Minnesota Geospatial Advisory Council Workgroup Work Plan

Hydrogeomorphology Workgroup

Work Plan date:

February 3, 2023

Co-chairs:

Andrea Bergman, Jamie Schulz, and Rick Moore **Steering Committee Liaison:**

Sean Vaughn

Link to committee charter:

http://www.mngeo.state.mn.us/committee/3dgeo/3dgeo committee charter.pdf

Work Plan for 2023

Planned activities and deliverables:

- 1. Education and Outreach
 - a. Maintain SharePoint Calendar with current and upcoming events members should be aware of
 - b. Look for opportunities to connect with hydrography related committees and workgroups within the Agencies
 - c. Develop needs statement to guide LiDAR derived hydrography products
- 2. Coordination across 3D Geomatics Workgroups
 - a. Connect with other workgroups to coordinate collaborative efforts
 - b. Attend 3D Geomatics Steering Team Meetings to present workgroup updates
 - c. Create a list of Agency programs that fund projects related to LiDAR, share with 3D Geomatics Steering Team

3. 3DHP

- a. Stay up to date on the process of creating 3DHP through participation in the NSGIC 3DHP for the Nation initiative
- b. Obtain a sample of the new lidar data coming into the state to pilot a project to create lidar-derived hydrography
- 4. DEM Hydro-modification Subgroup (formerly Breachline Database Subgroup)
 - a. Establish a Digital Dam Breachline (burn line) QA/QC Protocol
 - b. Maintain centralized authoritative map of current breachline datasets
 - c. Promote the Need for a Digital Dam Breachline (burn line) QA/QC Project
 - d. Explore the role of the DNR Culvert Inventory App or a modified version Breachline Inventory App in digital dam breachline mapping and dissemination
 - e. Collaborate with the GAC and provide an advisory role on GAC Priorities.

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- 5. Data Catalog Subgroup
 - a. Identify data needs not covered by existing data
 - b. Identify requirements of LiDAR collects to meet these needs
 - c. New webpage for the subgroup
- 6. Foundational Hydrography Data Stewards Subgroup
 - a. Basin ID Standard updates for GAC Standards Committee
 - b. Watershed ID Standard updates for GAC Standards Committee
 - c. Quarterly meetings
- 7. Culvert Data Standard Subgroup
 - a. Create subgroup and begin membership recruitment
 - b. Develop web page for Culvert Data Standard efforts
 - c. Develop Mission Statement and Work Plan
 - d. Establish meeting schedule
 - e. Collaborate with the GAC and provide an advisory role on GAC Priorities.
- 8. Broaden scope/mission to include relationship to soils
 - a. Establish a subgroup to incorporate concepts of how landforms and water create soil types
- 9. Maintain ongoing support duties
 - a. Work with MNGEO (Nancy Rader) to maintain workgroup web page
 - b. Maintain web pages for each subgroup (Hydromod, data catalog)
 - c. Identifying and Recruiting Membership
 - d. Maintain SharePoint site current and relevant content
 - i. Focus on using SharePoint for collaboration, such as documents for DEM Hydro-modification subgroup
 - ii. Identify SharePoint steward for the Workgroup pages

Roles and Responsibilities:

Membership will include diverse users and stewards of hydrography and soils data. Provide guidance to data stewards and users on initiatives that relate to LiDAR derived end products.

Resources:

The Hydrogeomorphology Workgroup will use the work and accomplishments of the former Hydrography Committee and collaborate with other current 3D Geomatics Committee Workgroups.

Workgroup needs:

The Hydrogeomorphology Workgroup will depend on guidance from the 3D Geomatics Steering Committee.

Dependencies and interrelationships:

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The workgroup will work with the 3D Geomatics Steering committee to coordinate LiDAR acquisition standards.

Risks:

- Taking on too much responsibility and underestimating the amount of commitment to the workgroup.
- Inaccuracies in historical data will be incorporated into future derived hydrography data.
- Lack of standards for data development and data application of hydrography data. Bad data will translate into lost time and money.
- Lack of communication between government agencies at all levels and private sector partners pertaining to hydrography data.

Additional Comments:

Date approved by the 3D Geomatics Steering Committee: