#### <u>3DHP FTN Monthly Forum:</u>

#### **Question and Answers**

### Michigan Statewide Hydrography Project Update: lessons learned and to be learned

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#### Mark Holmes, GISP

State of Michigan Geographic Information Officer

#### Cathy Power

NV5 Hydrography Technical Domain Expert

#### **Participant Questions:**

#### Can you share a link to the Michigan EDH RFP and award?

The MI RFP docs are here: <u>AdvantageVSS - Solicitation View Page (RFP)</u> (<u>michigan.gov</u>) >> View Published Solicitations (I had to hit the right '>' to see the option). Search 'all' contracts, keyword "hydrography.

The current MI NV5 contract is at <u>https://www.michigan.gov/dtmb/-/media/Project/Websites/dtmb/Procurement/Contracts/MiDEAL-Media/002/210000001620.pdf</u>

#### Cathy mentioned state review as part of the process, by who/how many?

An advisory committee was established early on during the planning phases of the project and that committee is currently comprised of approximately 12 people across multiple state agencies. The advisory committee members perform a review of the draft data deliverables. Since there is not any field work as part of the scope of this project, the advisory committee is developing a data maintenance process to receive data change requests from local stakeholders once the data is released in the future.

## How many people are on your team working on this - outside of NV5 and advisory workgroups?

Three staff at this time, our State of Michigan hydrography Data Steward and two GIS analysts on the team. This team reviews the data as part of the overall draft data deliverable review along with the advisory committee. They are not fulltime to the project, they are working on it concurrently with their other projects.

#### Is there a USGS QC function in addition to the state process?

Our pilot work was independent of USGS so while our National Map Liaison provided insights and our team communicated questions and status with USGS from time to time, there was no formal USGS role. We hope to participate in the 3DHP DCA program in the future and coordinate more closely with USGS.

# Can you share more on handling inconsistencies such as different time periods between lidar collects? Did NV5 take care of this by going back to the point cloud?

3DEP compliance means that the vertical accuracy of each dataset was ensured using ground survey points for both calibration and validation at the time of the lidar data production. Due to this, most areas actually match up pretty well and mismatches between datasets typically represent real temporal change. Where there are differences that specifically affect the downhill Z monotonicity values of the line, we add a comment to the feature indicating that the Z values does not continuously flow downhill in that area. Additionally, when we submit the data to USGS we will be required to also submit a spatial metadata shape that will define what lidar data was used for any given area. This will allow data users to specifically know where there might be seems/ area of temporal change in the dataset.

## Please elaborate on 'Data Stewardship' via the Data Steward Desk and Oversight Committee?

At this time, the data stewardship and future oversight committee are still in the planning phases for long term data maintenance. The advisory committee and NV5 are looking at options for future data change request workflows. The hydrography Data Steward and team will be responsible for vetting requests sent from Michigan stakeholders and also requests received by USGS and sent to the Data Steward for vetting. The Oversight Committee would review any potential requests the need additional stakeholder review because of standards complications, or data governance considerations. We intend to enhance our markup tool to manage the increase in requests that is expected as the data is utilized more widely. We also plan to coordinate data change requests with USGS as we learn more about the USGS system for data changes.

## Do you currently utilize NHD as your state hydrography dataset? If so, what benefits do you foresee with the EDH data?

Yes, there are groups within the state that use NHD but we, as a state, have not actively maintained it. There is another, state-generated hydrography dataset from our Michigan Geographic Framework that had been in use as well in the past. We feel that EDH, and eventually 3DHP, can provide a statewide product of better positional and attribute accuracy and that can serve as a reliable long-term dataset. We expect our statewide data to include both attributes for 3DHP and attributes for state needs only. Part of our data maintenance planning includes determining the process for maintaining state needed features and attributes as well as the 3DHP features and attributes.

#### Do the conflated dataset attributes use a unique ID shared with EDH?

No. we are just pulling over the overall attribution including, the GNIS ID, stream temperature, etc. but there's not a one-to-one link between the GNS ID and the old reach number for the flow line.