# Minnesota Geospatial Advisory Council

March 5, 2025

MINNESOTA
GEOSPATIAL ADVISORY COUNCIL

# Transcription & Information Sharing

- This meeting is being transcribed (not recorded) by Microsoft Teams to assist with the creation of the meeting minutes.
- The content of the meeting chat and transcript is subject to the Minnesota Data Practices Act, and so a gentle reminder, please don’t share any private information.

# Agenda Item 1

- **Call to Order**
  - Introductions
  - GAC mission reminder
  - Approve agenda
  - Approve last meeting minutes
    *(December 18, 2024)*

Albrecht

# Member Introductions

- **City, Twin Cities metro**
  - Dennis Tumberg, City of Chanhassen
- **City, Greater Minnesota**
  - Vacant
- **County, Twin Cities metro**
  - Vacant
- **County, Greater Minnesota**
  - Christy Christensen, McLeod County
- **Regional Government, Twin Cities metro**
  - Tanya Mayer, Met Council
- **Regional Government, Greater Minnesota**
  - Jill Amundson, West Central Initiative
- **State Government**
  - Kari Geurts, DNR
  - Ben Timerson, MnDOT
- **Federal Government**
  - Jeff Bloomquist, Risk Management Agency, USDA
  - Mitch Bergeson, US Geological Survey
- **Tribal Government**
  - Ryan Bonney, Shakopee Mdewakanton Sioux Community
- **Non-profit Organization**
  - Jessica Fendos, LOGIS
- **Business**
  - Kendis Scharenbroich, Pro-West & Associates
  - Gerry Sjerven, Minnesota Power
- **K-12 Education**
  - Shana Crosson, U-Spatial / UMN Twin Cities
- **Higher Education**
  - Len Kne, U-Spatial / UMN Twin Cities
  - Stacey Stark, U-Spatial / UMN Duluth
- **MetroGIS**
  - David Brandt, Washington County
- **MN GIS/LIS Consortium**
  - Leanne Knott, City of Red Wing
- **Surveyor**
  - Pat Veraguth, Douglas County
- **At-large**
  - Cory Richter, Ramsey County
  - Heather Albrecht, Hennepin County
  - Britta Maddox, Anoka County
- **Chief Geospatial Information Officer (ex-officio)**
  - Alison Slaats, MnGeo

# Non-Member Guests

*First and last name*

*Name of your organization*

**In-Room Attendees:** Please announce verbally

**Virtual Attendees:** Place in the chat

# Administrative Support

MnGeo will provide support throughout the meeting:

- Curt Carlson *(slides and chat)*
- Megan Sisko *(meeting minutes)*

# Mission

The Council acts as a coordinating body for the Minnesota geospatial community. It represents a cross-section of organizations that include counties, cities, universities, business, nonprofit organizations, federal and state agencies, tribal government, surveyors and other stakeholder groups that benefit from geospatial technology.

# Agenda

| Time | Topic | Time | Topic |
|---|---|---|---|
| 10:00 | Call to order | 11:10 | MN GIS/LIS Consortium Update |
| 10:10 | Review and accept Committee Reports | 11:20 | GAC Member Appointments |
| 10:15 | 3D Geomatics Committee Lidar Data Processing Update | 11:30 | Executive Team Update |
| 10:35 | Outreach Committee Update and Charter Amendment | 11:40 | MnGeo Update |
| 10:45 | Review and approve Archiving Committee Charter | 11:50 | Round Robin / Announcements |
| 10:55 | Governor's Certificate Award Announcement | 12:00 | Adjourn |
| 11:00 | Break | | |

# Agenda Approval

**Approve agenda**

# Approve last meeting minutes

*(December 19, 2024)*

# Agenda Item 2

**Review and accept Committee Reports**
Albrecht

# GAC Committee Report Highlights

## Archiving and Outreach Committees

- New charter proposals to be approved by the GAC

## Contributing to Nationwide and Commercial Data Assets Committee

- Reviewed the Google Maps Content Partner Program.
  - Google pulls address data from National Address Dataset quarterly
  - Public data feeds can be pulled into Google Maps, such as the Opt-in Statewide datasets available on the Geospatial Commons
  - Edit tool for Maps Content Partners to immediately update roads features in Google Maps

## Data Endorsement Committee

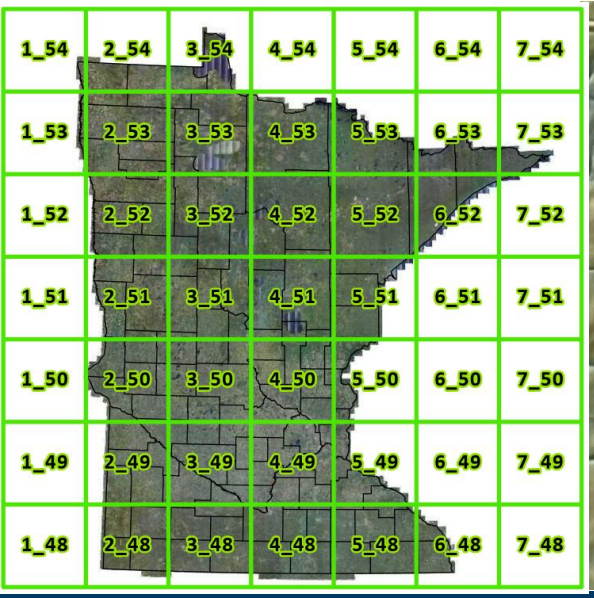
- The Committee's kick of meeting was held in January
- Committee is reviewing materials from other states and sources to assist is defining the endorsement process

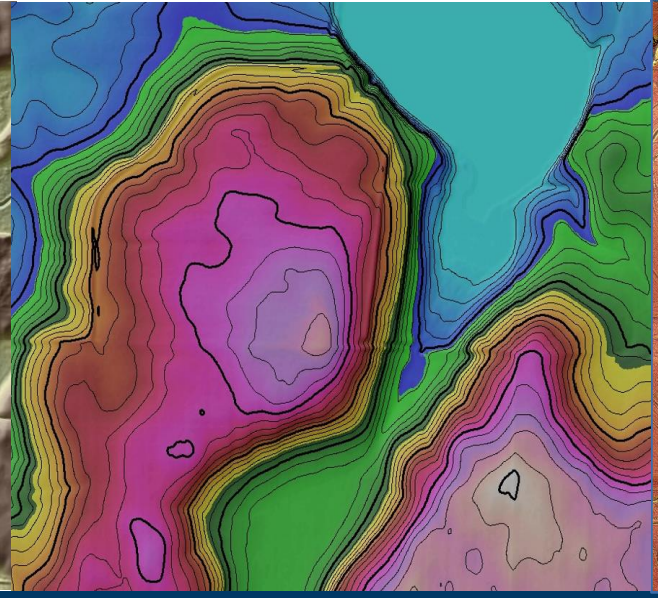
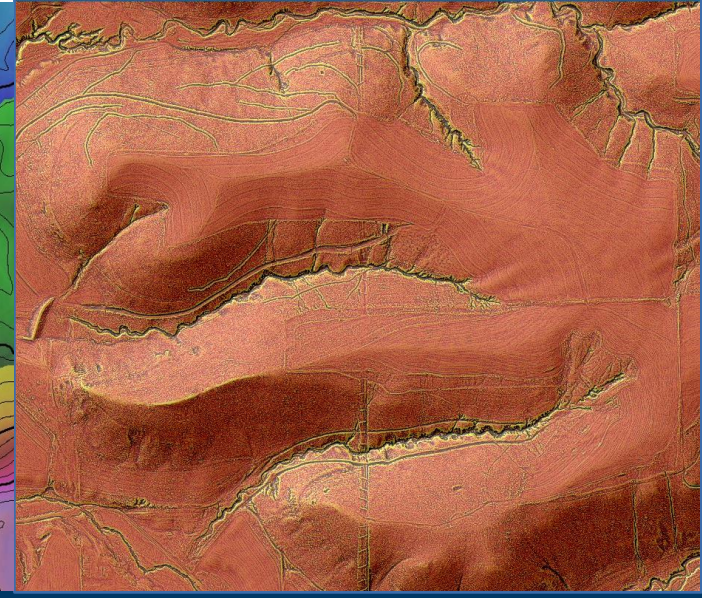
# Approve committee reports

# Agenda Item 3

**3D Geomatics Committee Lidar Data Processing Update**

Vaughn / Moore



# GAC Lidar Update:

## Statewide Seamless DEMs & Overlap Mitigation

Wednesday | March 05, 2025 | 10:15 – 10:35

Sean Vaughn (MNIT DNR)
Rick Moore (MNIT DNR)

MINNESOTA IT SERVICES

MINNESOTA GEOSPATIAL ADVISORY COUNCIL

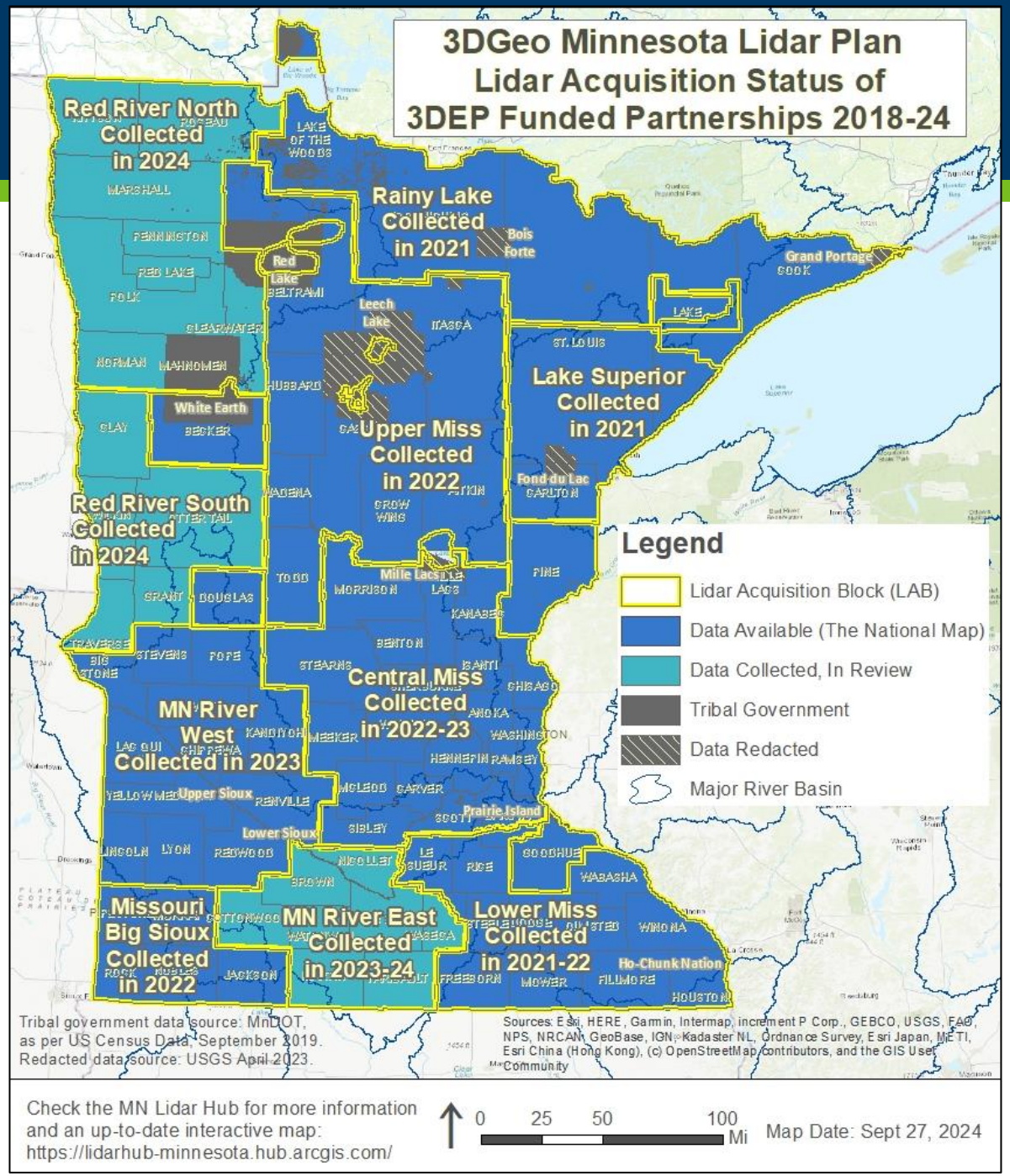
# What is Required to Build Statewide - Seamless DEM

**Before Statewide GIS**

- Viewing Connecticut Statewide topography
  - Historical Approach
- Minnesota
  - 51-million Acres
- Connecticut
  - 3.5-million Acres

*Image: State Map University of Connecticut, Dept. of Extension, Center for Land Use Education and Research*

# Status Map




## 3DGeo Lidar Acquisition

- **2017:** 3DGo Committee formed.
  - First full gathering of 3DGeo committee and working groups in June 2018.
- **2019:** Minnesota Lidar Plan Released
  - GIS/LIS Conference in St. Cloud.
- **2019:** First stakeholders meeting
  - Rainy Lake LAB, October, in Duluth
- **2020:** First Acquisition
  - Goodhue, Spring 2020.
- **2024:** Last Acquisition
  - Red River Watershed LAB, Spring 2024.

# Minnesota 2ndGEN Partnership - USGS 3D Elevation Program - 3DEP

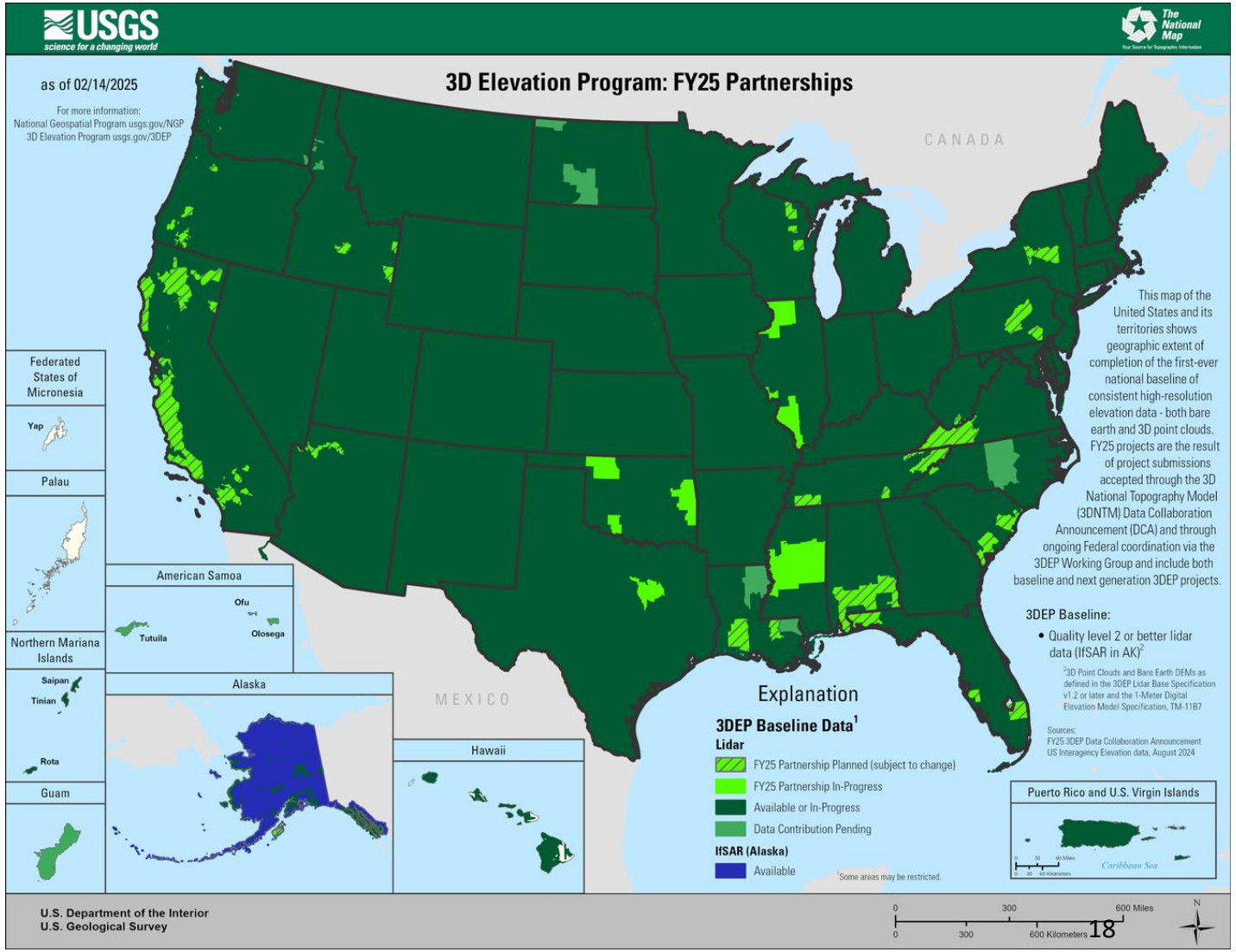
## 3D Elevation Program (3DEP)

- **Systematically** guiding the collection of 3D elevation data in the form lidar data for the United States, and the U.S. territories

## 3DEP Status Map

Dark Green = Data Available or In-Progress

- 3DEP **Certified Data**
  - Standardized by USGS Lidar Base Specification
  - Consistent high-resolution nation-wide elevation data
  - Supports Next Generation Hydrography



