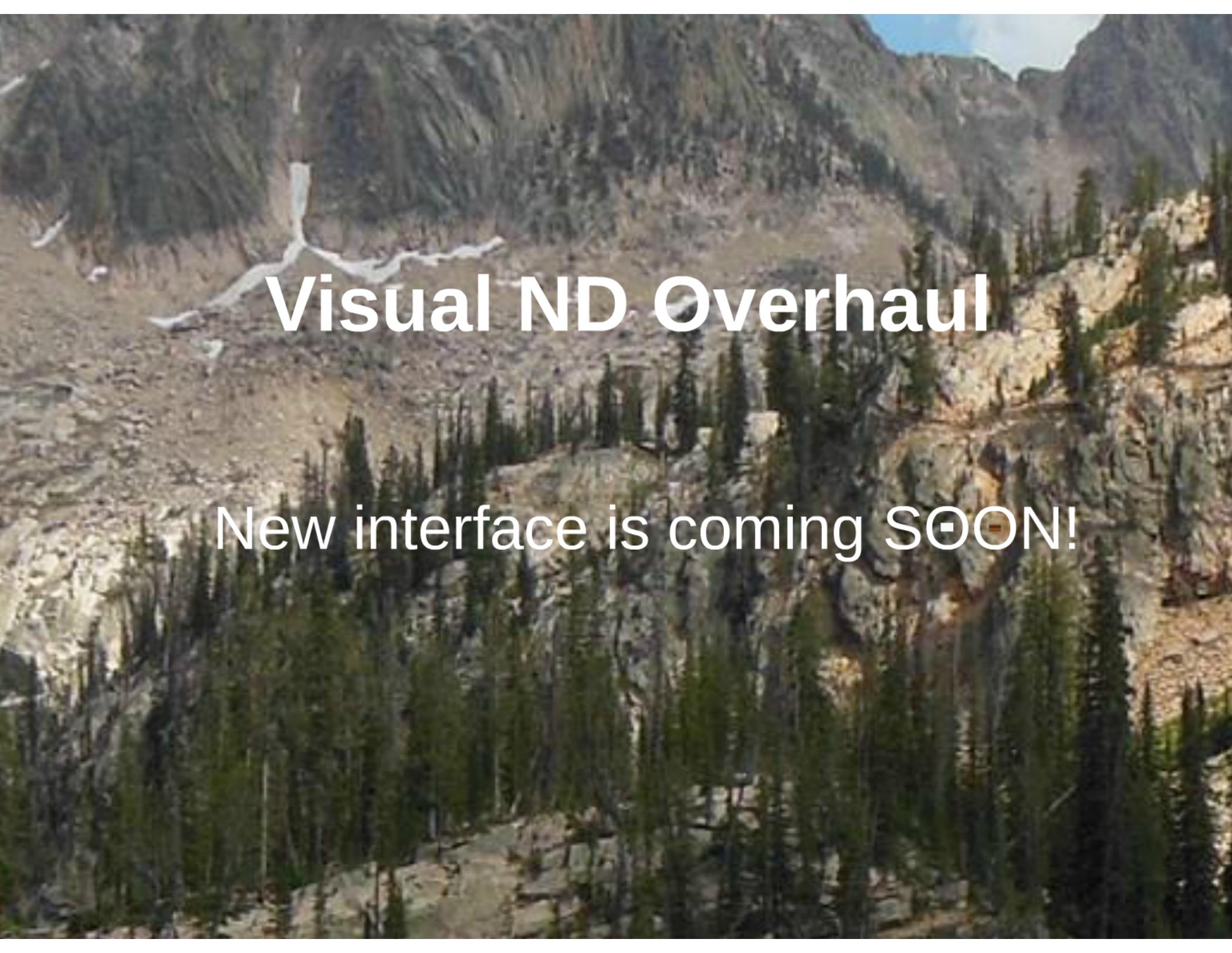
Step 3: Email Resulting Data

Email Address:

Get Data

System Upgrades

- Standard Things
 - ArcGIS Server
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 - Geodatabase
- Responsive design for mobile
 - Hub Explorer 
 - Data Download 
- Overhaul!
 - Visual ND
 - Hub Data Portal

An aerial photograph of a mountain valley. In the upper left, a river winds through a rocky, sparsely forested area. The middle and lower portions of the image are dominated by a dense forest of evergreen trees. The background shows rugged, rocky mountain peaks under a clear blue sky.

