

MnGeo Committee & Workgroup Reporting¹

Date of Report: 9/23/2015

Parcel and Land Records Committee

Accomplishments in last 18 months:

- The Digital Cadastral Data Committee was renamed the Parcels and Land Records Committee
 - A new committee charter and work plan was created, expanding the committee's focus to include Public Land Survey data
- At MnGeo's request, the committee reviewed which parcel attributes to be used as a statewide standard – the DCDC attributes (DCDATS) or the Dept. of Revenue's PRISM. Due to the lack of GIS attributes in the PRISM system and Revenue's timetable for making changes, the committee recommended MnGeo use the DCDATS attributes for parcel collection at this time.
- The committee is working closely with the Arrowhead GIS group, following their work on standardizing a parcel fabric in the region, which includes PLS data and public land owner types.
- Several members of the DCDC participated in the development and review of MnGeo's *Business Plan for Statewide Parcel Integration*.

Planned for the coming year:

- Continue to work closely with MnGeo on the development of statewide parcel data.
- Presentation on parcel standardization and data sharing at the GIS/LIS Conference
- Develop protocols and scripts to help counties export their parcel data into the attribute standard.
- Explore the development of a standardized parcel fabric framework to share with counties.
- Help implement the *Business Plan for Statewide Parcel Integration*, and promote parcel data sharing arrangements between government agencies.

Meetings held and scheduled:

- 05/13/2014 – new charter and work plan adapted
- 8/6/2014 – review work plan
- 12/3/2014 – review PRISM project
- 5/27/2015 – decision to use DCDATS attributes

The next meeting is scheduled for 12/9/2015

Charter and work plan:

The Committee has a modest work plan posted on the web

<http://www.mngeo.state.mn.us/committee/cadastral/index.html>

¹ For more info about these committees and workgroups, see: www.mngeo.state.mn.us/committee/

LiDAR Research and Education Subcommittee

CHAIR: Sean Vaughn, MN.IT at DNR

MEETINGS: Monthly, 2:00-3:30pm, via WebEx

WEBSITE: www.mngeo.state.mn.us/committee/elevation/research_education/index.html

CHARTER: This subcommittee of the [Minnesota Digital Elevation Committee](#) works to design and promote best practices with LiDAR data, LiDAR-derived products and LiDAR training statewide. This design and oversight will ensure there is consistency in data development and application for all users.

Full report will be submitted later. See Hydrography Committee report below about a discussion of the need to form a new committee that includes members of both the Elevation/LiDAR and Hydrography committees.

Emergency Preparedness Committee

Report will be submitted later.

Hydrography Committee

The Hydrography Committee was formed to promote the consistent development of hydrography data and to enable data exchange through coordination, cooperation and standards development. This was an active committee for thirteen years (1997-2011), but has been largely inactive since 2011. Major objectives of past work plans have included:

- Plan for an integrated approach to statewide hydrography data management, including defining roles and responsibilities defining a process for updates, implementing an event creation and maintenance process, and fostering development and sharing of applications and tools. There are two major hydrography datasets in use in Minnesota: the DNR Hydrography Dataset and the National Hydrography Dataset (NHD). The integration discussion has revolved around integrating these two datasets more tightly in Minnesota.
- Planning for future maintenance and stewardship of the Minnesota Watershed Boundaries.
- Creation of standards and guidelines for hydrography features.
- Work with the LiDAR/Elevation Committee to explore issues of mutual interest.

After a hiatus in committee activity, the state is now at a point of requiring a re-energized, re-structured, and re-focused committee. Discussions are underway to determine whether the former Elevation and

Hydrography Committees can join forces to provide leadership and guidance as the use of LiDAR elevation data to produce hydrography becomes feasible.

Accomplishments in last 18 months:

There have been no committee accomplishments in the last 18 months.

Nonetheless, there have been major agency accomplishments that have led us to where we are now:

- DNR: Continued development and improvement of the DNR Hydrography Database.
- DNR: Lead agency in researching LiDAR DEM hydro-modification and watercourse generation, has continued to develop these techniques and guidance documents, and supported the state's Buffer initiative.
- MPCA: Updating the NHD and creating events on the NHD, including recent Assessments, Impaired Waters, and updates to the Altered Watercourse determinations.
- MnGeo, DNR, MPCA (2014): Completion of Study: Statewide Hydrography Integration Project: *Exploring Integration Methods for Multiple Statewide Hydrography Datasets in Minnesota*. This study dealt with both Surface Hydrography and Watersheds.