# What is - Lidar

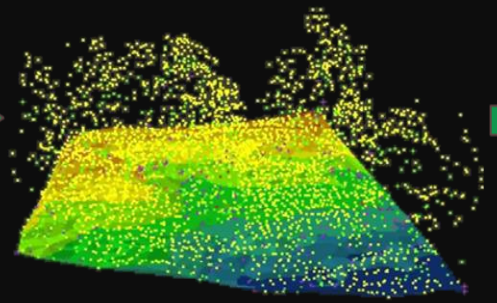
3DEP Deliverables

## 1. Lidar Acquisition

Lidar Acquisition

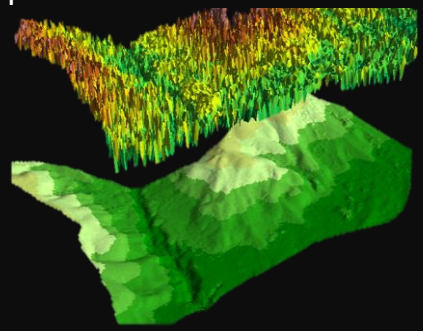
## 2. Lidar Point Cloud

3D Rendition of Natural and Built Environments



## 3. Point Cloud Classification

Feature Identification and Separation of Data



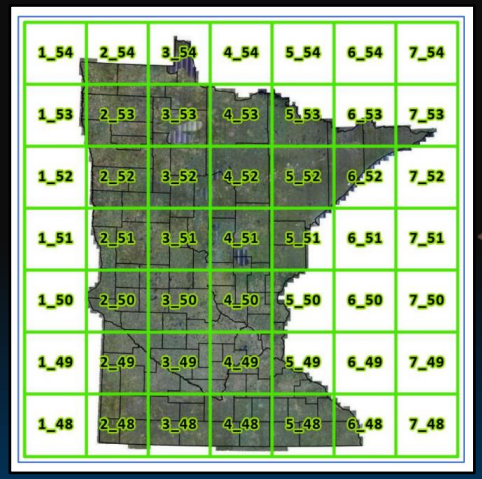
## 4. 3DEP 0.5-meter DEM

Lidar-derived Digital Elevation Model

State / 3DGeo Deliverables

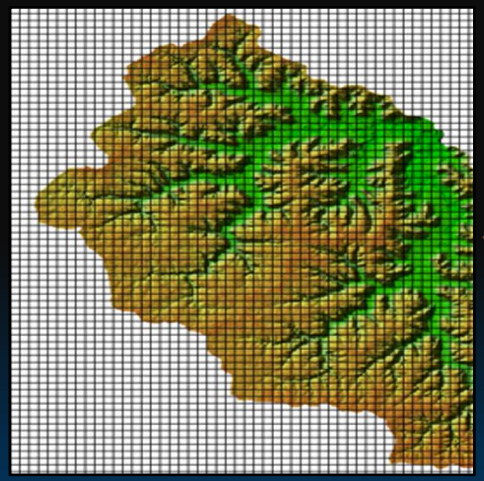
## 5. Data Architecture

Statewide, Seamless Tiles
1K x 1K



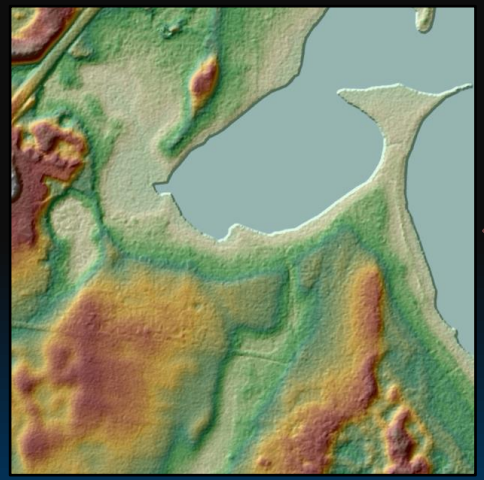

## 6. Foundational 0.5m DEM

Tiled, Overlap Removed, Seamless



## 7. Combined DEM

Consumable Seamless Product



R & D

## 8. DEM Derivatives

Contours, Hillshade, HPI, etc.

# 3DGeo - 1K Tile Index

- 3DGeo provided Index to **Vendors** to organize collected lidar data
- Each atomic level tile covers **1-kilometer** (0.39 sq mile [area]).
  - **220,250** - 1k Tiles Intersect State Boundary
- Nested tiles - **1K, 10K, 100K**
  - 0.5-meter DEMS also nest
- USGS 3DEP Deliverables → **Master Data**

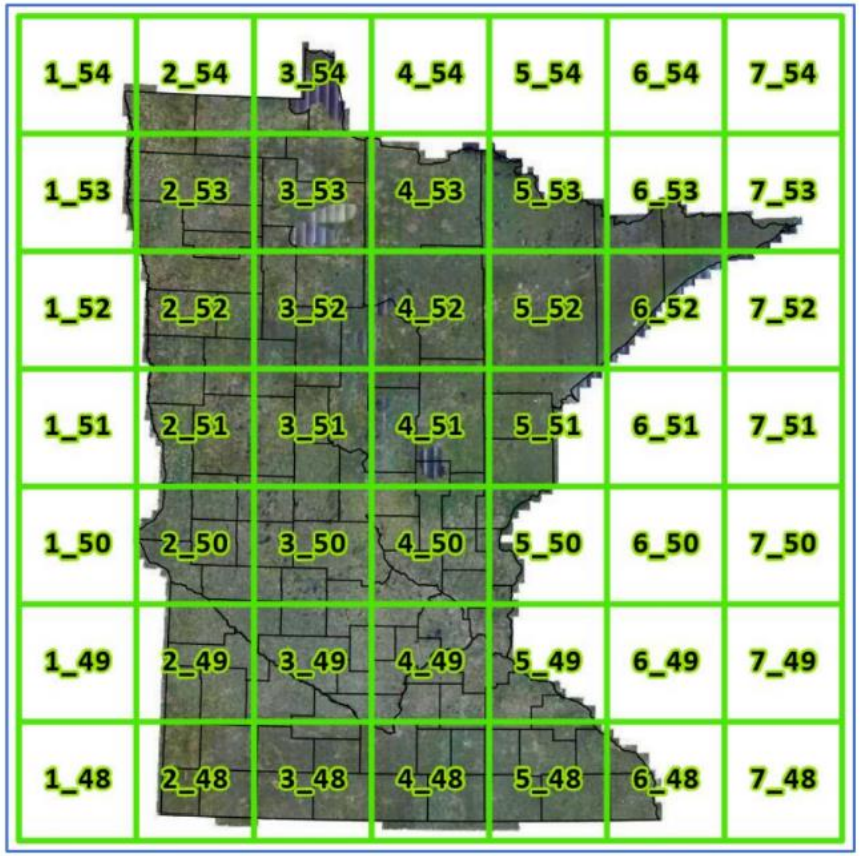



*Figure 1 - MN 3DGeo Tiling Index: 100,000 scale reference grid illustrating an index to the tiling scheme.*

# Lidar Acquisition Overlap

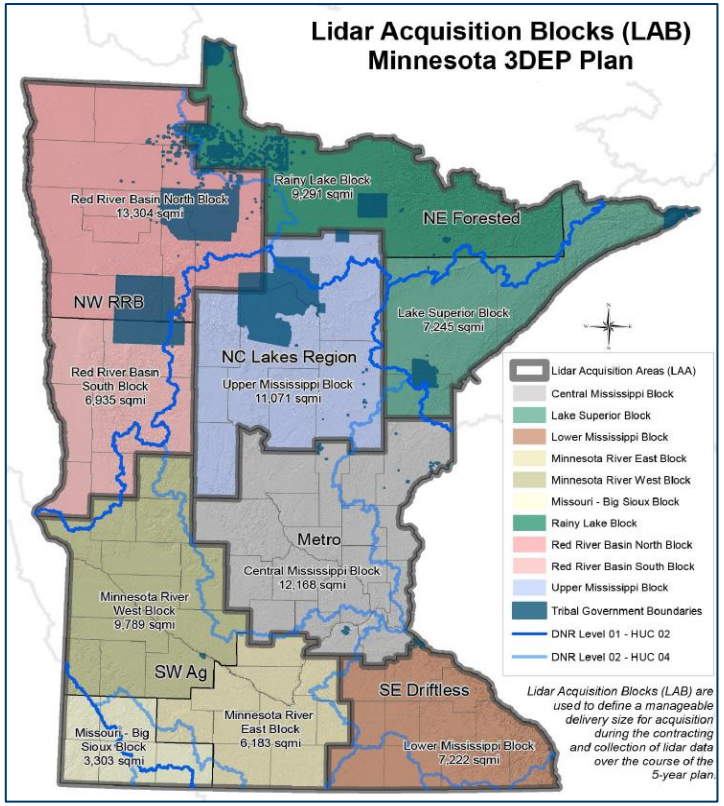
- **100-meter** overlap.
  - Overlap is required by USGS 3D Elevation Project (**3DEP**) Lidar Base Specification (**LBS**) for each lidar acquisition project.
  - Minnesota 3D Geomatics (3DGeo) Lidar Acquisition Blocks (**LAB**) can have multiple LAB  Work Units.
  - **Work Units** are managed as disparate lidar acquisitions.

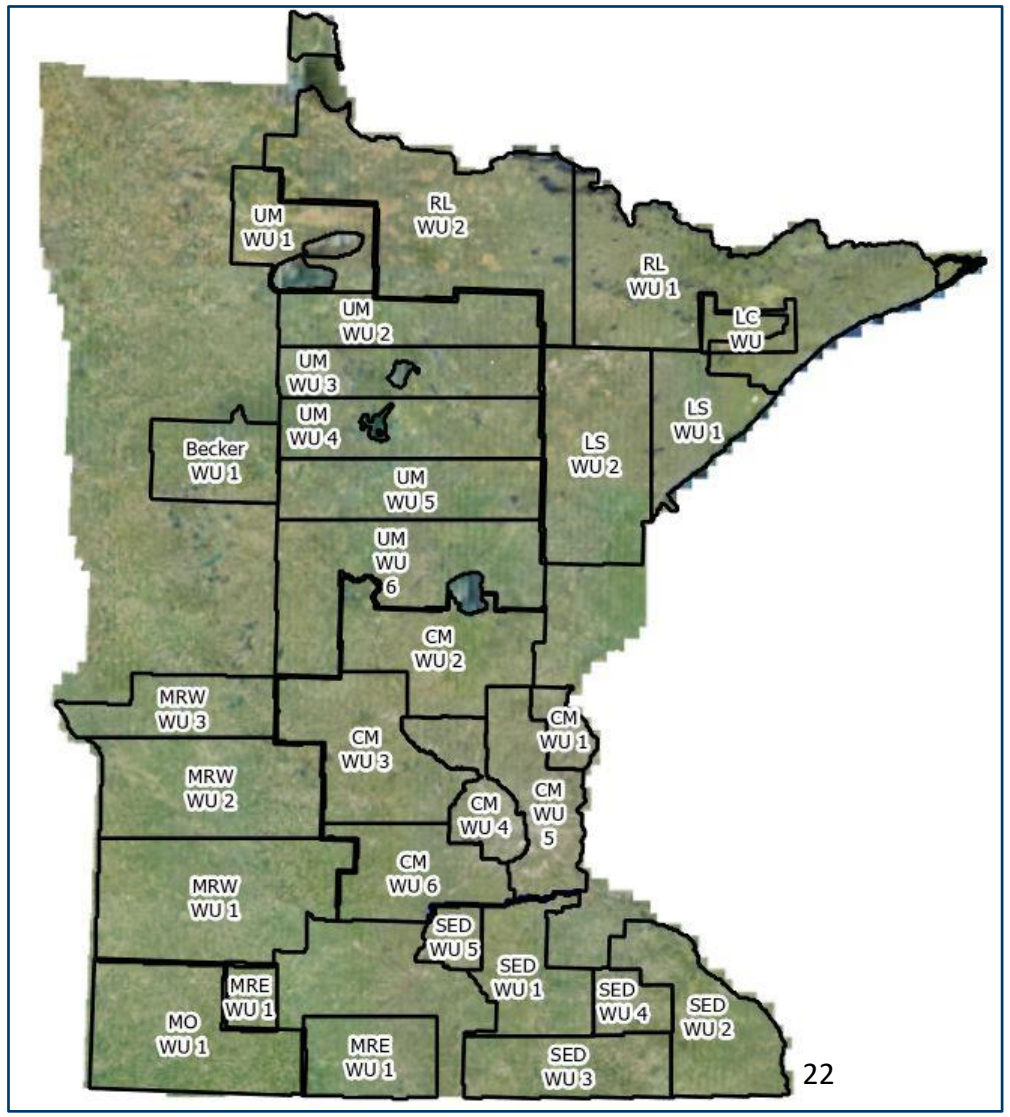
AI/Copilot's interpretation of 1-square meter of earth's surface being collected by a lidar system.

# Adjacent Lidar Acquisitions - Overlap

## 2 Types of Overlap at Acquisition Boundaries

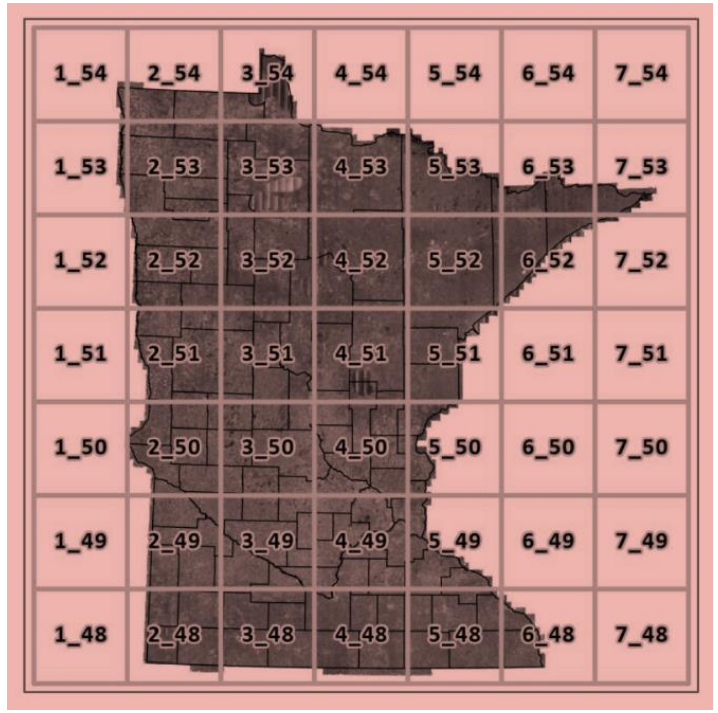
1. External LAB Boundaries (BAA/DCA project boundaries)
2. Internal LAB boundaries (**Work Units**)



# 1K Tile Index for a New Data Architecture

- Each atomic level tile covers **1-kilometer** (0.39 sq mile [area]).
- Build a Data **Enterprise**
  - **Azure** Blob
  - Organized file/folder system
- Nested tile architecture - **1K, 10K, 100K**
  - 0.5-meter DEMS also nest
- **Esri Raster Mosaic** Datasets and/or large footprint Cloud Optimized (**COG**) GeoTiff's build upon the 1K Tile Index Data Architecture to aid in processing and visualization.