Visual ND Overhaul

New interface is coming SOON!



State Agency Maps and Other Resources



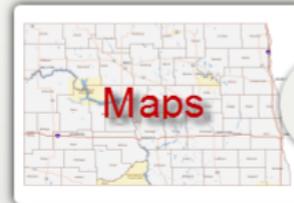
Visual ND - Applications



Visual ND - Data



Visual ND - Documents



Visual ND - Maps

Visual ND is a portal to North Dakota state agency geospatial data and information. Explore this site by clicking on the thumbnails above.

Additional geospatial data and information are available from the [Hub Data Portal](#).



north dakota
VISUAL ND



Find Applications, Maps, Data and Documents.

Click on the magnifying glass to see all the content

Applications **Maps** Data Documents x

Boating Access Sites

Application

ND Game and Fish Department Boating Access Sites

Energy Impact Grant Funding Maps

Application

A visual representation of requested and awarded grant funds for the current biennium.

Fall School Enrollment Count Change

Application

Fish Stocking History



Energy Impact Grant Funding Maps

By jadamsND

Tags: North Dakota, DTL, grants, application, awards, City, City Fire Department, Airport, Higher Education, Fire District, School Districts, townships, County, EMS, Park District

Last Modified: 1/8/2015

Hub Data Portal Overhaul

- Available Q4
- Focus on data and news
- Easier to use



Our old friend...

North Dakota **nd.gov** Official Portal for North Dakota State Government

north dakota GIS HUB DATA PORTAL

Home | Contact us | Links | About | Help

Username Password Login

What?

Where?





- Any -

[Reset](#) [Advanced](#) [Options](#)

Categories

- Applications
- Communications
- Ecological
- Elevation

Show map

Welcome to the North Dakota GIS Hub Data Portal

The NDGIS Hub Data Portal can be used to find downloadable GIS data, GIS web services, and GIS applications using geographic extents, searching by keywords, browsing or searching within categories, or some combination of all. Data can be viewed using the built-in map viewer or using Google Earth. Maps and descriptive information can be sent to others via email. The GEORSS can be used to become aware when new information is added or existing information is updated.

Featured Data or Application

▸ **US Fish and Wildlife Service 1996 Landcover**

In 1996, the US Fish and Wildlife Service (FWS), Region 6 Habitat and Population Evaluation Team, initiated a pilot project to evaluate the potential to use Thematic Mapper satellite imagery to map u

▸ ...more...



New - part of the main page...

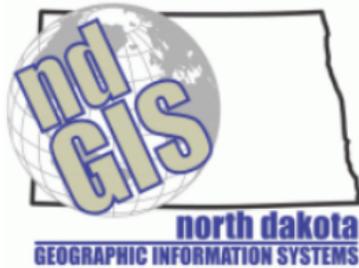
Welcome to the North Dakota GIS Hub Portal

This is where you will find North Dakota geospatial data and information. The contents of this site are managed by the North Dakota GIS Technical Committee.

Find data



New - part of a data page...



ND GIS Hub

The NDGIS Hub Data Portal can be used to find downloadable GIS data, GIS web services, and GIS applications using geographic extents, searching by keywords, browsing or searching within categories...

Social

License

Other (Public Domain)

Legislative Districts

North Dakota Legislative Districts, adopted November 9, 2011 from House Bill 1473, of the 62nd Legislative Assembly of North Dakota, Special Session, which commenced November 7, 2011.

