Lidar Work Group Notes from 2/28/2018 meeting

Attendees in person: Gale Blackmer, Scott Hoffman, Howard Hodder, Eric Jespersen, Mike Shillenn

Attendees by phone: Scott Dane, Scott Drzyzga, Marcie Dunn, Joe Petroski, Zach Reber

News from NRCS: Marcie says NRCS will have money for lidar again this year; will know how much in July-August. Could be "a lot." She also indicated that having some state resources would be very effective.

There was active discussion on the need to identify financial resources this Spring to have a successful BAA application this Summer. There has been an initial round of funding queries to state agencies by PEMA, without commitments. Scott Hoffman provided meeting notes (previously sent to LWG members) which showed federal interests from Sea Sketch tool.

Discussion of contracting, led by Mike Shillenn and Scott Hoffman

Contracts can take one of two paths (state can go either way, depending on which works best under the particular circumstance)

- 1. Contract through USGS using GPSC
 - a. Most importantly, GPSC includes 100% QA to USGS specs.
 - b. USGS adds 5% to cost of collecting and processing the data, which presumably covers the QA.
- 2. Use a state contract vehicle
 - a. This could be done through the PEMA imagery contract.
 - b. PEMA has an independent QA contract for imagery; don't know how that would work with lidar.
 - c. USGS does provide limited QA before inclusion of data into National Elevation Dataset, but not the 100% QA we would want unless contracted specifically.

Choice of vehicle may boil down to "the cost of the risk" regarding QA. I think the sense of the room was that the additional 5% is a good deal.

Best estimate of cost is about \$170-190/sq. mi. for QL2, <u>standard deliverables</u>, no QA. Standard deliverables include classified LAS, gridded 1-m DEM, hydro-flattened, grayscale intensity image, breaklines. Current 16-county collect also includes contours.

QL2 and QL1 requirements can be included in the same contract, if we wanted to go that way. QL1 will increase the cost for those portions.

Question raised as to whether 3DEP likes to see a "state plan" in the proposal. Answer is uncertain but there are signals that state plans would be valuable for many reasons. Components

of a state plan discussed included: USGS as a central partner, stated refresch sycle, probable need for regional partners in the various river basins.

After-the-meeting note: Gale met with DCNR's fiscal director, Stacie Amsler, to talk about how funds were aggregated the last time we did this for PAMAP. DCNR paid the USGS, and other agencies reimbursed DCNR through Interagency MOUs. It is possible, but more complicated, to take money from sources outside state government.

Discussion of possible partners outside of state government

Suggestion was made that we should cultivate "regional champions"; examples might be:

- NRCS Chesapeake Basin
- Possibilities for western PA:
 - AlCoSan (Allegheny County Sanitary Authority)
 - Southwest Planning Commission
 - Three Rivers Wet Weather
- William Penn Fdtn. Delaware Basin

Marcellus Shale Coalition was suggested and nixed. After-the-meeting note: Joe Petroski reopened discussion of MSC involvement b/c of the need to discover abandoned wells close by planned new wells. Requires additional discussion.

Point was raised that PennDOT paid for part of DVRPC work through a TIP money pass-through (I don't know what this means but perhaps others of you do).

Potential partners can be approached by letters; there should also be at least some face-to-face meetings. Gale offered to do meetings, if accompanied by someone who already has a relationship with the partner(s).

Mike can have a PA leave-behind put together, when we have the content ready. This will essentially be an update of our current Talking Points.

Miscellaneous discussion items:

- Quantum Spatial announced as PEMA imagery contractor
- Important to recognize the value of imagery and lidar concurrent in time
- Lidar collection in process for last 3 of 16 counties under contract
- Tangent discussion of bathymetric mapping, especially of rivers. Most of what we have to date is sections across rivers; can't really create a surface out of those.
- Maurie Kelly and Gale Blackmer are the Pennsylvania champions for the 3D Nation Elevation Requirements and Benefits Study. Details just being finalized on this 2-year study.

Discussion of future work of the Work Group

Our task is "program development now and moving forward" - i.e., our goal is not just to obtain a single set of lidar data, but to develop a sustainable program for elevation data.

Data: collect-manage-disseminate

What should this group coordinate?

- other derivatives (land cover, canopy, buildings...)
- tools/applications
- o engage private entities and academia
- Action item: Group members are requested to share potential partners and contacts with the group. Include contact information at potential partners and if there is a certain geography of interest (County, river basin, MPO, etc.)
- > Action item: Eric will work on a state plan framework; Howard will help.

Next Meeting scheduled for March 28 at TopoGeo Middletown Office. 10 – Noon Web access/Remote participation info TBD