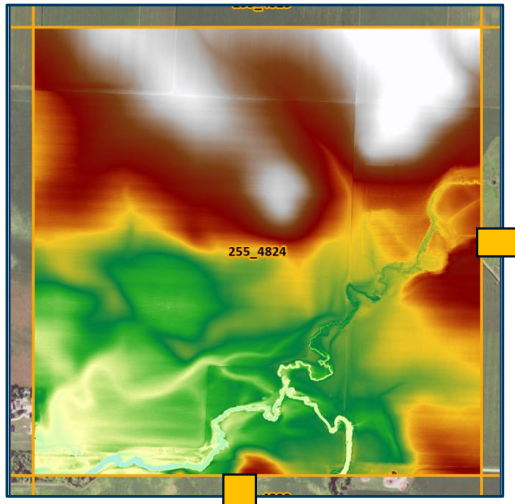


# Statewide Seamless - Data Architecture

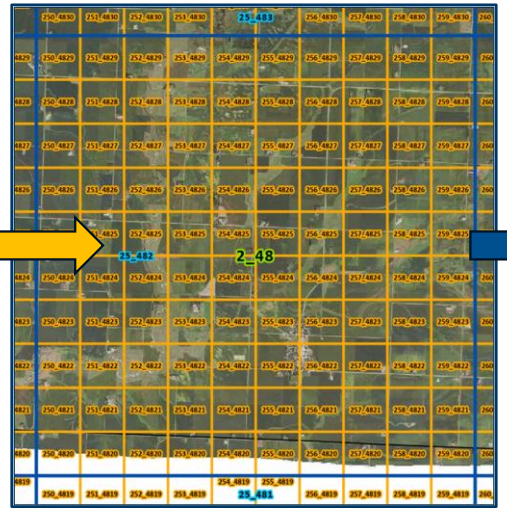
**DISSEMINATION**

**Combined Seamless Data** - Esri Raster Mosaic and/or COG Tiff Based Services

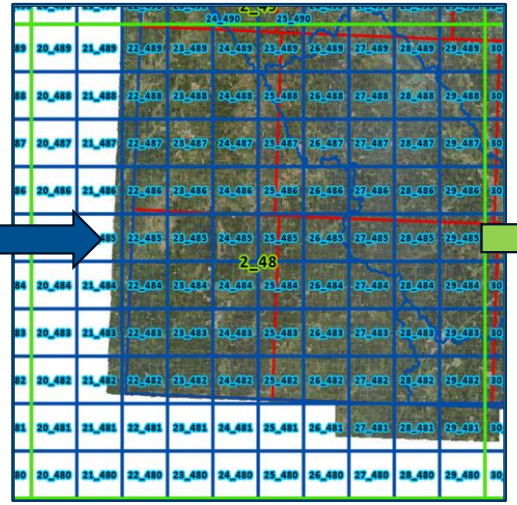
**1 Km Tiled DEM**



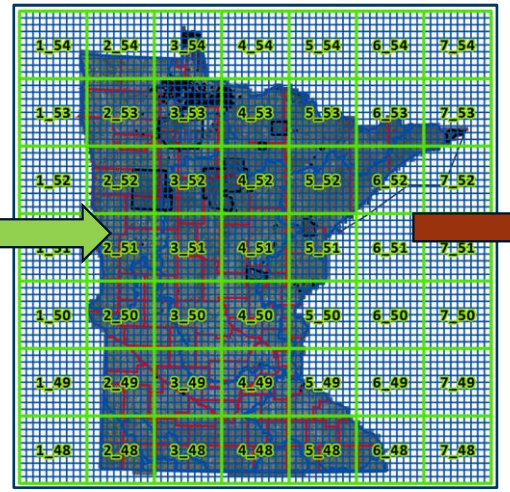

**10 K Tile**




**100 K Tile**




**Statewide Dataset**



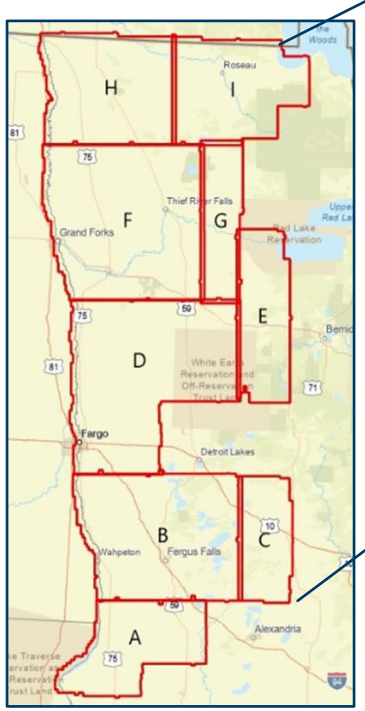

**Web Services**

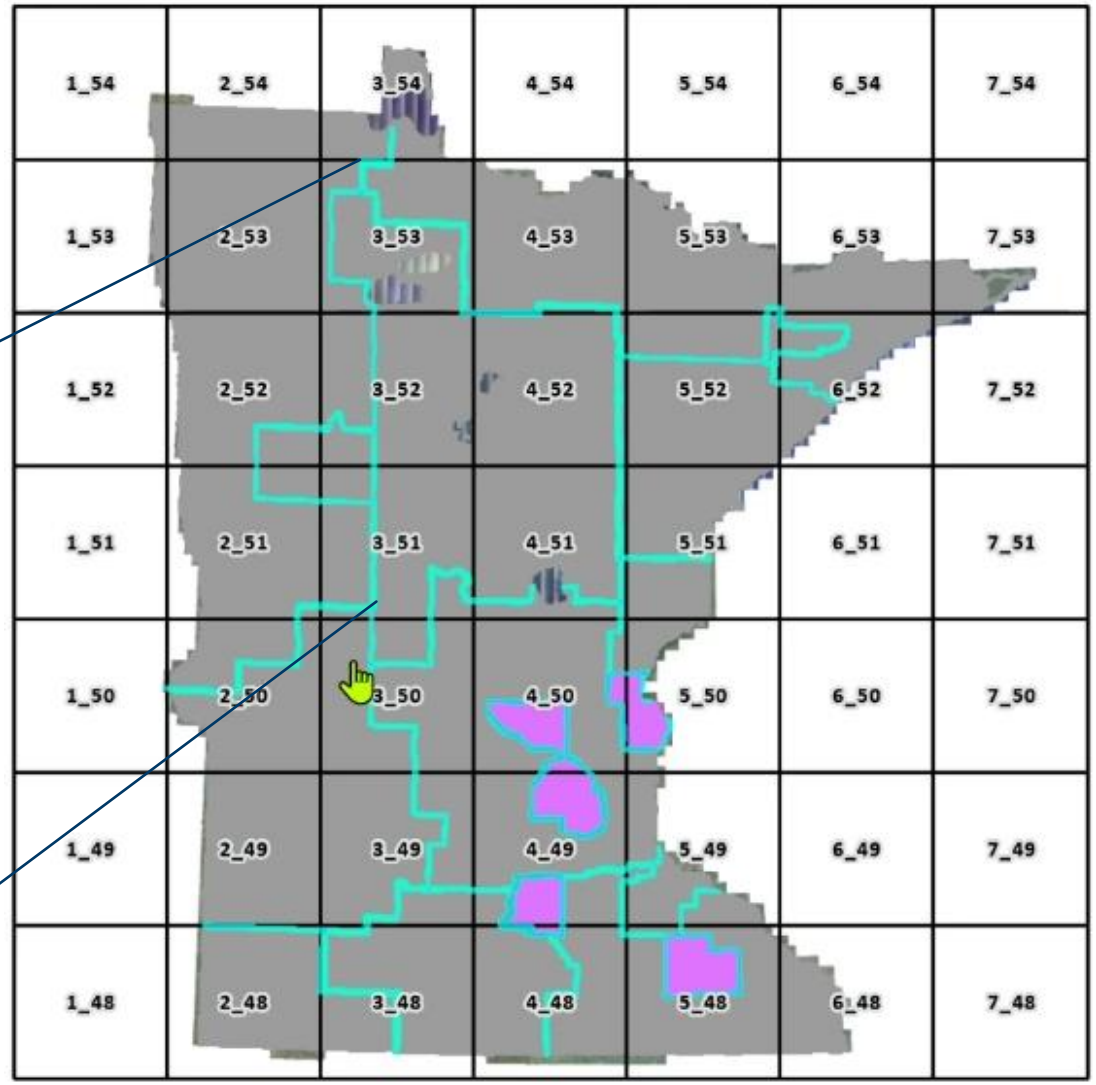
**Source Data Dissemination**

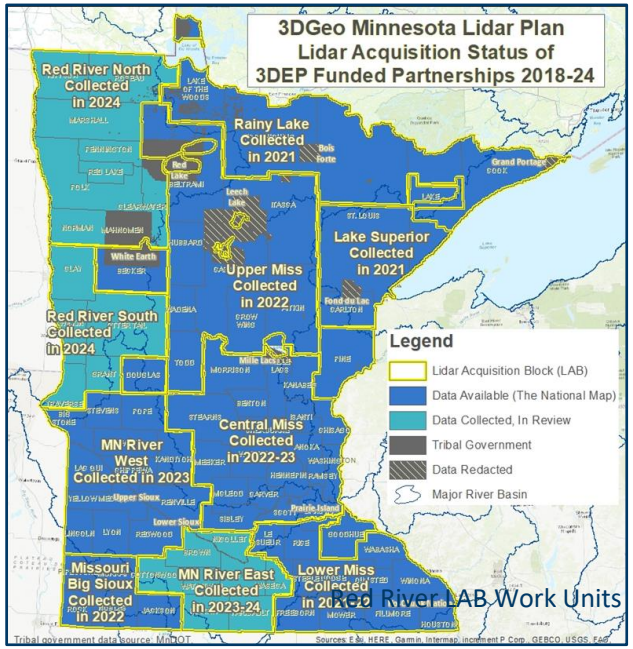
# Overlap - Adjacent Lidar Acquisitions

## Work Units

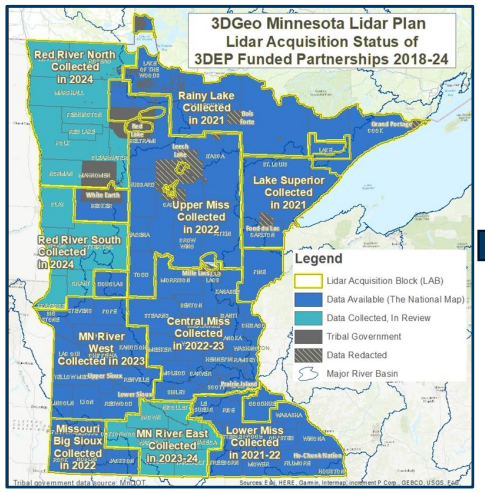
- **24** Work Units (so far).
- Red River will add more.

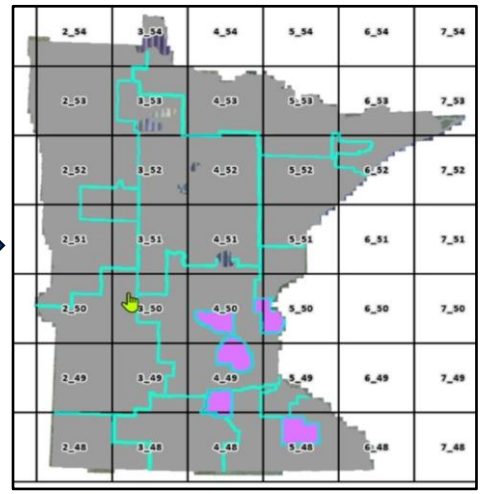


# Overlap - Adjacent Lidar Acquisitions - Prioritization

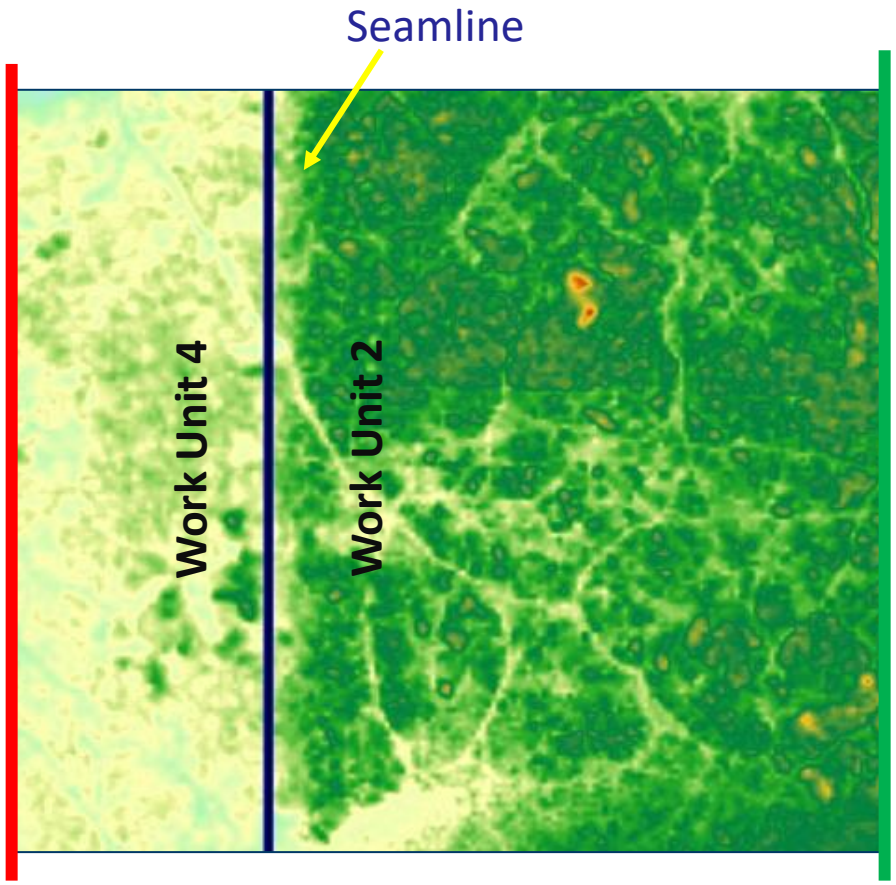


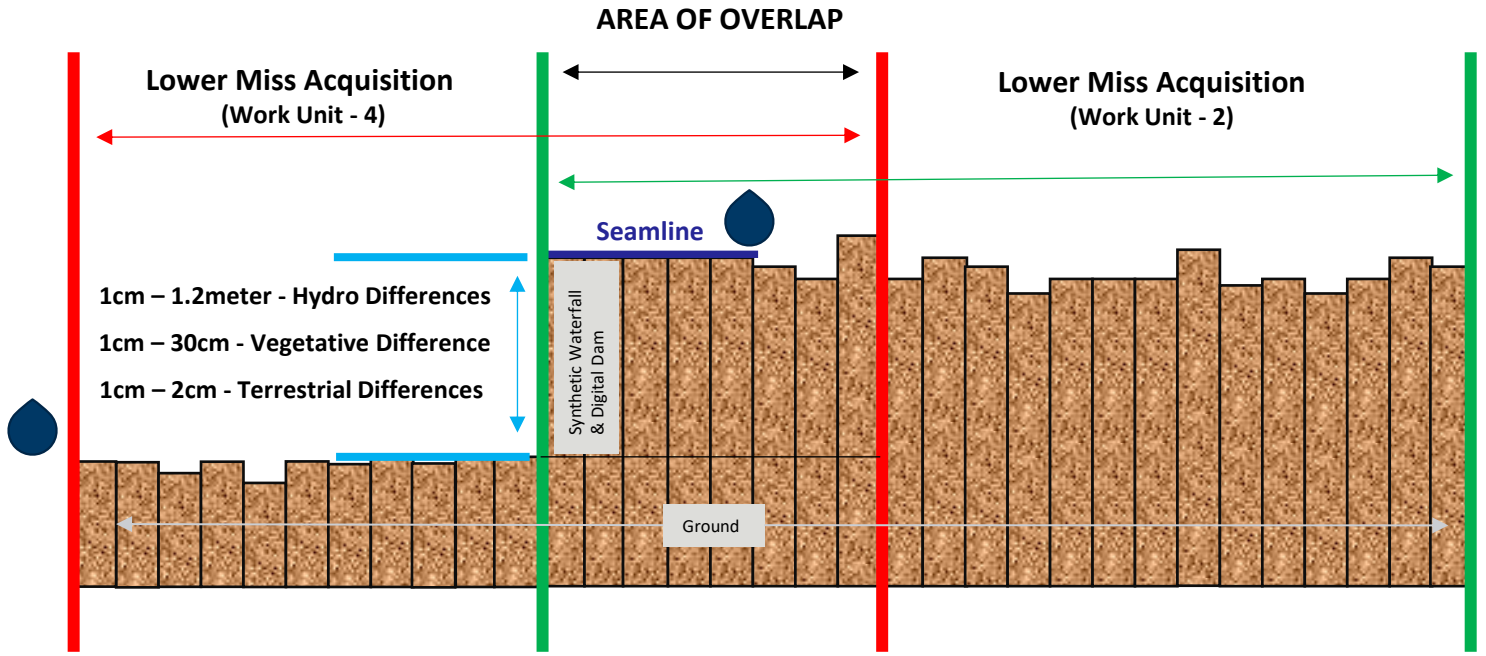
| ORDER | TILE PRIORITIZATION = WORK UNIT ORDER<br>Using Lidar Acquisition Attributes to Define<br>Overlap Order for Blend Processes | |
|---|---|---|
| 1 | Year | 2018 - 2024 |
| 2 | Quality Level | QL0, QL1, QL2 |
| 3 | Density | >8, >30 |

# Disparate Lidar Acquisitions – Different Z-Values

## Plan View




## Cross Sectional View



# Disparate Lidar Acquisitions – Different Z-Values

Inertial Measurement Unit (IMU)