Data and Resources

-  **Data Table**
Tabular data of legislative districts in North Dakota Open With ▾ Download
-  **Download**
Download data in the format and coordinate system of your choosing Visit page
-  **Full ISO Metadata**
ISO 19115 metadata Download
-  **Web Services**
Esri REST with links to JSON, WMS, WFS, KML Open With ▾ Visit page
-  **Thumbnail**
Display an image of this data Visit page

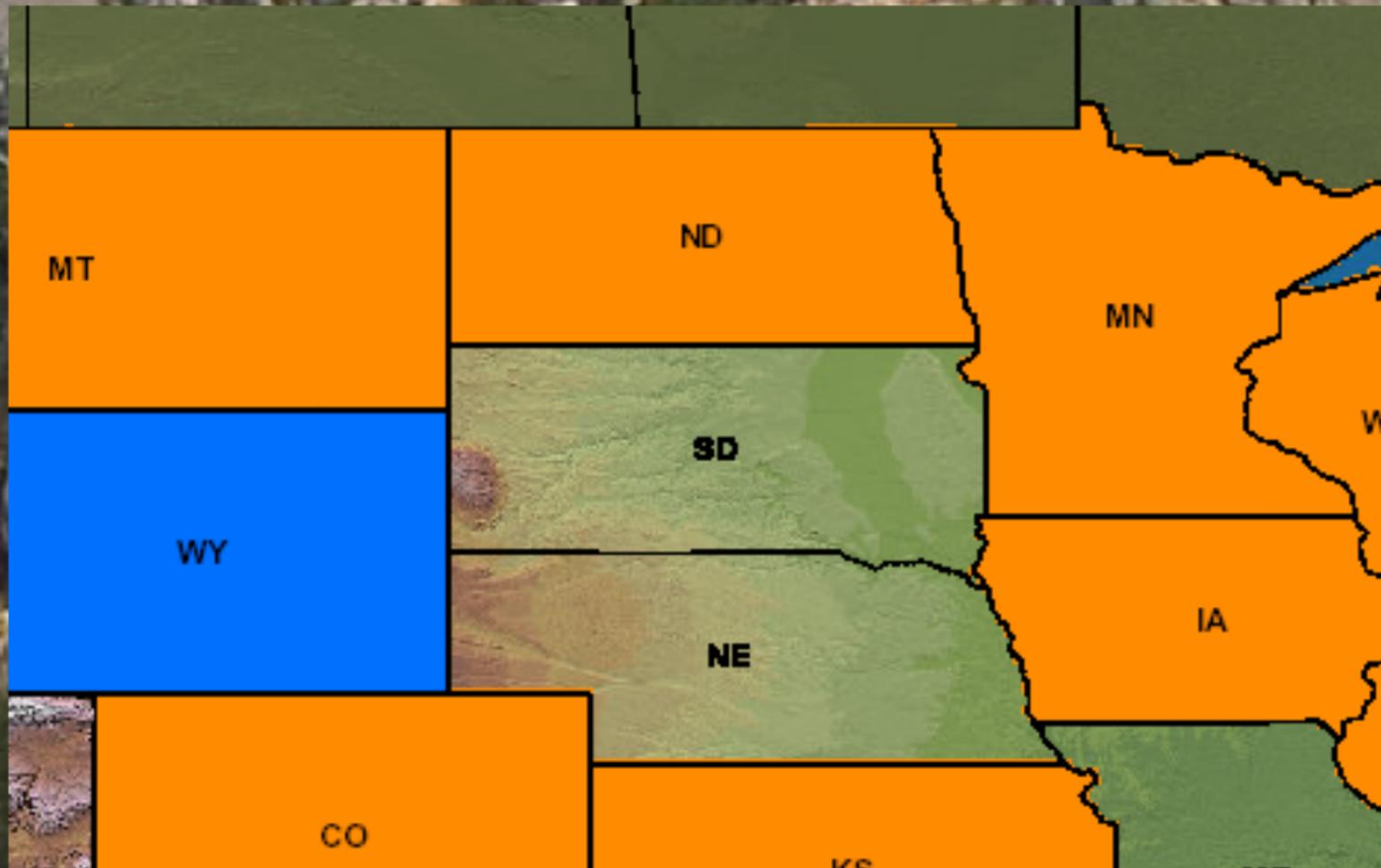
boundary legislative district

DES Base Map Project

- Imagery, road centerlines, address points
- Imagery is on the GIS Hub
- Centerlines and address points completion planned for Q4
- On-going maintenance & training activities



2015 NAIP!



A photograph of a rugged mountain landscape. The upper portion shows a steep, rocky slope with exposed rock faces in shades of grey and tan. Sparse evergreen trees are scattered across the upper slope. Below the rocky section, a dense forest of tall, dark evergreen trees covers the lower slope. At the very bottom of the image, a dark asphalt road is visible. The text "Other Stuff" is overlaid in large white font across the center of the image.

Other Stuff

Vendor Pool

- GIS categories:
 - Programmer/Analyst
 - Technical & Data Services Specialist
- State & local government can use this!
- Work order for services
- <http://www.nd.gov/gis/resources/pool/>

Vendor Pool Companies



Communications

- Web site
 - News and references
- Listserv
 - Training, RFPs, data upgrades, news
- Twitter
 - Listserv + more frequent, more items
- Blog
 - Data news, behind the scenes, how-to, background info





north dakota GEOGRAPHIC INFORMATION SYSTEMS

[Home](#) · [Contact Us](#) · [Listserv](#) · [Twitter](#) · [Blog](#)

Maps and Data

- » [Mobile](#)
- » [Maps](#)
- » [Data](#)
- » [Web Services](#)
- » [Visual ND](#)

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[Help](#)

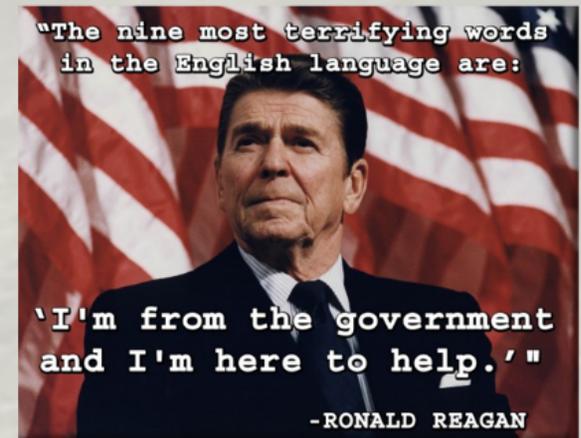
Data

Please use one of the links below for your data needs

- » [Finding And Obtaining Data From The GIS Hub](#)
- » [New and Updated GIS Hub Data Information](#)
- » [North Dakota County and City Data Resources](#)
- » [Neighboring States and Provinces Data Resources](#)
- » [Federal Data Resources](#)
- » [Government Survey Plats](#)
- » [Submit data to the GIS Hub](#)

GISTC Can Help!

- Imagery
 - Hosting and distribution (saves you time)
- Parcels
 - Hosting and distribution
- Training
 - Let us know of topic
 - Combine with state