Planned for the coming year:

Past Elevation, LiDAR Research and Education, and Hydrography Committee members have been discussing the need to form a new committee that includes members of both committees. There are a number of reasons for this:

- DEM hydro-modification and watercourse generation are hydrography-related issues that require the participation from both groups. The use of elevation data as the driver of hydrography becomes possible when the elevation data is accurate enough. Methodologies need to be standardized.
 - New, more accurate, hydrography is a priority for many GIS users.
 - At the federal level, USGS is moving forward with its Ele-Hydro concept – reflecting the need for a harmony between LiDAR elevation data and hydrography data
- Standardization of processes and tracking of DEM hydro-modification activities are important as more organizations use LiDAR data to create their own hydrography and hydro-modified DEM's (often with state funds).
- An improved plan is needed relating to future LiDAR collects (including a coordinated approach for 3DEP).
- New committee could promote the sponsoring of a DEM Hydro-modification Symposium for the state.

Meetings held and scheduled:

LiDAR R&E Committee met on 9/16/2015 to discuss GIS Conference participation and the possible committee restructuring. The DNR GIS Water Resource Team will be presenting a Technical Panel Session at the GIS/LIS Conference, entitled: *Watercourse hydrography Development from LiDAR-Derived Products – Creating Next Generation Watercourse Hydrography (NXGHydro) for Minnesota's Landscape*.

Formation of a restructured committee will be presented to a larger audience at that session. No further meetings have yet been scheduled.

Charter and work plan:

To be developed.

<http://www.mngeo.state.mn.us/committee/hydro/#workplan> (Web Page and Work Plan from 2013)

<http://www.mngeo.state.mn.us/committee/elevation/>;

http://www.mngeo.state.mn.us/committee/Committee_Workgroup_Reports_Nov2012.pdf (LiDAR Research and Education web pages and report).

Standards Committee

Accomplishments in last 18 months:

No proposed standards have been ready for the committee to review, so it has not met during this time. The committee has members but currently has no chair.

Planned for the coming year:

- The committee will be provided the opportunity to comment on draft standards being developed by the Next Generation 9-1-1 GIS Standards Workgroup.
- A final cadastral data transfer standard may be submitted for review in the next year.
- Revisions to the Minnesota Geographic Metadata Guidelines may be submitted for review in the next year.
- A MetroGIS group is considering taking up the responsibility of proposing a revised stormwater data standard effort.

Meetings held and scheduled:

None. Standards facilitation and communication has gone on outside of meetings.

Charter and work plan:

The Committee has a work plan posted on the web site:

www.mngeo.state.mn.us/committee/standards/index.html#workplan

Metadata Workgroup of the Standards Committee

The workgroup's original objectives were to:

1. Recommend methods for creating and editing metadata that are compatible with ArcGIS 10.
2. Recommend a metadata format for web services.
3. Recommend changes to the Minnesota Geographic Metadata Guidelines (MGMG) by evaluating new international standards.

Its main objective in 2015 was to recommend metadata requirements for the [Minnesota Geospatial Commons](#). Workgroup members also contributed to related metadata activities.

Accomplishments in last 18 months:

- Created "[Metadata Requirements for the Minnesota Geospatial Commons – Draft recommendation](#)" document. The recommendation was approved by the Statewide Geospatial Advisory Council at its June 24, 2015 meeting. It awaits final approval by the Geospatial Technical Committee.
- Related metadata accomplishments:
 - Held a pilot hands-on metadata workshop for MnDOT staff on June 25, 2015.
 - Created a [tutorial](#) for the Minnesota Metadata Editor tool (MME).
 - Created an [MME FAQ](#).
 - Presented [Minnesota's experience using MGMG](#) during the Federal Geographic Data Committee Metadata Working Group's ISO Geospatial Implementation Forum, 7/8/15.

Planned for the coming year:

- Finish creating a metadata training plan. It will include several hands-on workshops as well as online materials.
- Finish developing instructions for using ArcGIS 10 to create metadata compatible with MGMG (and thus the Commons). This would fit with the workgroup's original Goal 1.
- Evaluate North Carolina's streamlined ISO metadata profile as a possible solution for updating MGMG. This would fit with the workgroup's initial Goals 2 and 3.

Any other plans depend on determination of priorities and resources available. Options include:

- Track issues with MME and evaluate the next version of the original software (EPA Metadata Editor (EME)); advocate for resources to maintain and improve this tool.
- Evaluate ArcGIS Metadata Toolkit to see whether it could be used to customize the ArcGIS 10 Metadata Editor for MGMG.

Meetings held and scheduled:

- Two meetings held in 2015: 4/30; 5/22
- Additional work has gone on outside of meetings; no meetings are currently scheduled.

Charter and work plan:

[Workgroup homepage](#); [Charter](#); [Original workplan \(2011\)](#)