#### **Elevation Work Group**

## Go-to-Meeting

## March 26, 2019 10:30 - noon

### 1. Introductions

a. 20 attendees

## 2. Acquisitions

- a. Ellicott City QL-1 Lidar
  - i. Acquired 42sq mi at QL1 in Dec2018, processed and delivered to USGS and returned to Fugro for metadata corrections. Expect corrections by 4/11.
    Deliverables will be sent to DoIT, MDE, MEMA
- b. Howard County QL-2 Lidar
  - QL2 data also collected in Dec for all of Howard Co but on a longer processing time. Potentially delivered by end of 2019
- c. St. Mary's County Topo/Bathy
  - i. Shared an updated status map of Chesapeake Bay topobathy status. QSI is the vendor for this. St Mary's acquisition is complete and data is being processed, expected delivery towards end of 2019.
  - ii. Calvert Co and Annapolis area in active acquisition status. Some clearance issues in Annapolis area due to Patuxent Naval Academy.
  - iii. Point Cloud will be available in Digital Coast
  - iv. Brief discussion on bathymetric lidar: what it is, how it's collected, how it is similar or different from topographic lidar, and use cases (shoreline determination and mitigation, identification of living resources, wetland mapping, etc.) Some bathymetry can be collected by boats however access and navigation becomes difficult in the shallow, near shore areas so airborne lidar is very effective to map these areas. Near shore areas (0-6ft depth) are also where humans are most active and have the greatest impact.

# d. MD iMAP Lidar service updates

i. Montgomery and Prince George's County 2018 updated lidar services are available. Bulk LAZ downloads are available via dropbox. Index to access downloads is forthcoming. Acquisitions status map updated. DC services have been updated but waiting for point cloud data. LizardTech updates are complete. ii. Access to all services and information via MD iMAP https://imap.maryland.gov/Pages/lidar.aspx

## e. Hurricane Joaquin 2015

i. Lidar flown in response to disaster: QL2 along Atlantic Coast (Barrier islands and inland coast.) Data is available USGS National Map Elevation

# 3. Potential Acquisitions

- a. Lower Eastern Shore Lidar project-2019-2020
  - i. Elevation WG held interest meeting in Salisbury to discuss a potential collection of Worcester, Wicomico, and Somerset Co.
  - ii. So far have identified federal, state, and local interests/use cases for this collection, have cost estimates for QL1 (Ocean City), and QL2 (counties) tide-coordination has been included in these costs.
  - iii. Discussion about submission of AOI to sea sketch and the various contract mechanisms available via USGS and the DoIT State contract. DoIT is taking the lead on reaching out to organizations to determine support and potential funding sources: MDE, DNR, MDA, SHA, MEMA. Roger will keep us up to date on the various deadlines from USGS and Matt will take the lead on organizing state entities.
  - iv. Kevin Wagner suggested a fact sheet as a tool for more effective communication of the importance of LiDAR to budgeting decision makers within various organizations. He mentioned a few important use cases including the requirements for many communities to update hazard mitigation plans every five years. The State is updating in 2021. MEMA will be gearing up for this update and they'd like to work towards an "enhanced plan" which requires more data and analysis but if they can get enhanced plan status they'd be eligible for more funding in the event of a disaster (20% vs standard 15%.) Kevin volunteered support on this item. Roger suggested that Kevin and Matt work together on a list of use cases and fact sheet and offered to provide federal use cases. Suggestions to use the comprehensive document that the ESRGC developed in 2016 as well as various work group lists as a starting point for development of Maryland specific use cases.
  - v. This topic led to a discussion of an ROI study. Matt briefed the group on the history of this idea within Elevation WG. DoIT may have funding for this ROI study. Roger explained that USGS 3D Nation is not ROI but rather an update to 2011 NEEA with new technologies as well as adding topo/bathy however the eventual Maryland ROI could/should reference 3D Nation.

#### 4. Other Related Topics

a. Maryland shoreline issues and need for standardized approach

- i. George Edmonds, DNR DNR is documenting case studies specific to shoreline. Reviewing all different organizations/programs that require shoreline data and documenting their needs and the currently available data. In the development of these case studies and discussions with various groups (MDE, MGS, etc) the topic of shoreline updates and standardization continues to come up. A regularly updated and standardized shoreline product is critical to DNR and they would be interested in contributing funds to LiDAR collection if it would help with delineation of a standardize shoreline.
- ii. MGS agrees that common shoreline is important. More thought and discussion is needed on the methods and quality level required because of the cost increase associated with higher quality levels. Also more discussion needed on the issue of SLR and low level marshes what is shoreline when marshes are now underwater? Rich expressed caution with using topo/bathy as the outputs seen so far are not as good as traditional land based lidar St Jerome's Creek data delivered in fathoms used as example.
- iii. Roger to research existing shoreline standards or definitions as starting point to work from

#### 5. TUGIS

- a. Logan Hall, ESRGC is leading a LiDAR workshop on day one of the TUgis conference, August 7<sup>th</sup> from 1p-4p. It is a half-day, hands-on session focused on topographic LiDAR with topics ranging from: how to access data thru DoIT, converting LAZ to LAS, building LAS datasets, building various derivative products in Arc Desktop, raster processing with the image analysis tools. Anyone interested can learn more and register via TUgis website <a href="https://tugisconference.com/">https://tugisconference.com/</a>
- b. The Elevation WG will also be holding a meeting from 2p-4p on August 7<sup>th</sup>. A more formal venue this year for the meeting that has traditionally been held during lunchtime on the main conference day. The agenda and details are still being determined but potential topics include acquisition updates, continuation of the shoreline discussion, and LiDAR visualization options/methods. Roger to connect Dave White and Al Wainger viz QL1 data Connection

# Action Items:

- Lower Shore Acquisition
  - Roger to reach out to Gretchen and Collen McCormick regarding NRCS budget and Lower Shore LiDAR funding support
  - Roger will keep the group up-to-date on the various deadlines from USGS
  - Matt will take the lead on organizing state entities.
- ROI
  - Matt Sokol to continue update the group on potential funding of ROI via DoIT
  - Matt Sokol, Kevin Wagner, Erin Silva work to begin pulling together MD specific use cases with the ultimate goal of developing a fact sheet

- TUgis
  - o Roger to connect Dave White and Al Wainger viz QL1 data Connection
  - Roger to research existing shoreline standards or definitions as starting point to work from

Next work group meeting will be August 7<sup>th</sup> 2p-4p at Towson unless otherwise noted. Agenda and call-in information will be provided via email and on TUgis website

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# **MSGIC Elevation Work Group Meeting: March 2019**

Tue, Mar 26, 2019 10:30 AM - 12:00 PM EDT

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