

Minutes: 3D Geomatics Committee Hydrogeomorphology Workgroup

Date: 5/14/2019
Time: 10:00 a.m. – 11:00 a.m.
Location: Skype online meeting



I. Attendance | Hydrogeomorphology Workgroup

Accountable: ~~Ann Banitt~~ (ACOE); **Andrea Bergman** (MNIT@DNR); **Jen Crea** (MNIT@MPCA); **Matt Drewitz** (MNIT@BWSR); **Tyler Grupa** (MNSU-WRC); **Tom Hollenhorst** (EPA); **Brandon Krumwiede** (NOAA Affiliate); **Rick Moore** (MNIT@DNR); **Christiane Roy** (USDA-NRCS); **Kiah Sagami** (HEI); **Jamie Schulz** (MNIT@DNR); **Sean Vaughn** (MNIT@DNR)

Informed: **Lyn Bergquist** (MNIT@DNR); ~~Joe Brennan~~ (USDA-NRCS); ~~Whitney DeLong~~ (UMN); ~~Chuck Fritz~~ (IWI); ~~Ben Gosack~~ (DNR-EWR); ~~Kevin Hanson~~ (ACOE); ~~Keri Hedin~~ (Fond du Lac); ~~Brian Huberty~~ (USFWS); **Alan Laumeier** (Goodhue Co); **Rick Lorenzen** (MNIT@DNR); ~~Grit May~~ (IWI); ~~Joel Nelson~~ (UMN); ~~Doug Norris~~ (DNR-EWR); ~~Jill Pohjonen~~ (DNR-EWR); **Emily Resseger** (Met Council); ~~Ben Richason~~ (SCSU); ~~Casey Scott~~ (MPCA); ~~Aaron Spence~~ (BWSR); ~~Angus Vaughan~~ (MPCA); ~~Barbara Weisman~~ (DNR-EWR); ~~Andy Williquett~~ (MNIT@DNR)

II. Welcome and Agenda Review - Jamie

Any agenda additions?

III. Homework Reminders - Jamie

- Testimonials? (Testimonials for LiDAR and improved derived products)

IV. Steering Team and Subgroup Reports (25 min)

- 3D Geomatics Steering Team – Sean
 - Updated the 3D Geomatics Workgroup diagram
 - Renaming workgroups – sign of maturity
 - Infrastructure and Construction Management added Construction to reflect the groups needs. This is still in discussion amongst the group members.

- Serves a purpose to help with decision makers
- Our hydrography data serves a lot of business needs
- Need to consider field perspective – staff are losing the confidence of our customers because the current data is not meeting their business needs
- Remotely Sensed Data Acquisition
 - Effort on building membership
 - Emails being sent out
 - Existing workgroup members and encouraged to participate if they have an interest
 - Acquisition in the NE was identified but the timeline and funding were reasons that it did not move forward.
 - Minnesota Lidar Plan: Phase 1 – North East Minnesota – Higher quality level of collection in the North East could benefit the bare earth with more points identifying the bare earth and canopy. Remind folks that because we don't have trees in the agricultural areas, does not mean we don't need detailed collection as well. Improved hydrography and more points in vegetated areas will help us both define bare earth as well as hydrography.
 - People see the DEM as a continuous surface. DEM's are interpolated by using the points. Fewer points in the interpolation process does not create a well defined DEM. More points that can be interpolated reduces the amount of interpolation needed between the points.
 - Collection in the NE has been put on hold. The Minnesota LiDAR Plan needs to be well defined and a lot of thought put into the steps needed to move forward. An October deadline for the plan is currently in the plan.
- SharePoint Site
 - Will be sending out invites
 - Trying to manage by tags and not use folders
 - Multi-user editing is disappointing. Need to look into further
- Submitted abstract for a 90 min panel session on LiDAR acquisition to GIS/LIS
 - Looking to leave 20-40 min for Q/A
- Data Catalog update – Jamie
 - Andrea – the DOT basemap is a nice example of why we are always looking to expand membership of this workgroup. Data was found when researching data layers for this Data Catalog. We have reached out to them to be a member of the workgroup so their data needs are represented.
 - Clint – stated that maybe the DOT is still using the DLG data because it works best for their mapping needs. Their focus is the streets/roads, not the hydrography. The discussion of the data referenced for their basemap came from this site. <https://dotapp9.dot.state.mn.us/basemap/> Metadata from this site includes. Major River Centerline Traces in Minnesota - Source LMIC 1984! Navigable Waterways - Source U. S. Army Corps of Engineers 2003. No metadata for streams and ditches. Major River