Beam Divergence

Precipitation Event

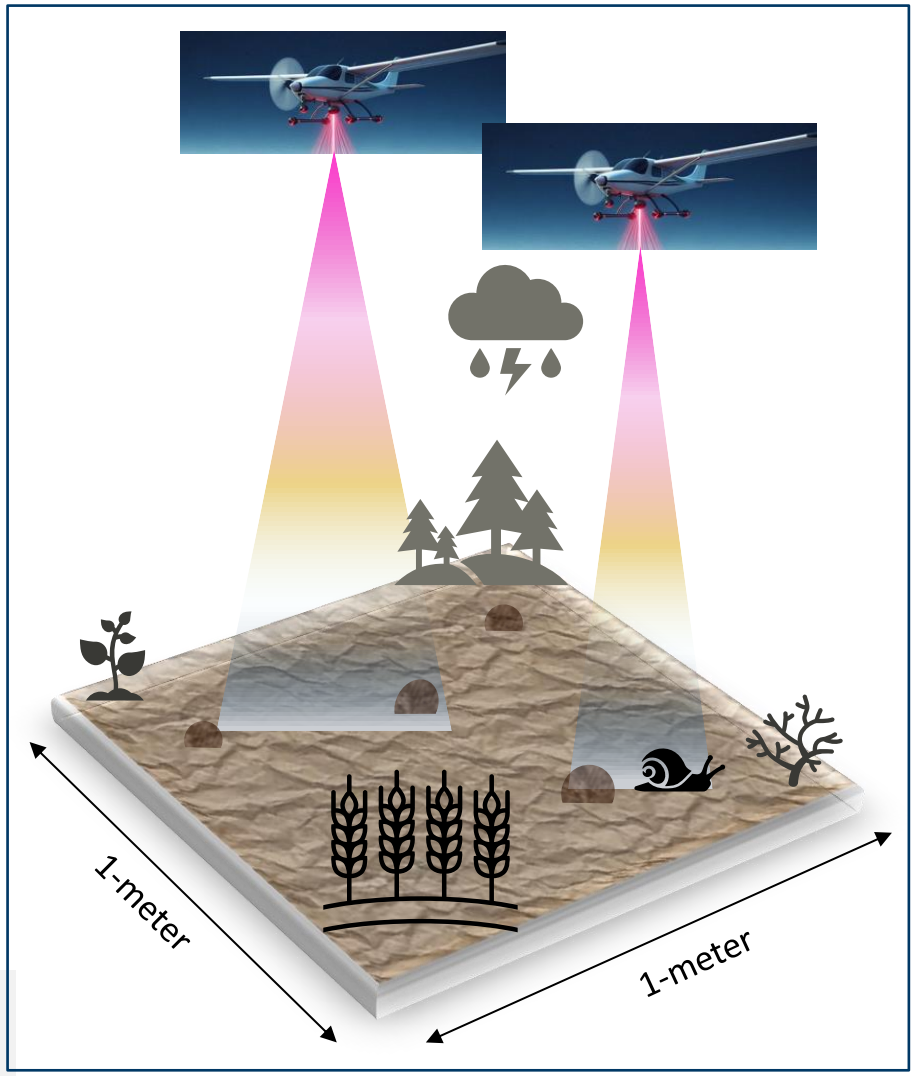
Lake and River Ice

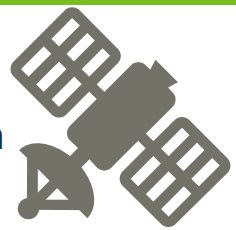
Receiver Models

Timing Electronics

Scanner and Optics

Mechanical Alteration of earth's surface



Global Navigation Satellite System (GNSS) constellation

Erosion

Laser Wavelengths

Sensor Calibration

Pulse Rate

Vegetation Changes

Scan Angle

Ground Frost & Soil Expansion

# Section Wrap Up – Disparate Lidar & Overlap

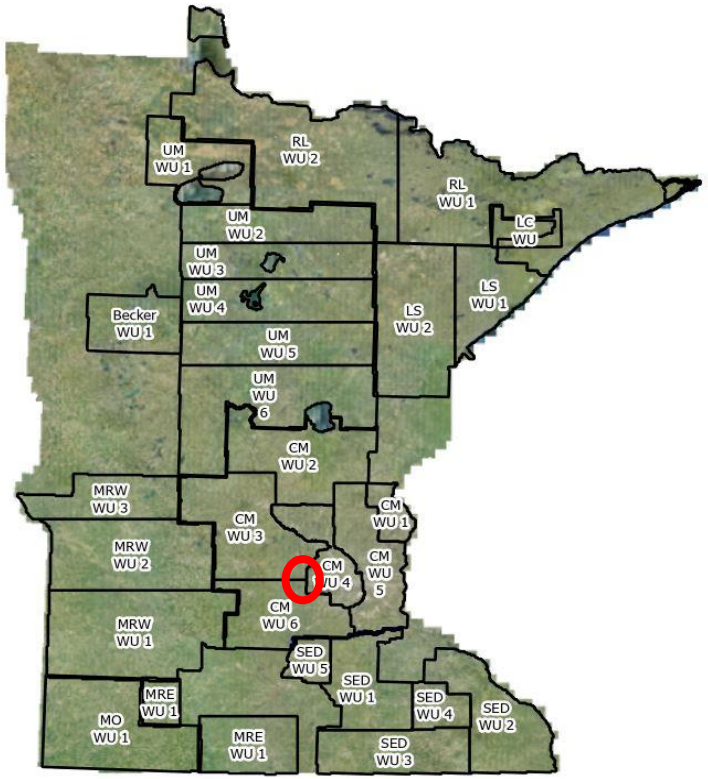
## Overlap Introduction Takeaways

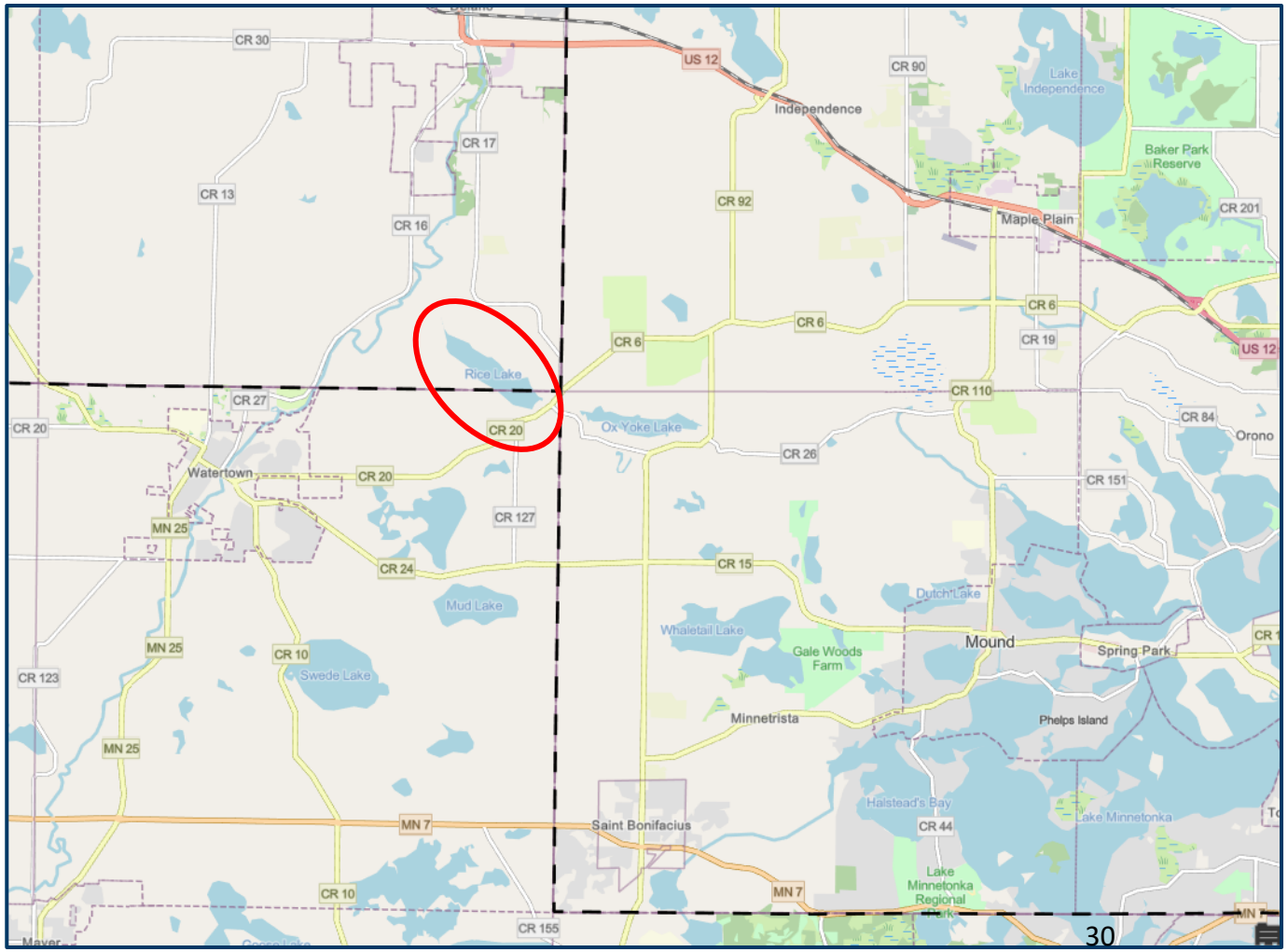
- A lot of **thought and R&D work** has gone managing and mitigating overlap issues and artifacts.
- No two **disparate lidar** data acquisitions will generate the same elevation value for the same spot.
  - ✓ Vegetation growth
  - ✓ Different Lidar sensors
- Less than 1% of the 220,250 tiles require overlap work, the work ahead is **achievable.**
- Our work maintains **3DEP data integrity**.

# Overlap of Adjacent Lidar Acquisitions – Rice Lake Example #1

## Rice Lake

- Confluence of Three Different Work Units.

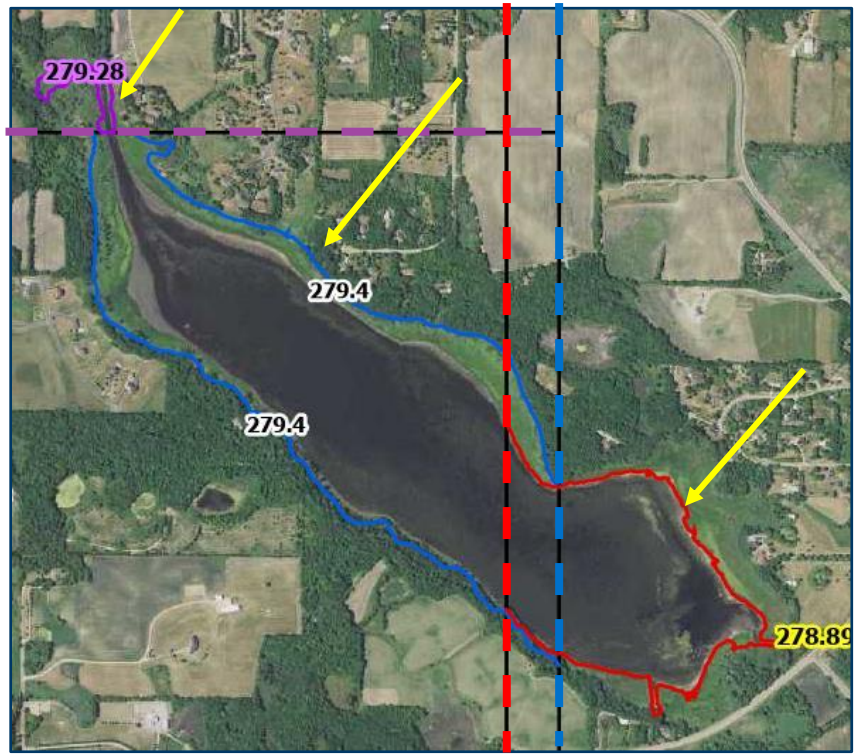


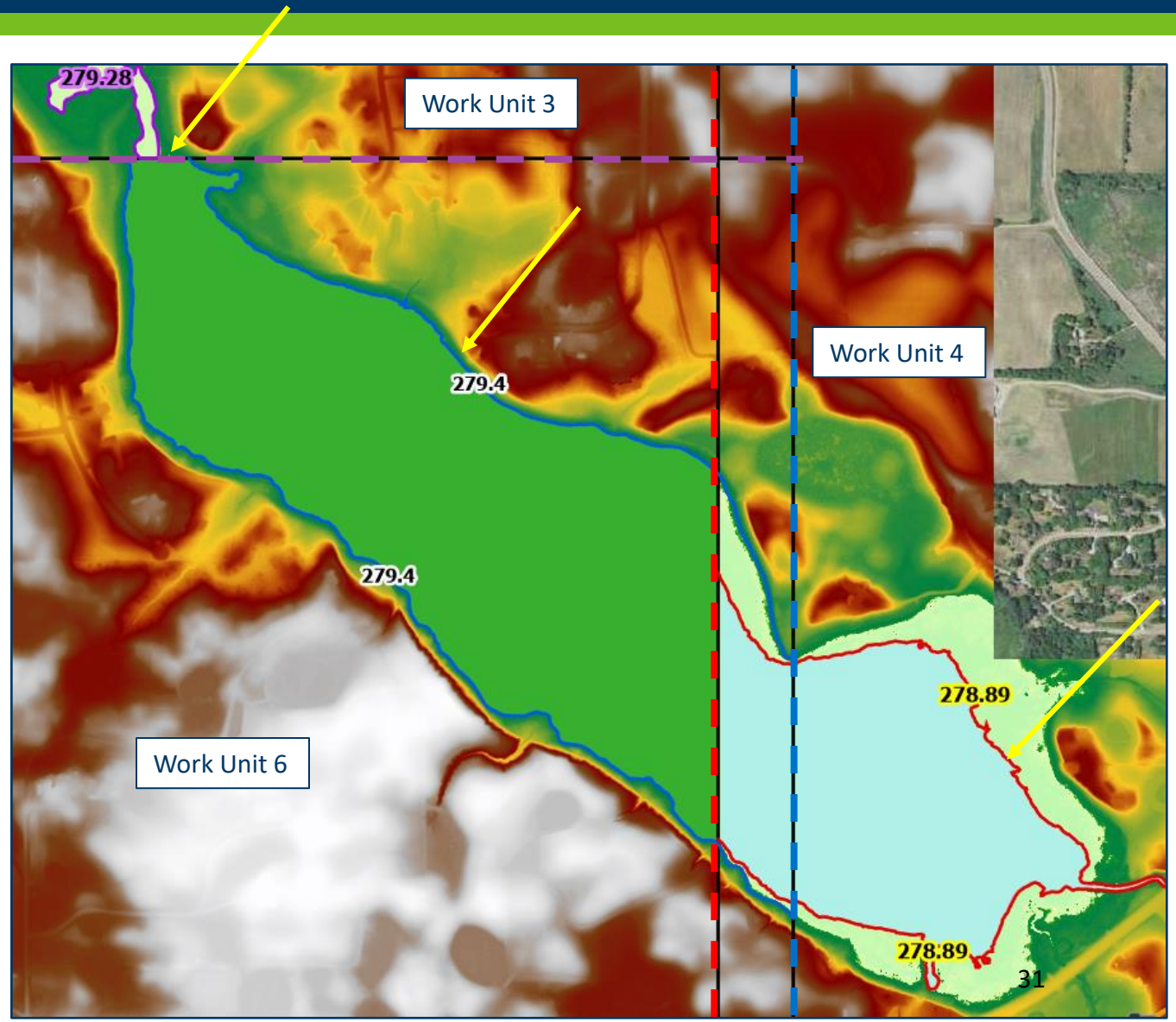



# Overlap of Adjacent Lidar Acquisitions – Rice Lake Example #1

## Issue: 3 Different Lake Elevations

- **Purple** (work unit 3, 2023) delineation is higher (**279.28**)
- **Blue line** (work unit 6, 2022) delineation is higher (**279.40**)
- **Red line** (work unit 4, 2022) delineation is at a lower elevation (**278.89**).



# Overlap of Adjacent Lidar Acquisitions – Rice Lake Example #1

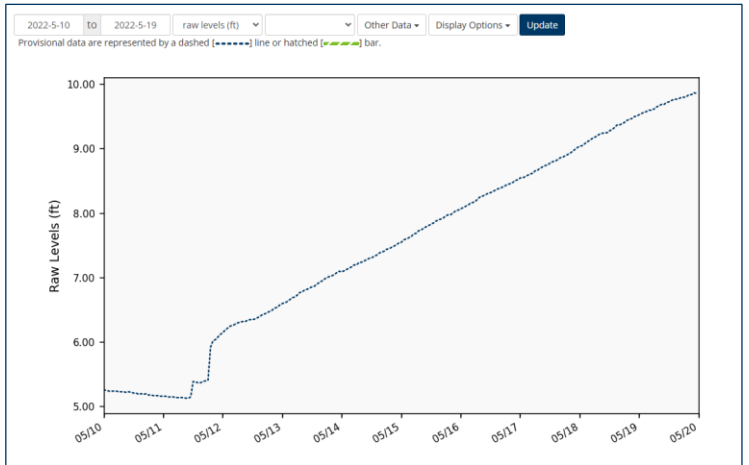
## 3 Different Lake Elevations (Central Miss LAB)

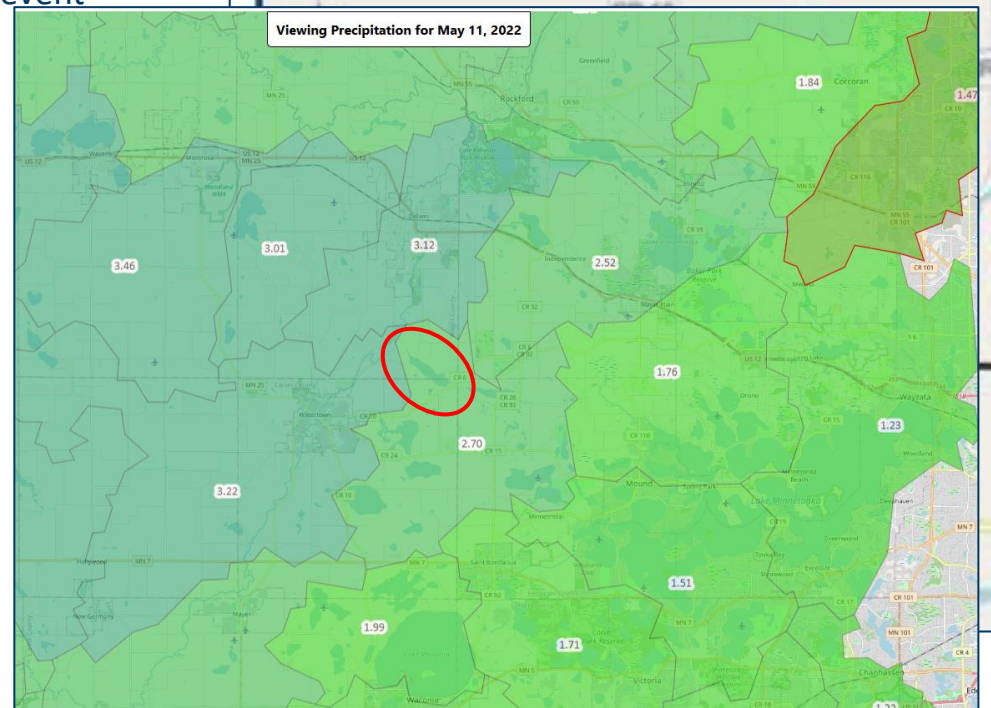
- Data is **correct**, accurate, and meets USGS Lidar Base Specification
- Precipitation events put **water on the landscape**
- **Rising water** in lakes and rivers covers shoreline areas
- MN 2ndGEN Lidar does not map **water surface**
  - Linear Lidar technology only collects **land elevations**.
  - **Water absorbs laser** pulse and therefore does not return a reflected laser pulse back to the sensor.
  - Elevation of the **water surface** can be interpreted to be equal to the **land elevations** around the lake.
- The lake (or portion of the lake) captured is **assigned one** constant/consistent surface elevation based on the terrestrial values surrounding the lake.