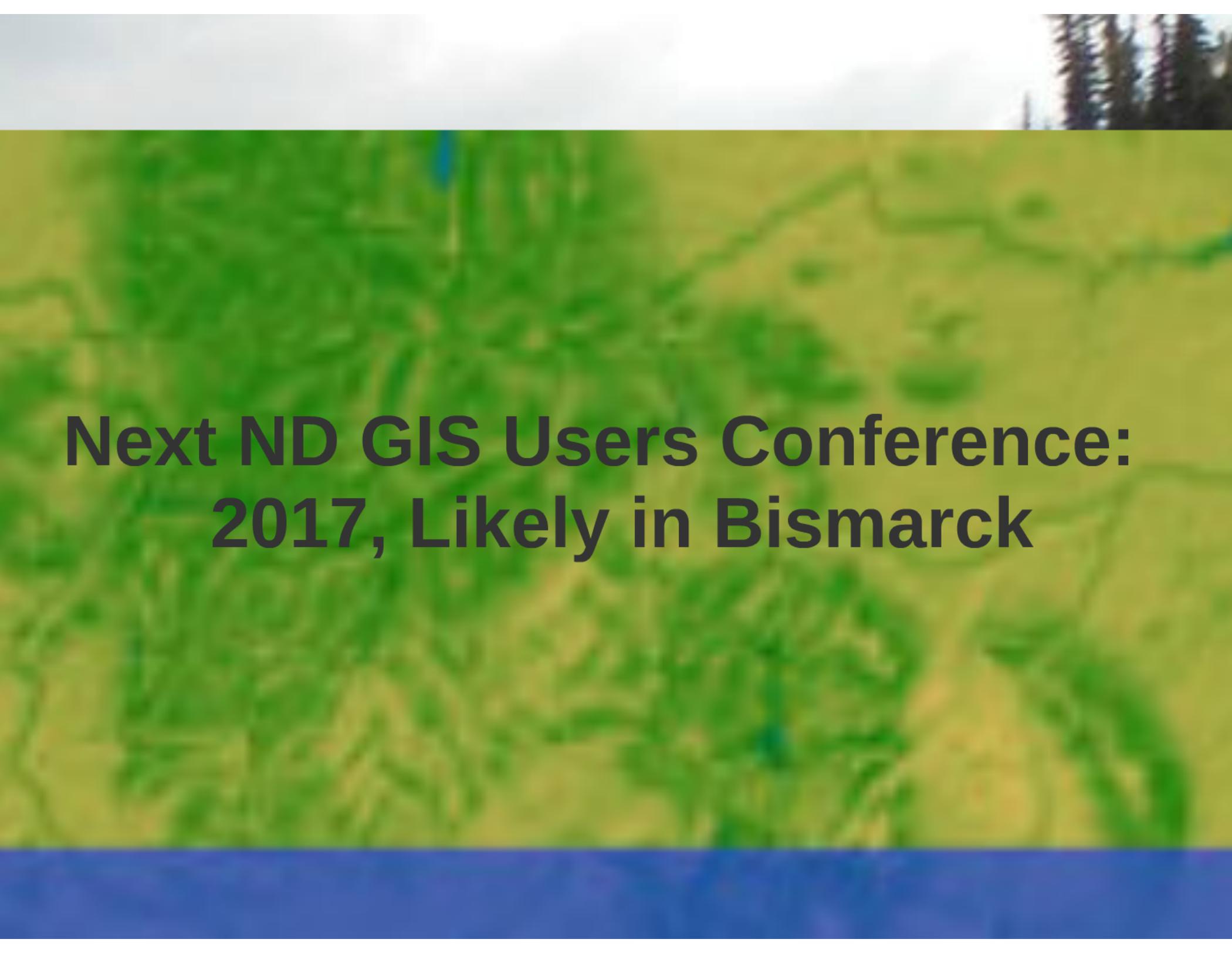




Next ND GIS Users Conference:
2017, Likely in Bismarck

NORTH DAKOTA GIS USERS CONFERENCE

Looking for additional team members:
• Keep fresh with new perspectives
• All industry sectors welcome!
• Contact Bob Nutsch

An aerial photograph of a green field with a blue line, possibly a road or boundary, and a blue bar at the bottom. The text is overlaid on the image.

**Next ND GIS Users Conference:
2017, Likely in Bismarck**

- 
- Looking for additional team members:**
- **Keep fresh with new perspectives**
 - **All industry sectors welcome!**
 - **Contact Bob Nutsch**

A green rectangular sign with rounded corners and a white border, mounted on a wooden post. The sign reads "Thank You" in large white letters. The background is a scenic view of a mountain range under a blue sky with scattered white and yellowish clouds. The foreground shows a rocky, scree-covered slope with some evergreen trees.

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www.nd.gov/gis

Thank You

The GISTC is tasked with identifying, collecting & maintaining statewide publicly-available data



Identify key data needs that would potentially have a cross-industry benefit



Transportation/Communication/Utilities

Natural Resources/Environment

County/City/Tribal Government

Public Safety/Emergency Services/Public Health