- Centerlines (National Wetlands Inventory) (FGDC) 1979-1988. Lakes from Digital Line Graphs (DLGs) (FGDC) Source USGS 2002.
 - The idea of what other agencies are using as a reference basemap led to the idea of the Data Catalog to document what data sets are used across the state.
 - Main goal is to define layers that could satisfy the state's needs in the future.
- Sean – our data fills many different needs and uses
 - Field perspective is important – we are losing the confidence of our customers
 - Data doesn't match what is on the ground
 - Public have more data available than ever. Aerial imagery commonly used. If hydro data doesn't match what is in the imagery, no trust in the data
 - Reminder to share the message that there is a need for improved data – must invest in NXG Hydro data. It is a hard sell with the people controlling the funds
- Breachline Subgroup updates – Rick
 - Didn't meet in April, but will be meeting in 2 weeks
 - Current map of work done in MN
 - Shows confidence of the work done
 - Red River work to be added
 - Other areas have been done, but the information has not been collected
 - Letter will be sent out explaining what is being done and why it is important
 - Potential funding through BWSR (Matt Drewitz) to complete the map and keep it maintained
 - Waiting for final budgets
 - Would like a coordinated effort to document what has been done, what is currently in the works, and what is planned for the future

V. ID Standards (25 min)

- Watercourse ID Standard – Jamie & Jen
 - Hydro Standards Workflow and Business Model
 - Stewards update the standard – then to the DNR GeoWRT and then to the GAC group
 - Draft sent to GeoWRT members for review, comments incorporated.
 - Looking for a vote of endorsement on this standard.
 - Endorsed
- Basin ID Standard – Andrea
 - Draft ready to send out
 - Complications
 - Department of Waters doesn't exist anymore, updated in standard
 - Change LAKE ID to BASIN ID
 - BASIN ID – refers to lakes, wetland and waterbodies
 - Questioning how IDs are established

- Shared email address at DNR – central location for tracking requests
 - Working on the process for naming Basin ID's and standardizing the process. Adding verbiage to the document to reflect the process of how to name so it becomes a standardized process
 - Web page similar to the DNR feature naming page will be created
 - https://www.dnr.state.mn.us/waters/surfacewater_section/hydrographs/naming_features.html
 - Clint – does permit process use the DOW ID?
 - Andrea - yes
- Watershed ID Standard – Sean & Rick
 - not as far along as the others due to time constraints and working on current catchment updates that will affect the standard language
 - not many changes needed
 - topics added due to current catchment updates
 - Sean – need better description of why there are multiple datasets included to understand the importance of them
 - Statues refer to the DNR Majors and DNR Minors
 - No equivalent in the HUC layers for the minors
 - Hydro Standards in general – the updates are bringing attention to them while they have been mainly ignored in the past
 - Moving forward they will be more accessible and easier to find

VI. Current Projects of Interest (10 min)

- DNR Hydro ID App - Andrea
 - <http://arcgis.dnr.state.mn.us/ewr/StreamID/>
 - Mapping portion responds quickly
 - Data retrieval is slow – has not been maintained in the past 3 years and never finished before the programmer left
 - Power of this tool
 - The information that is collected when a feature is clicked on – all available in one location
 - State and federal IDs
 - Can add links to other data or web pages (i.d. lake finder)
 - Data Catalog could be used to show what fields people really want to see in this app
 - Need input from users or potential users for development of this tool
 - Funding also needed to finish it and maintain it
 - Jen – where is the Reach Code coming from?
 - Andrea – GDRS – which we know is old data. Need to be able to find a more updated source for this data
 - Jen – she and Dave F. are working on a plan to keep this data updated

- Clint – does it link to Lake DB?
 - Andrea – that is an internal only database, so it doesn't
- Next meeting: June – **Volunteer?**

Future Meetings

Date: 6/11/2019

Time: 10:00 a.m. – 11:00 a.m.

Location: Skype online meeting

Agenda items: (submit proposed agenda items to [Jamie Schulz](#))