# Overlap of Adjacent Lidar Acquisitions – Rice Lake Example #1

## Why Do We have 3 Different Lake Elevations (Central Miss LAB)

- **May 10, 2022**: Work Unit 4 lidar acquisition, no rain
- **May 11th – 12th, 2022**: **3”** – Precipitation fell in the watershed
  - **Rice Lake** surface elevation rises as a result
  - Nearby **Crow River** experiences bounce of 1.5-feet (10th – 13th)
- **May 13th, 2022**: Work Unit 6 lidar acquisition, following rain event
- Crow River at Rockford, MN
  - May 10th - 5.25 feet – River Level
  - May 20th - 10 feet – River Level

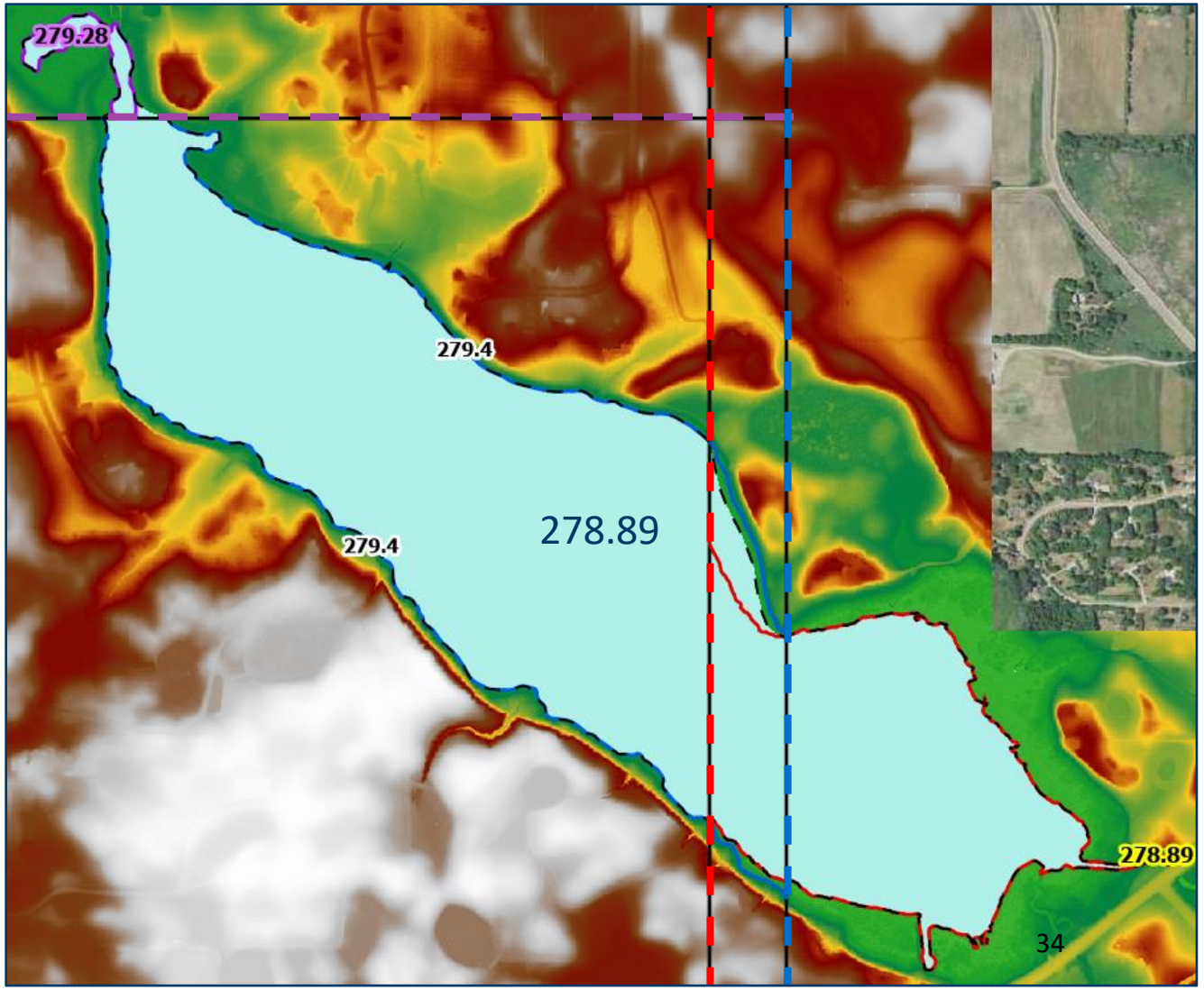


# Overlap of Adjacent Lidar Acquisitions – Rice Lake Example #1

## Process

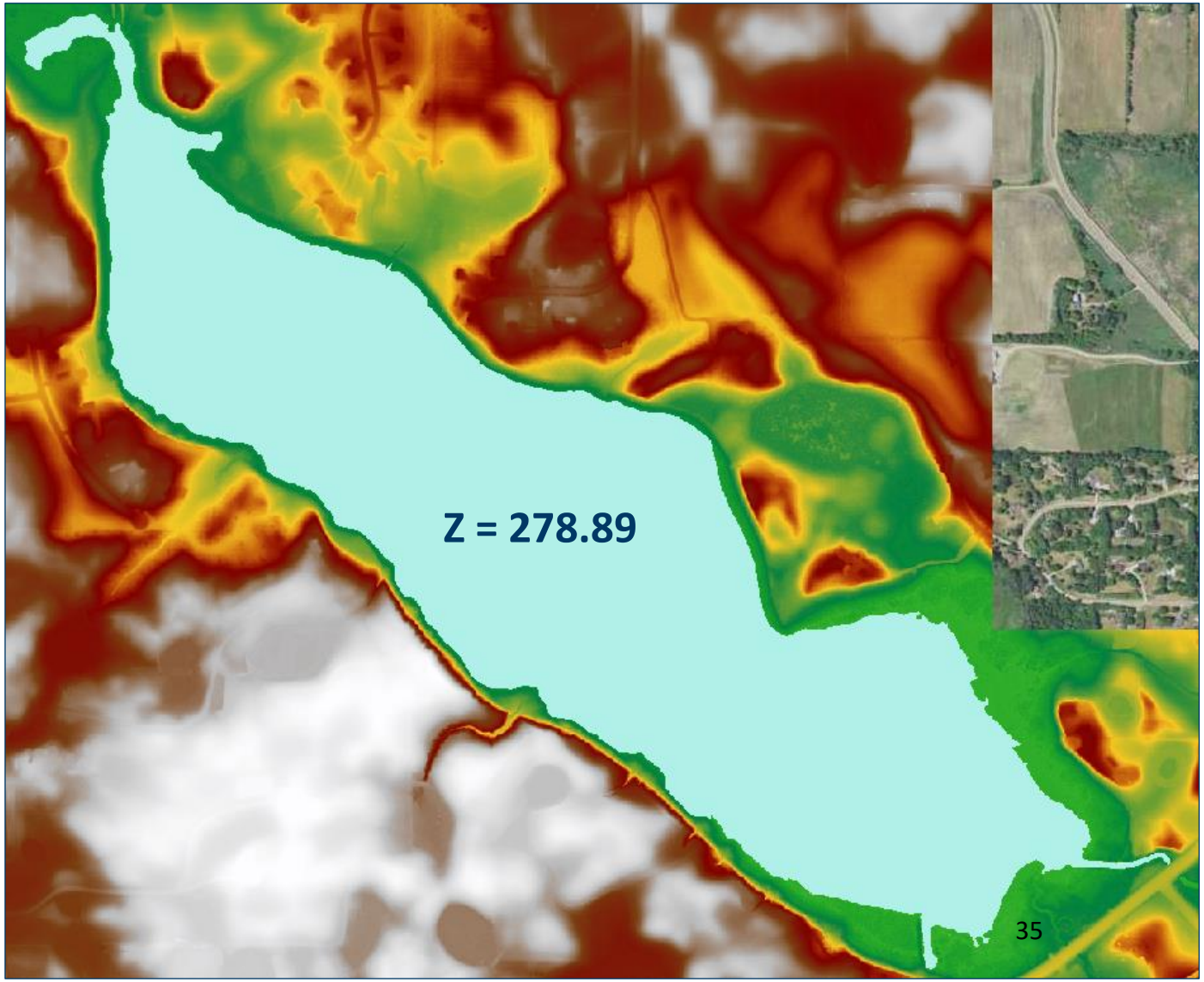
- Can’t raise the lake higher than surrounding terrestrial elevations to avoid creating a **plateau**.
- Need to create a single and consistent elevation for the lake .



# Overlap of Adjacent Lidar Acquisitions – Rice Lake Example #1

## Result

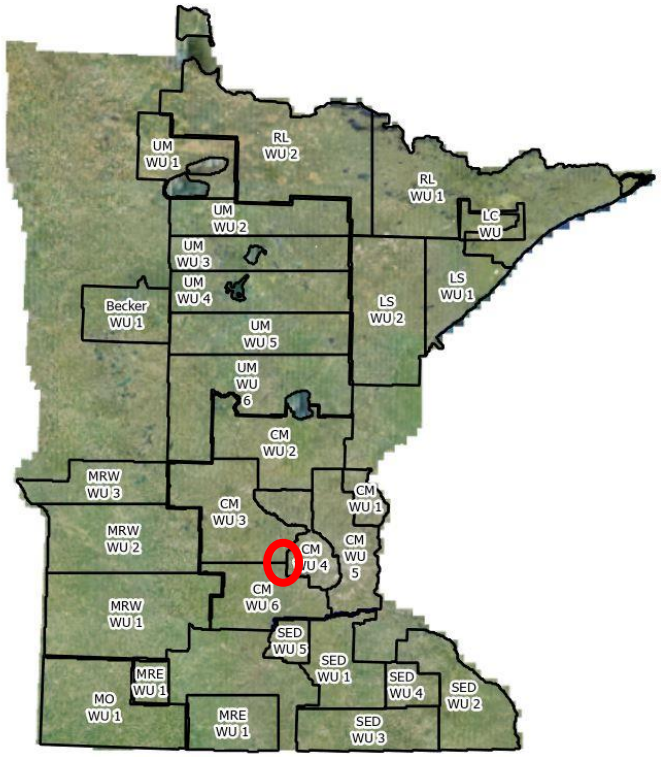
- One Consistent Elevation (**278.89**)
- **Invisible Work:** Users of the DEM in this area will never know the lake was collected in 3-different lidar acquisition projects.
- Work maintains 3DEP **data integrity.**
- Supports development of **sensible contours** for the region.

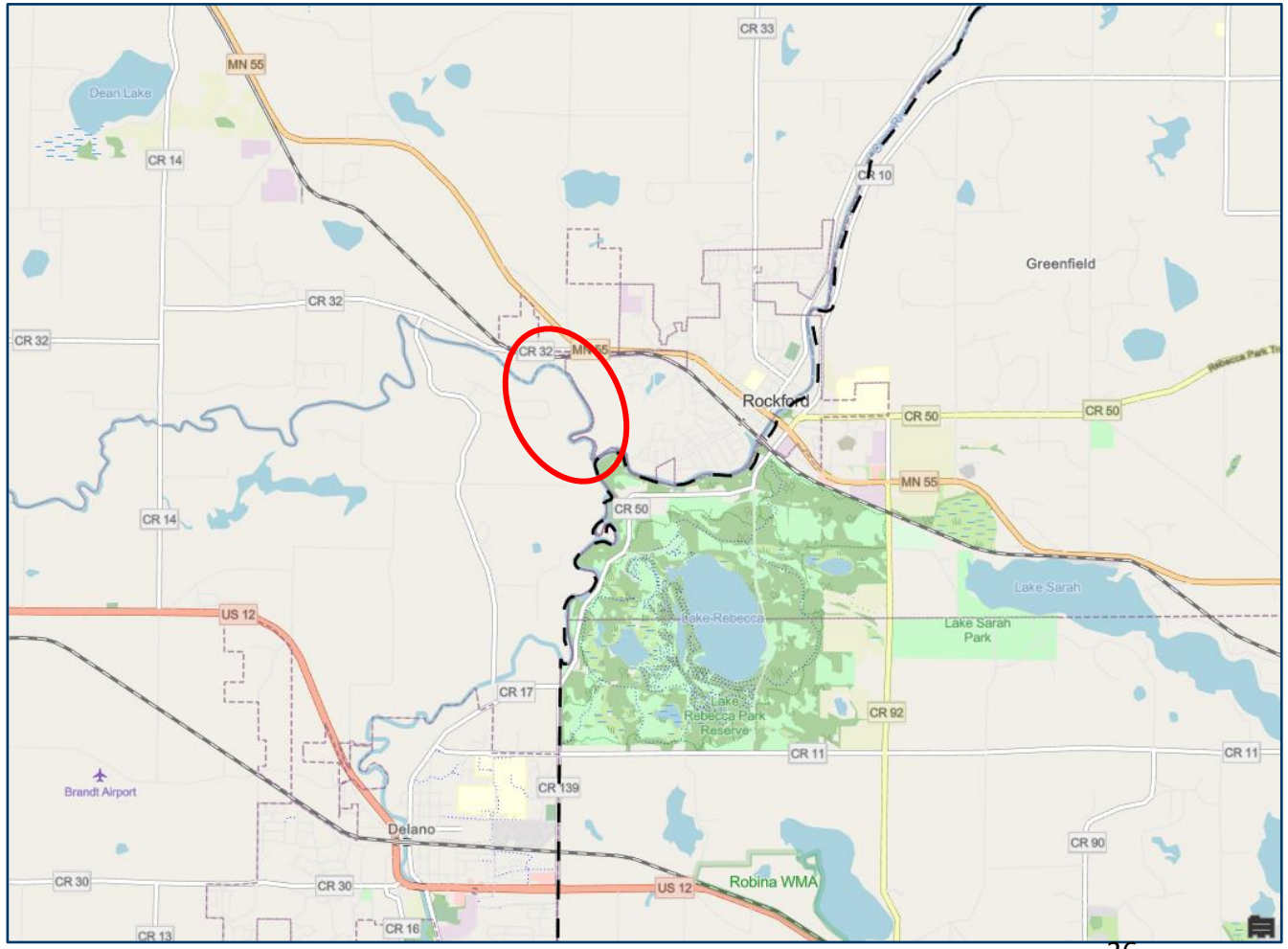


# Overlap of Adjacent Lidar Acquisitions – River

## Crow River

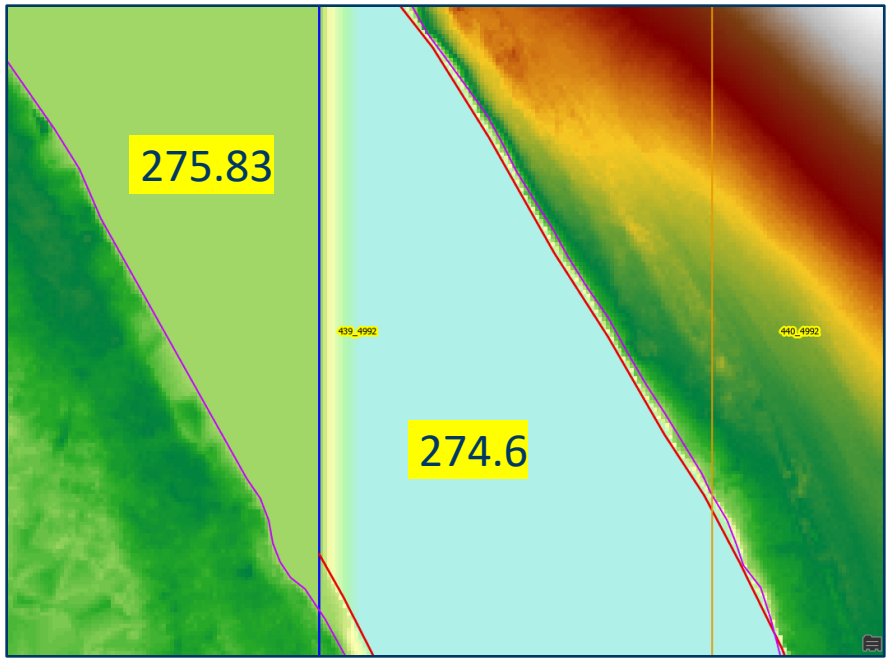
- Disparate acquisitions – Different River Elevations.

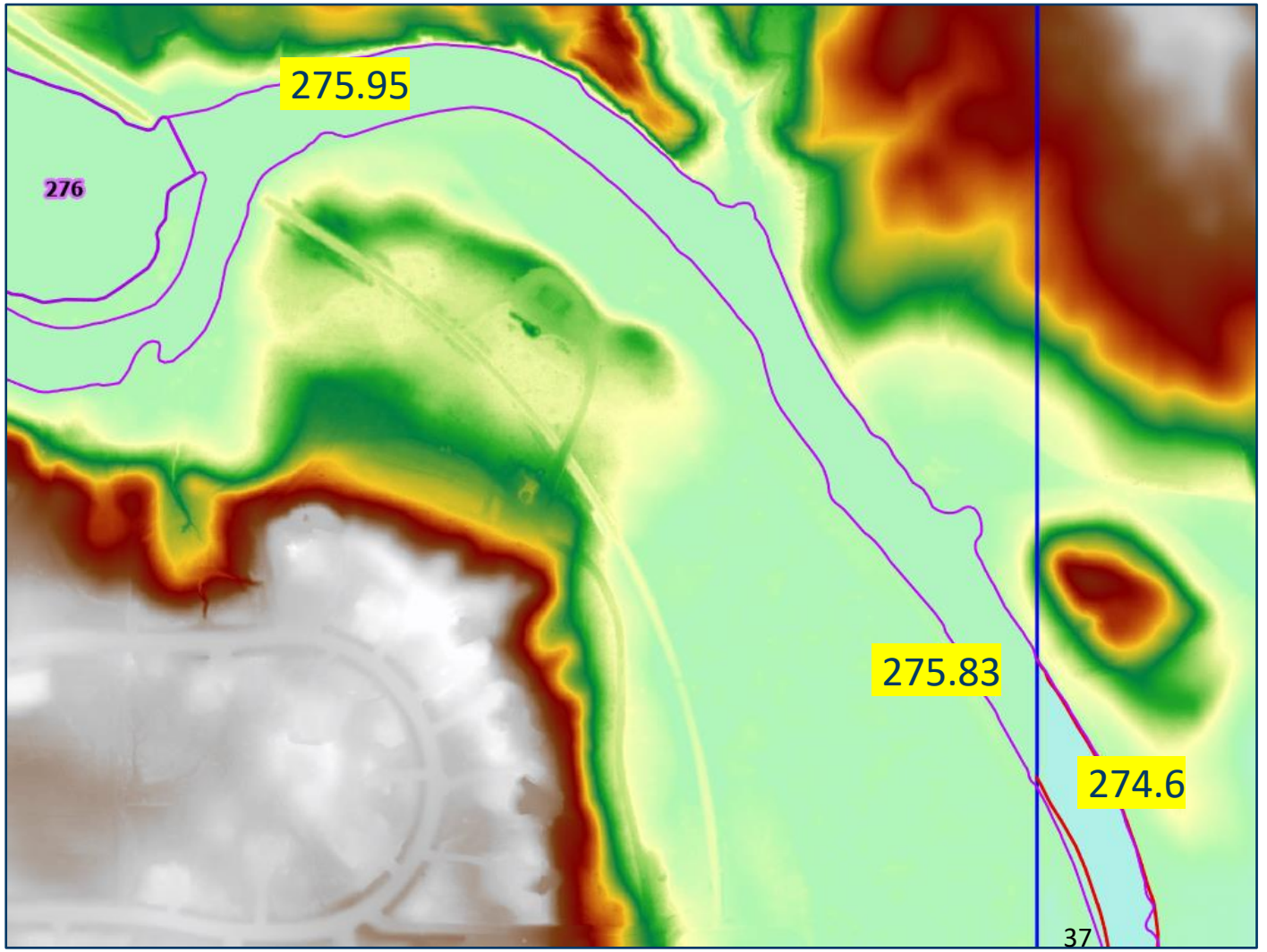


# Issue: Two River Elevations

- Overlap is causing hydro-flattened river to display in DEM as a **waterfall**.
- Overlap seamline requires gradual **downgradient** elevations.

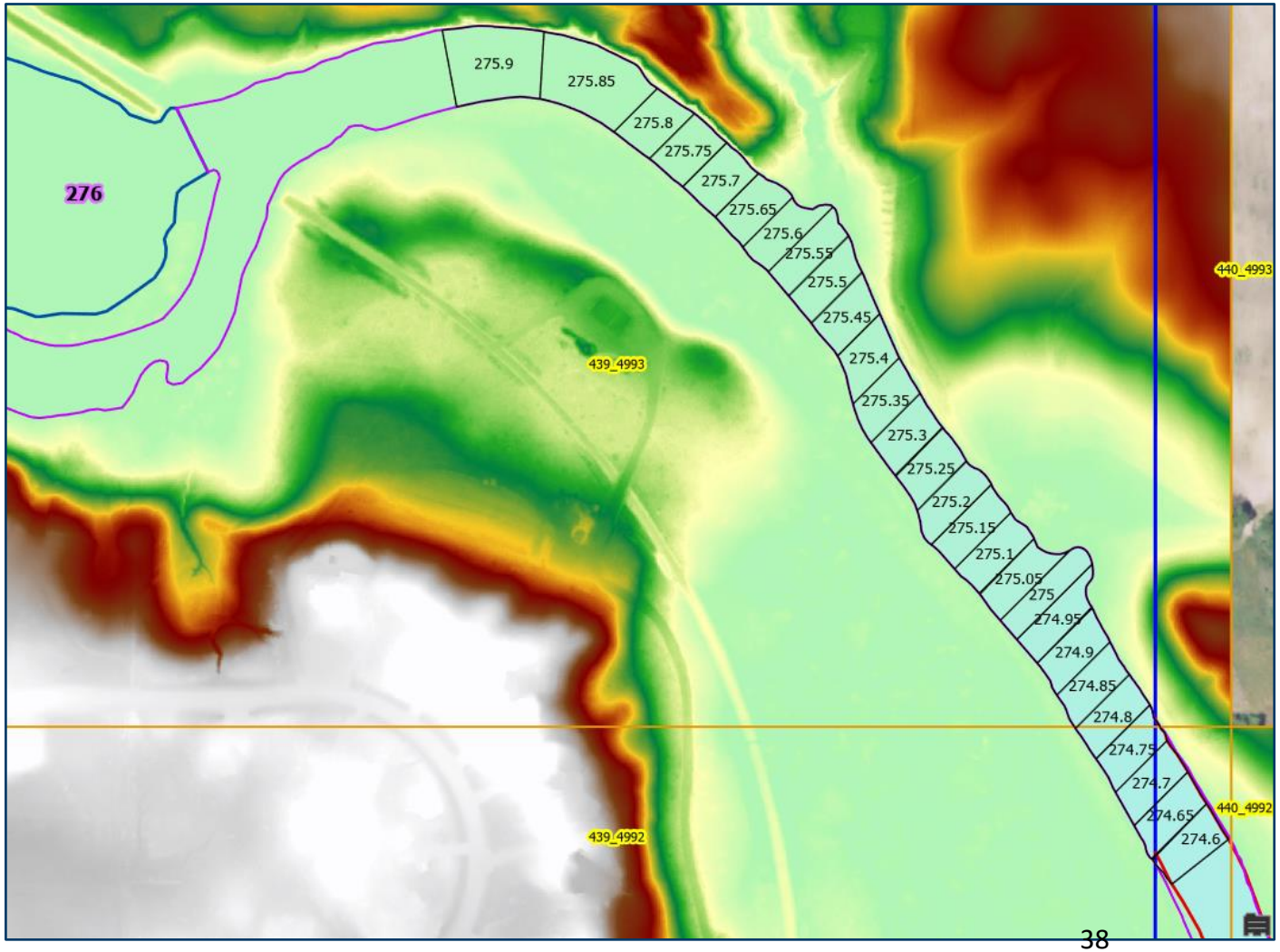


# Overlap of Adjacent Lidar Acquisitions – River

## Process

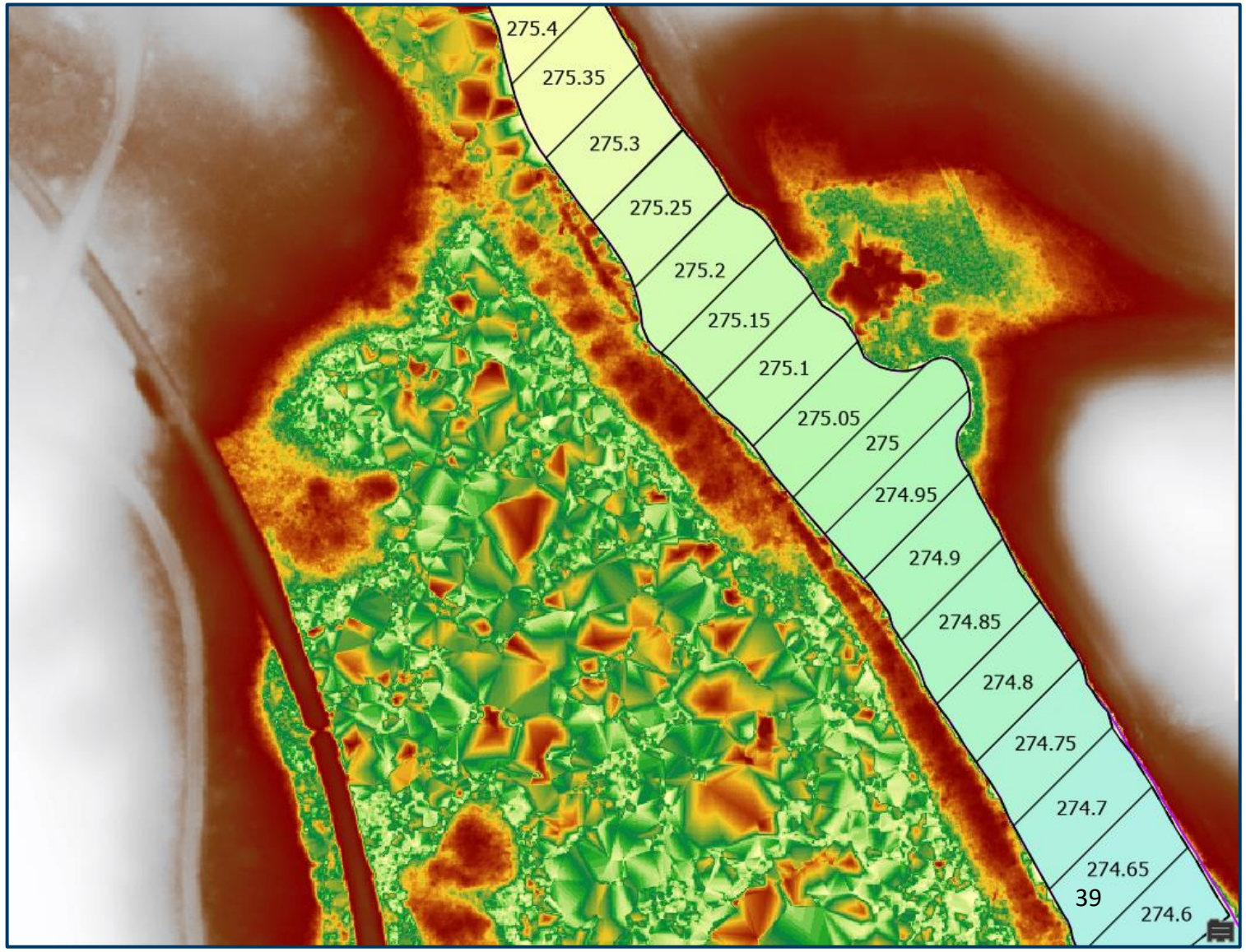
- **R&D**
  - Unique processes have been to created to modify hydro-flattened DEM.
- **Manually** created evenly spaced **incremental downgradient** elevations.



# Overlap of Adjacent Lidar Acquisitions – River

## Result:

- DEM has **gradual** decent for stretch of the watercourse.
- **Color palette** now shows smooth transition of colors in DEM.
- Establishes **practical hydrology**.
- Water elevation values are in **harmony** with adjacent land elevation values.
- Work maintains 3DEP **data integrity.**
- Supports development of **sensible contours** for the region.



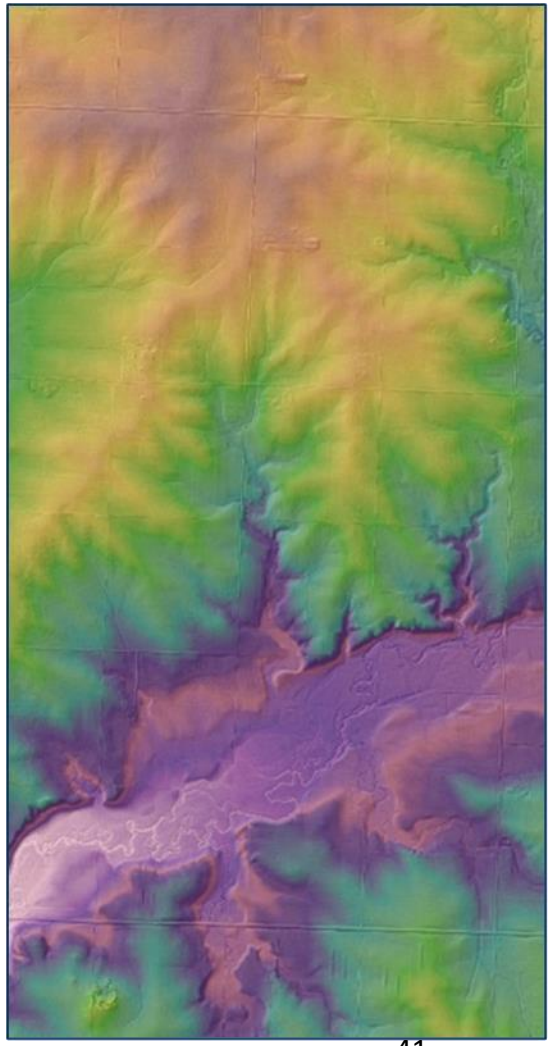
# Wrap Up – Overlap Takeaways

- Seamless data is necessary to have statewide data.
- The source lidar data is **correct**, accurate, and meets USGS Lidar Base Specification.
- Our overlap work:
  - Creates authoritative, combined, edge-matched, seamless data so **tens of thousands** of future end users will not have to combine, and edge-match the data themselves.
  - Is **Invisible** to the end users.
  - Maintains **integrity** of the 3DEP Certified Data.
- Less than **1%** of the 220,250 tiles require overlap work, the work ahead is **achievable.**

# Wrap Up – Overlap Takeaways

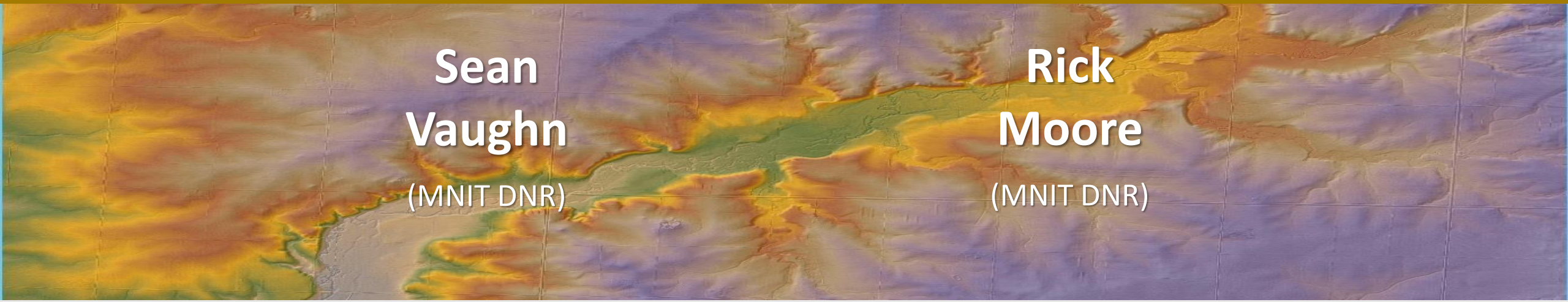
- Minnesota's 0.5-meter Seamless **DEM** is a **Foundational** Data Product
  - Building blocks for additional derived products (Contours, Hillshade. HPI etc.)

- Fun Facts
  - **220,250:** 1k Tiles Intersect State Boundary
  - **~881,000,000,000:** (8.81 Billion): 0.5-meter DEM grid cells
  - **~2,000,000,000,000:** (2-Trillion) Lidar Elevation Points
  - **~$30 million:** Value of MN 2ndGEN lidar (data, time, hardware etc.)



# Thank You!

From: 3D Geomatics Derivatives Team



**Sean Vaughn**
(MNIT DNR)

**Rick Moore**
(MNIT DNR)

**Email us: lidar@state.mn.us**

# Agenda Item 4

**Outreach Committee Update and Charter**
Fendos

# A New Committee Has Come Together

- **Recruited ten members from the government (state, county, city), private, education, and nonprofit sectors.**

*Chris Cantey – MN Legislative Coordinating Commission*
*Abby Stamm – MDH*
*Carla Coates – Ramsey County*
*Jeff Kalar – Ramsey County*
*Alec Trenda – Hennepin County*
*Cara Leitheiser – Dakota County*
*John Nerge – City of Brooklyn Park*
*Kendis Scharenbroich – ProWest*
*Nick Linell – We Are Alight*
*Shana Crosson - USpatial*

# Roles and Responsibilities


- State government outreach – Chris C + Abby Stamm
- County alliance – Carla C + Cara L
- Media Outreach – Megan S & Sally Wakefield
- Publication/Messaging – John N, Megan S

Heather A
Norman A

Len Kne

- Governor's Certificate + Esri/NSGIC Awards – Kendis S + Jessica F
- MGAC and Committee Hubs – Jeff K, Alec T, Kendis S, Jessica F, Megan S.

# Activities

- The Open Data Subcommittee meets every 6 weeks to discuss status and strategy of encouraging counties to opt-in to sharing data toward statewide composites.
- The Outreach Committee will convene on the first Tuesday of every month to monitor GAC Committee Hub sites build progress and the Outreach Committee's community engagement activities and communication endeavors.
- New Mission Statement
- Committee member roles and responsibilities assigned
- 2025 -2027 Action Plan
- Looking to fill an Open Data Subcommitte Co-Chair position

# New Charter

**Proposed Outreach Committee Charter** – March 4, 2025

**Committee Mission:** To connect the community with the council and its committees by providing strategic communication resources that advance council priorities and values.

**Objectives/Vision:** To support its mission, the Outreach Committee will:

- Promote the work of the GAC and its committees through public engagement, web presence, and recognitions.
- Connect with local government representatives to support the GAC's commitment to free and open geospatial data for Minnesota.
- Tell geospatial stories in venues where they can inform policy makers, partners, and the general public.
- Develop and provide guidance for Esri Hub sites for the GAC and its committees.
- Coordinate with Minnesota Geospatial Information Office to establish communication guidelines for the GAC that are in alignment with Minnesota IT Services policies and expectations.

# Priorities and Progress

**Open Data:** Statewide Opt-in Composite available on the MN Geospatial Commons.

- Of 87 MN counties, 55 contributed parcels, 46 have agreed to contribute address points and emergency service zones, and 45 have agreed to contributed road centerlines to date. Murray County opted-in!!!
- Parcels, address points, and road centerlines are available for download on the MN Geospatial Commons. The data is being refreshed on a quarterly basis. Parcel datasets were refreshed in Feb. 2025, to be followed by address points and street centerlines.
- **Outreach**: Received consents from three GAC Committee Chairs - CAN DO, Data Endorsement and Outreach Committees. Hub build team migrated contents for all three sites and will continue to work with MnGeo and Committee Chairs to further embellish these hubs.

# Emerging Committee Hubs

Minnesota Geospatial Advisory Council Events News Council

## Outreach Committee

Serve as a communication resource
council priorities and values.

### Objectives

To support its mission, the Outreach Committ

- Tell geospatial stories in venues where t
general public.
- Connect with local government represer
open geospatial data for Minnesota.
- Develop and provide guidance for Esri H
- Promote the work of the GAC, and its co
and recognitions. Coordinate with Minne
communication guidelines for the GAC t
and expectations.

Minnesota Geospatial Advisory Council Our Work Organization Events News Resources

## Data Endorsement Committee

M

The Data Endorsement Committee of the Minnesota Geospatial Advisory
endorsement process for statewide geospatial datasets.

### Committee Leadership

Co-Chairs:

- **Alison Slaats,** *Minnesota Geospatial Information Office, alison.slaats*
- **Kevin Trappe,** *Beltrami County, kevin.trappe@co.beltrami.mn.us*

### Committee Membership

Anyone interested in being part of this committee is welcome. Please ema
you are interested in joining.

### Charter, Accomplishments, and Workplan

Charter

The Data Endorsement Committee is in its early stages - see the charter fo

### Committee Meeting Minutes

Click on a meeting date to view the minutes for that meeting.

(Minutes will be added here once available)

Minnesota Geospatial Advisory Council Our Work Organization Events News Resources

## Contributing to Nationwide and Commercial Data Assets Committee

### Committee Mission

To share local authoritative data with nationwide and commercial assets

**Objectives:**

- Raise awareness of the need for shared data.
- Identify major consumers of shared data.
- Identify, document, and recommend requirements and processes for MnGeo to share aggregated statewide datasets compiled from local authoritative data.
- Identify appropriate open licensing.

**Benefits:**

1. Basemaps with authoritative data.
2. Geocoding - Instead of several services can use one (statewide, national).
3. Improved map accuracy for delivery and emergency response.
4. General business planning.

**Deliverables:**

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# Thank You!

**Jessica Fendos**

*jfendos@logismn.gov*

# Outreach Committee Charter Approval

**Approve amended**

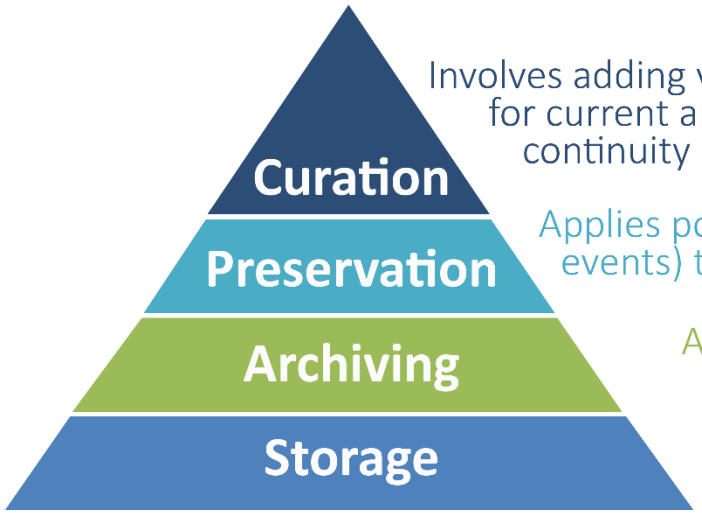
**Outreach Committee Charter**

# Agenda Item 5

**Archiving Committee Charter**
Mattke

## Digital Stewardship Pyramid

MINNESOTA GEOSPATIAL ADVISORY COUNCIL




Involves adding value to a trusted body of digital information for current and future use (e.g., semantic and ontological continuity and comparability of the collection content).

Applies policies and procedures (validation, migration, events) to ensure that files are continuously useable.

Adds identifiers, replication with integrity and verification checking.

Storing bits - public, private cloud, tape, etc.

# Archiving Committee – Proposal for GAC Approval

Ryan Mattke | Geodata Archive Implementation Priority

# Previous Work

## Previous Workgroup Reports

**December 2022 - Archiving Imagery Workgroup Final Report** and **description of geospatial imagery formats**

- Summary of the workgroup's key findings from its research, community outreach and public survey

**March 2022 - Archiving Pilot Workgroup Final Report**

- Summary of the workgroup's accomplishments, key findings, future considerations, next steps and future plans

**February 2021 - Archiving Implementation Workgroup Final Report**

- Summary of the workgroup's accomplishments, key findings, future considerations, next steps and future plans

**August 2019** - **Archiving Workgroup Summary Report**

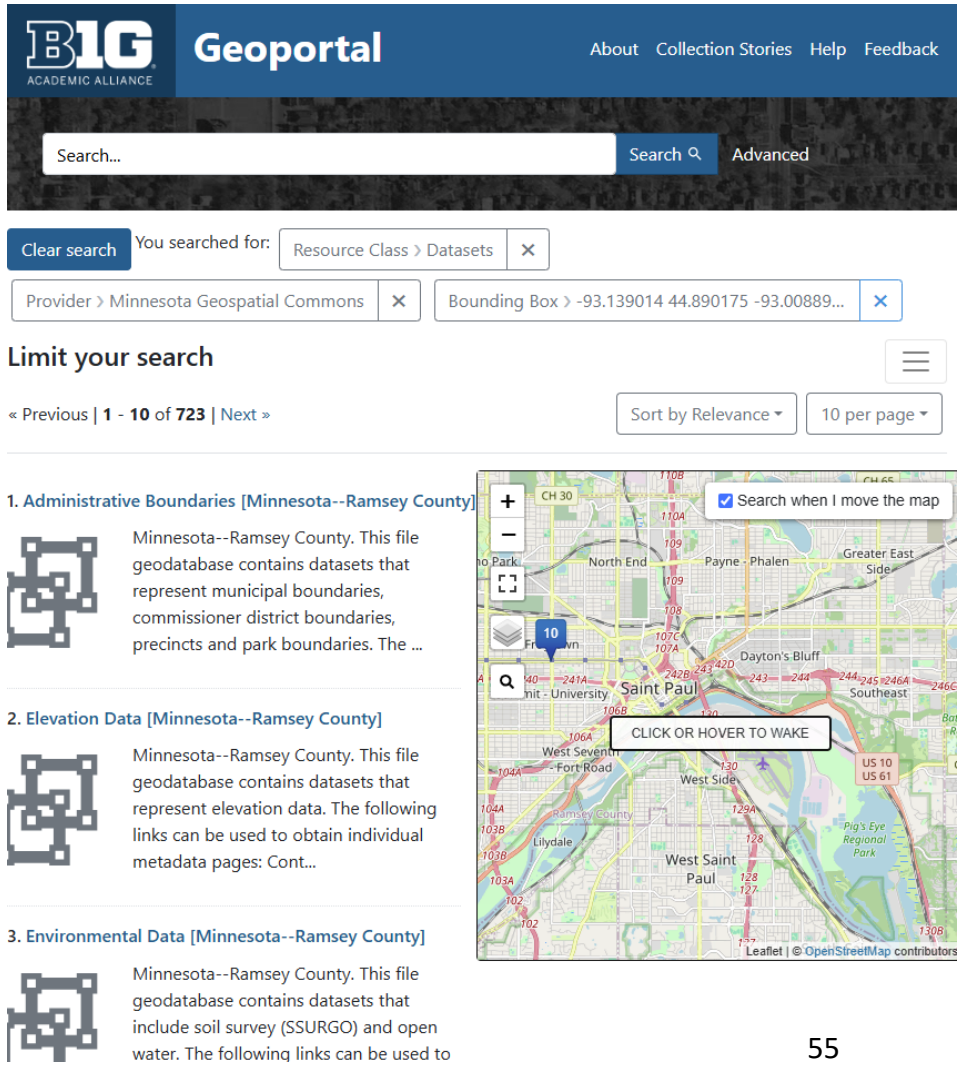
- Summary of the workgroup's accomplishments, key findings, future considerations, next steps and future plans
- Summary of **Archiving Strategy Subgroup Report**, **Priority Datasets Subgroup Report,** and **Archiving Agreement - Guidelines and Recommendations**

# Context and Current Opportunity

## Big Ten Academic Alliance Geospatial Information Network

- Current collection policy covers metadata records for geodata and historical scanned maps.
- Expanded policy includes a curated collection of public geodata.
- Looking for pilot partners

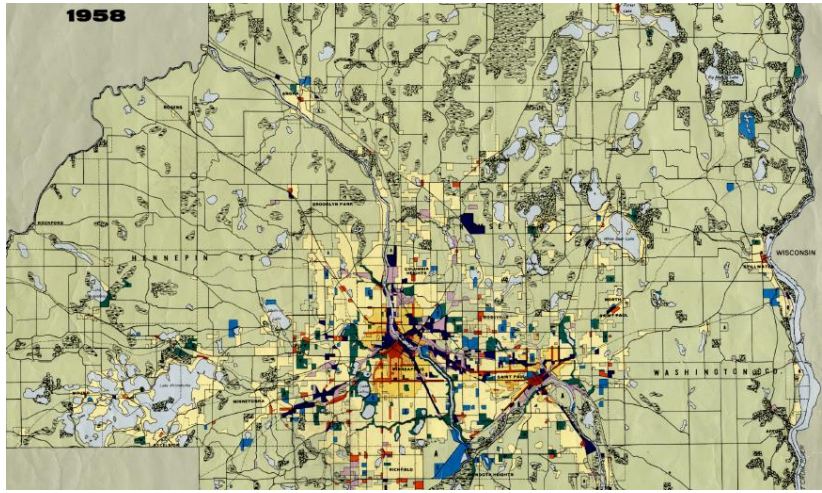
https://gin.btaa.org/library/geodata-collection-strategic-plan/



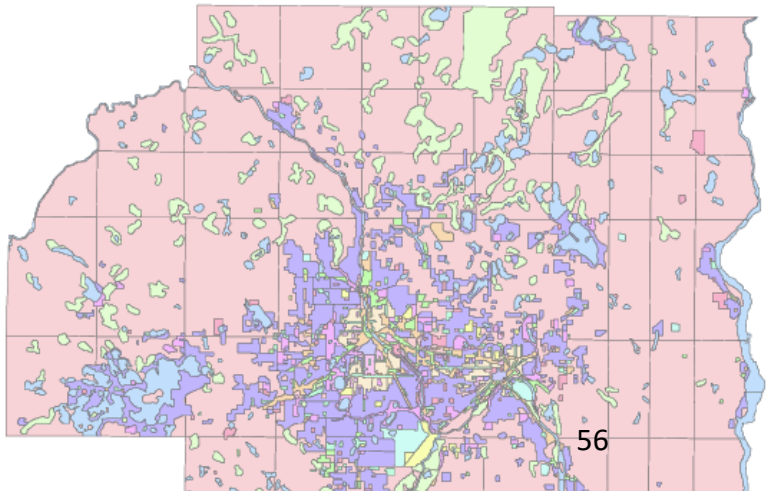
# Historical GIS Data Example

Land Use data

- **GIS data existed for Twin Cities historical land use**
  - Created by the Met Council
  - Historical data back to 1984 available via MN Geospatial Commons
- **Faculty member in Civil Engineering needed earlier data**
  - Hired a graduate student to digitize data for 1958, 1968, and 1978 from paper maps
- **Data has been downloaded 610 times in the past ten years**
  - As of 2018, data had been downloaded 230 times




Twin Cities Land Use 1958



# Archiving Committee - Objectives

## Objectives

1. Establish a statewide archiving framework
2. Foster collaboration across sectors
3. Align with existing efforts
4. Educate and advocate
5. Monitor and evaluate progress

## Deliverables

1. An operational framework
2. Community engagement
3. Documentation

# Archiving Committee – Mission

## Mission Statement

The Archiving Committee is dedicated to establishing Minnesota as a national leader in geospatial data preservation. By advising the state geospatial community on best-in-class archiving practices, shaping forward-thinking policies and procedures, and fostering collaboration across sectors, the committee ensures that Minnesota's valuable geospatial data is not only preserved but leveraged to drive innovation and benefit future generations.

## Next Steps

- **Approval of the committee by the GAC**
- **Recruit (more) volunteers** – need representation from:
  - Have volunteers from UMN & MN DNR
  - MnGeo, Government agencies at all levels (state, regional, county, city, etc.), Tribal government, Researchers, users of historical geospatial data, Higher Education, Non-profit organizations, Private sector
  - Need a MN GAC Vice Chair
- **Convene Meetings** – Recommendations for proceeding expected Fall 2025

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GEOSPATIAL ADVISORY COUNCIL

# Thank You!

**Ryan Mattke**

*matt0089@umn.edu*

# Archiving Committee Charter Approval

**Approve Archiving Committee Charter**

# Agenda Item 6

**Governor’s Certificate Award Announcement**

Kne

# Agenda Item 7

***Break***

# Agenda Item 8

**MN GIS/LIS Consortium Update**
Knott

MINNESOTA
GEOSPATIAL ADVISORY COUNCIL

# Update on MN GIS/LIS Consortium

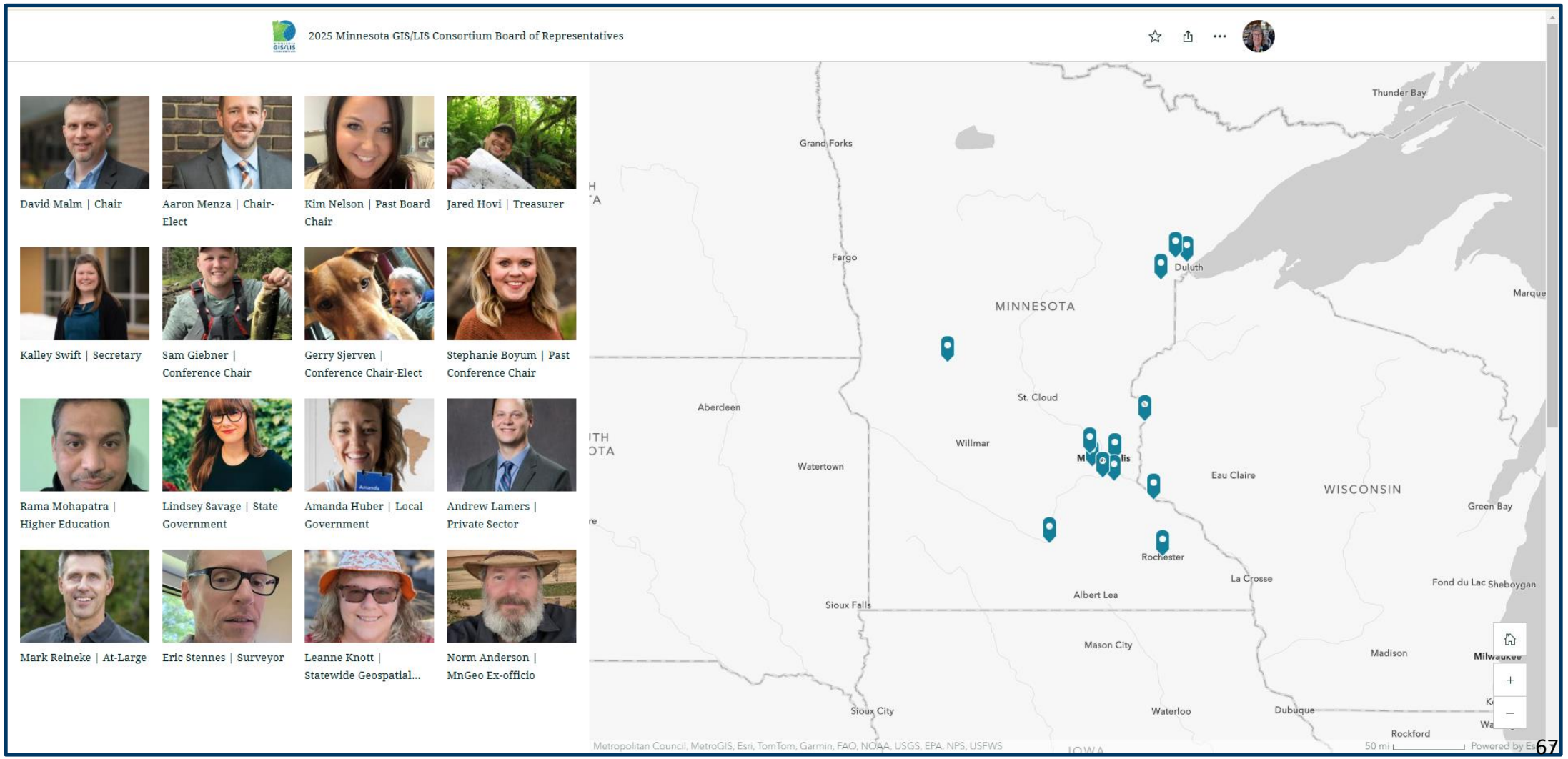
Leanne Knott, GISP| GIS/LIS Ex-officio for the GAC

# About the Consortium

## Minnesota GIS/LIS Consortium

- The Minnesota GIS/LIS Consortium is a 501(c)(3) non-profit organization with over 600 members across the Minnesota Geospatial Industry.
- **Mission Statement:** Our mission is to develop and support the GIS/LIS community in Minnesota for the benefit of our people and contributors.
- The MN GIS/LIS Board of Directors is responsible for shaping the direction and operations of the Consortium. Fourteen committees support the Board, each specializing in core operations in support of the Board.
- Board members serve two-year terms, with the exception of Board Chair and Conference Chair (Elect, Chair, and Past Chair).

# Current Board



# Professional Development

Connecting GIS professionals statewide.

- **Spring Workshops** – May 15 U of M
- **Fall Conference** – Finalizing for 2025
- **Networking** – Workshops/Conference/Esri UC/GIS Day
- **Story Maps/Hub** – GeoPeps Hub Site

# Fall Conference Awards Applications

The Consortium recognizes stellar individuals through four awards.

- **Lifetime Achievement** – Significant career contribution
- **Polaris Leadership**– Mid-career leadership
- **Distinguished Educator** – Active educator leveraging GIS
- **Emerging Professional**– Early-career contributor
- Nominations for 2025 recipients will open in May, please visit https://www.mngislis.org/page/awards for more information.

# GAC Ex-officio Board Position

## GAC - GIS/LIS Consortium Ex-officio

- Board position initiated by Ryan Stovern, who saw an opportunity for greater collaboration between GAC and GIS/LIS Consortium.
- I was voted into the position in Summer 2021. My second term will end in June 2025.
- Recruitment opened in December 2024 with two nominees. Carla Coates was confirmed by Board vote and will serve the 2025-2027 term.
- Board members serve two-year terms, with the exception of Board Chair and Conference Chair (Elect, Chair, and Past Chair).

# GAC Ex-officio Board Position

## GAC - GIS/LIS Consortium Ex-officio Qualifications/Selection

- Two-year term starts in June to align with GAC appointments.
- Call for applicants the previous December with applications due by Feb.1.
- Applicant reviewed by the Executive Committee and then the Board will vote online.
- Ex-officio applicant must have served on the GIS/LIS Consortium Board with the previous four years and must demonstrate a willingness to attend meetings for both bodies and serve on at least one Sub-Committee.

# Spring Workshops

## May 15th at U of M Minneapolis

- Call for Workshop instructors for topics including Experience Builder, Database, Pro, LiDAR, Python, AGOL, Portal, Arcade and more!
- Fun networking after workshops.
- **Contact Spring Workshops Chair Eric Myott (myott001@umn.edu) for more information.**

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# Thank You!

**Leanne Knott**

*Leanne.Knott@goodhuecountymn.gov*

651-385-3187

# Agenda Item 9

**GAC Member Appointments**
Albrecht

MINNESOTA
GEOSPATIAL ADVISORY COUNCIL

Mission: The Council acts as a coordinating body for the Minnesota geospatial community. It represents a cross-section of organizations that include counties, cities, universities, business, nonprofit organizations, federal and state agencies, tribal government, surveyors and other stakeholder groups that benefit from geospatial technology.

# GAC Member Appointments FY 2026/27 Term

Heather Albrecht | Chair, Geospatial Advisory Council

# GAC Guiding Principles

- Promote effective investments in geospatial information
- Promote geospatial information as a shared public resource
- Support the establishment and use of geospatial standards and best practices
- Champion collaboration among geospatial practitioners and related stakeholders
- Educate and inform policymakers about the value and use of geospatial technology
- Provide a forum for ideas and issues to be shared and acted upon by the geospatial community
- Encourage all council sectors to contribute to the state geospatial infrastructure
- Encourage all council members to communicate outcomes with relevant stakeholders
- Encourage geospatial education at all levels
- Advocate for free and open geospatial data

# GAC Member Obligations

- Support the Council's mission & guiding principles
  - Attend term member orientation: September 3, 10 AM - 2 PM (in-person)
  - Participate in a minimum of one committee or subgroup
- Be active in quarterly Council meetings
  - Respond to call for agenda items, suggesting topics pertinent to your sector
  - Come prepared, reviewing past meeting minutes, agenda, and committee reports
  - Participate in round robin updates related to your sector
- Be an ambassador representing your sector
  - Contribute a minimum of one sector presentation during the two-year term
  - Responsibility to report GAC news and information to the sector you represent
- Abide by MNIT communication and conflict of interest policies

# GAC Sector Representation

1. City (2)
   - Twin Cities metro (1)
   - Greater Minnesota (1)
2. County (2)
   - Twin Cities metro (1)
   - Greater Minnesota (1)
3. Regional Government (2)
   - Twin Cities metro (1)
   - Greater Minnesota (1)
4. State Government (2)
5. Federal Government (2)
6. Tribal Government (1)
7. Non-profit Organization (1)
8. Business (2)
9. K-12 Education (1)
10. Higher Education (2)
11. MetroGIS (1)
12. MN GIS/LIS Consortium (1)
13. Surveyor (1)
14. At-large (3)
15. MN Chief Geospatial Information Officer (ex-officio)

**All sector representation seats are open to applicants!**

# Next GAC Term Appointments

- Applications for FY 2026/27 term GAC membership opens: March 7th, 2025
  - Submit cover letter and resume to: https://commissionsandappointments.sos.state.mn.us/Agency/Details/144
  - Watch for MnGeo Newsletter with application link and reminder to apply
  - Submit your questions to gisinfo.mngeo@state.mn.us
- Application period closes: March 28th
  - Or when all vacancies are filled, whichever is later
- Members are appointed by Terek Tomes, MN CIO and MNIT Commissioner
  - Selected & non-selected applicants are notified prior to term start date (July 2025 - June 2027)

- **First GAC meeting of FY2026/27 : September 10 (hybrid)**

# Agenda Item 10

**Executive Team Updates**
Albrecht

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GEOSPATIAL ADVISORY COUNCIL

Mission: The Executive Team of the MN Geospatial Advisory Council supports the functions of the GAC. The Executive Team authors the GAC workplan and aligns the activities of the GAC to adhere to the plan. The Executive Team supports the GAC by organizing the quarterly public meetings, gathering feedback from the GIS community through the priority surveys, and ensuring the committee work supports the priorities.

# Update to the GAC Executive Team goals

Heather Albrecht | Chair, Geospatial Advisory Council

# GAC Executive Team Goals

- Increase duration of priority project work to align with full GAC term
  - Completed
- Align GAC committees and priority projects
  - In Progress
- **Improve committee and workgroup reporting ***
  - **In progress**
- Increased participation of GAC committee and sectors in meetings
  - Future phase
- Replace GAC website and committee pages with Esri Hub
  - In progress
- Additional GAC member support for committees
  - In progress
- **Ease transition of GAC membership and leadership between terms**
  - **In progress***

# Committee (GAC) Reporting Improvements

- Change year end reporting to end of term reporting
  - **Committee Workplans** –
    - **Approve at *end of term* May meeting for the next 2-year term (due for all GAC committees May 2025)**
    - Revise as-needed after term priorities are set at the *first FY* December meeting
    - Priority driven revisions to committee workplans will be approved by the GAC at the *first FY* March meeting
  - **Accomplishments –**
    - Midterm summary of accomplishments toward committee goals and priorities reviewed at *first FY* May meeting (2026)
  - **Term report –**
    - End of two-year term summary of accomplishments toward committee goals and priorities included in the Committee Workplan templates
    - **We are asking committees to submit their FY2026/27workplans and FY2024/25 term report in May of 2025**
  - **Geospatial Advisory Council and Executive Team reporting –**
    - Geospatial Advisory Council and Executive Team goals and priorities reporting will follow the reporting plan outlined above

**Reporting templates available on the GAC Committee and Subgroups homepage**
**https://www.mngeo.state.mn.us/committee/index.html**

# GAC Membership and Committee Chair Retreats

- GAC FY 2026/2027 term retreats in addition to quarterly GAC meetings
- Prior to the first GAC meeting of a new 2-year member term, Executive Team will host a **GAC membership overview** for new and returning members to set the stage for understanding the GAC and what is involved with the 2-year commitment.
  - **New term GAC member orientation: September 3, 10 AM - 2 PM (in-person)**
- Executive Team will host a **gathering of committee chairs** to align priorities across the Committees, GAC membership, and the GIS community.
  - **Committee - Leadership Retreat: October 22, 10 AM - 2 PM (in-person)**

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# Thank You!

**Heather Albrecht**

*Heather.Albrecht@hennepin.us*

Stay up to date on GAC news: https://www.mngeo.state.mn.us/newsletter.html

# Agenda Item 11

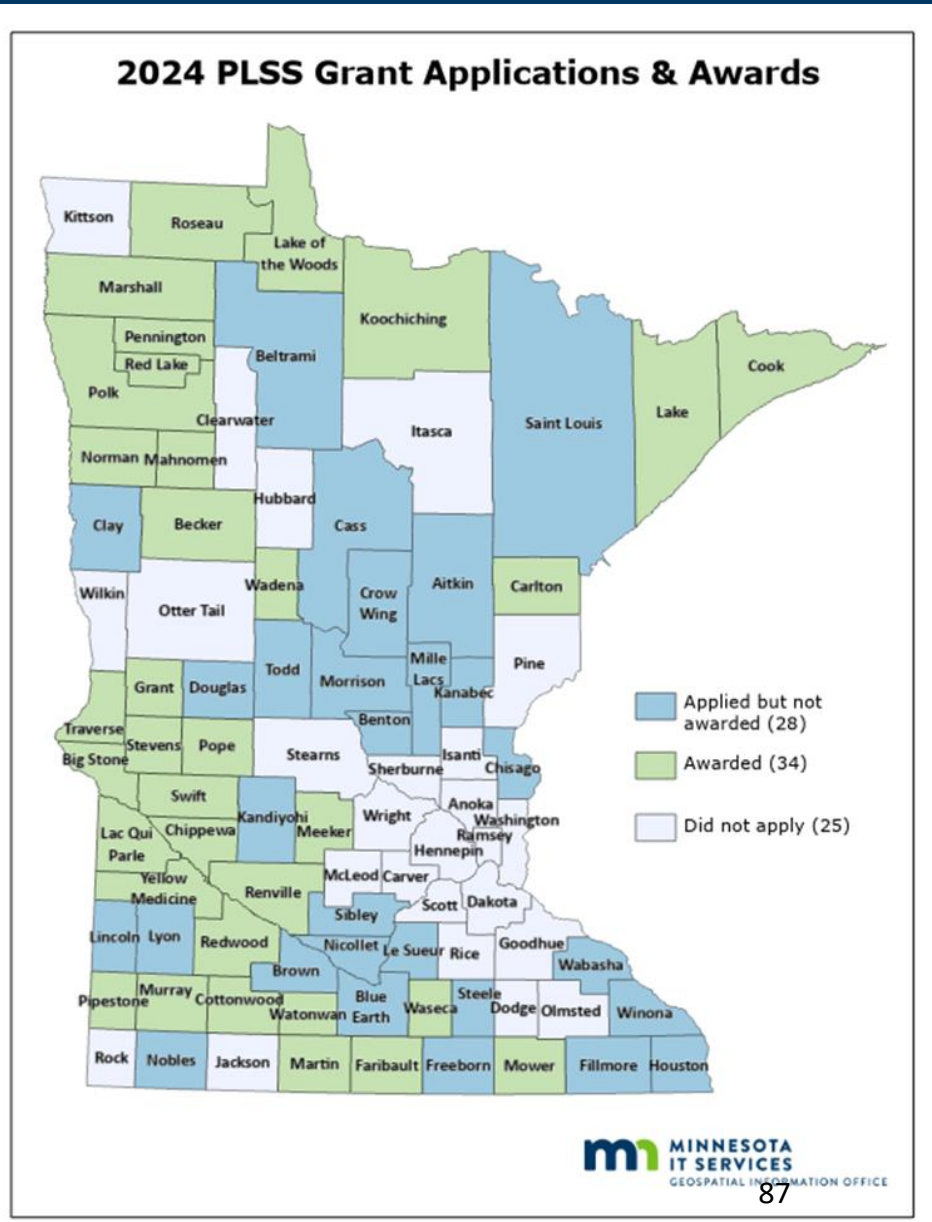
**MnGeo Updates**
Slaats

# Update on MnGeo PLSS Monument Grant

- **February quarterly progress reports show:**
  - Average project completion is 37%

    *As reported by the counties*
  - Total County Expenses to date: $2,854,603.36
  - Processed **$2,572,984.07** in reimbursements

    *28% of $9.1 million*
  - A few counties are on track to finish early
  - 1 county has not completed their progress report to date
  - Annual reviews are almost complete:
    - All counties are reporting to be “on schedule” or “slightly ahead of schedule”
    - Some counties are projecting to be under budget and will complete additional corners
    - The rest of the reviews should be completed by the end of March
- **Upcoming progress:**
  - Many counties are starting to file corner certificates
  - Based on annual review interviews significant work will be completed this spring
  - Kory is planning to make a few inspection trips starting in the spring

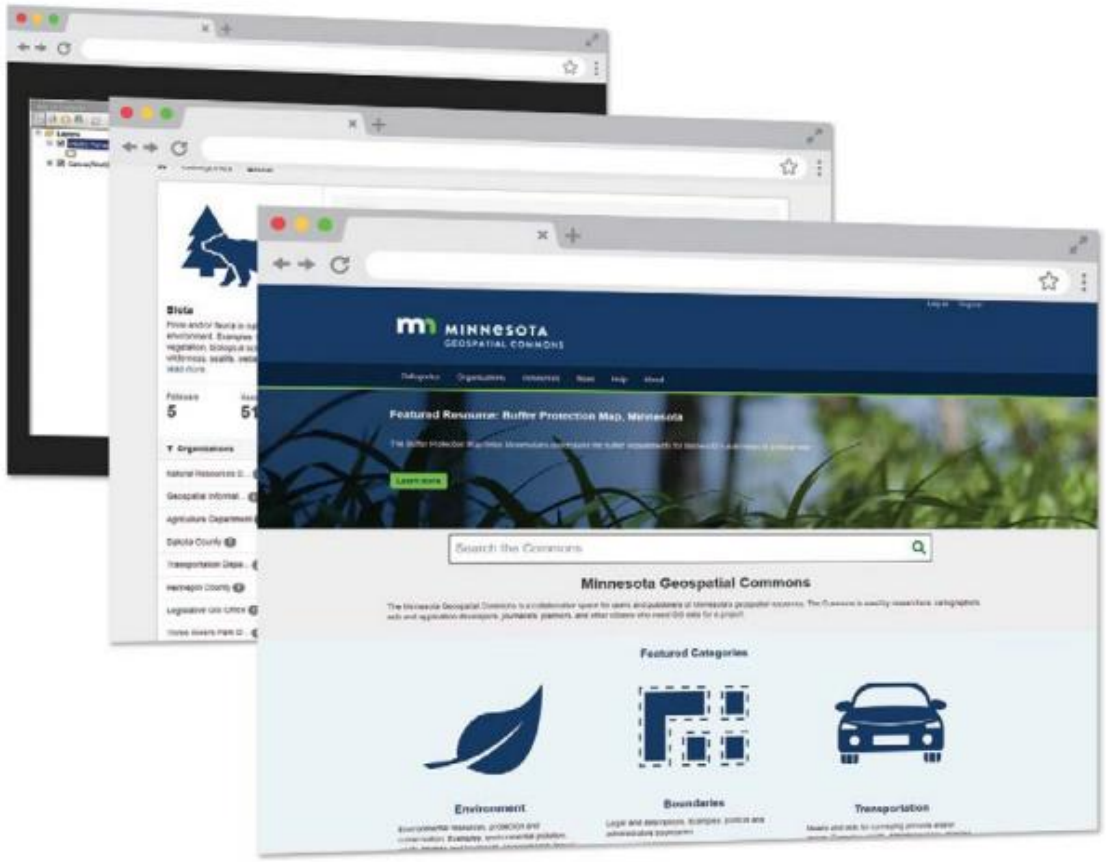


# PLSS Remonumentation Legislation Subcommittee

- **Past outreach**
  - Phil Raines lobbying for PLSS Funding at the capitol
  - National Association of County Surveyor's (NACS)
    - Kory & Pat presented at their annual meeting in Michigan
  - Phil Raines presented PLSS Legislative need to AMC Transportation Committee
  - Minnesota Society of Professional Land Surveyors(MSPS)
    - Kory moderated a PLSS Restoration Panel Discussion
    - Phil Raines gave a legislative update to MSPS members
- **Upcoming outreach**
  - Surveyor's Day at the Capitol March 17
    - Governor's Dining Room 12:00p.m.-4:00p.m.
    - Presentations & Lunch Provided
- **Legislative update**
  - Monitoring Two Bills:
  - SF 1233 and HF 1478 have been submitted proposing further funding of the PLSS Monument Grant Program
  - SF 59 and HF 531 have been submitted by Senator Steve Green. Currently tabled by the senate judiciary committee

# Update: Modernization of the Geospatial Commons

- MnGeo applied for, and received funds from the MNIT Technology Modernization Fund
- The Minnesota Geospatial Commons technology is aging, and 10 years old
- TMF funding will enable *modernization* of Commons technology from a *file-based system to a web service model* and *improve user and publisher experience*
- **Update: Requested a project extension to March 2026. Evaluation of extension in April**



# Update: Government-Owned Lands Dataset

**Overview**

- The Government owned lands is a derived subset of the aggregated parcel dataset that includes land owned by government entities

**Example Uses**

- Identify potential areas for collaborative conservation efforts between the Department of Natural Resources and various conservation partners.
- Assess watershed areas and determine the proportion of protected land versus land open to development.
- Identify private landowners in proximity to known Chronic Wasting Disease cases.
- Exclude government-owned lands from certain analysis where private ownership is critical (like Broadband).

**Update**

- First release of data is anticipated second quarter 2025

# MNIT Annual Report

- MNIT published their 2024 annual report in January
- Includes a section about the GAC and lists members
- Shares how geospatial technology is a key part of the work MNIT does

# Agenda Item 12

**Round Robin / Announcements**

All

# **Reminder:** Next Meeting

## Wednesday, May 21, 2025

**11:00 a.m. - 2:00 p.m.**

Hybrid

*(in-person and online via Teams)*

# Agenda Item 13

**Adjourn**
Albrecht

MINNESOTA
GEOSPATIAL ADVISORY COUNCIL

# Thank You!

**Minnesota Geospatial Advisory Council**

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