

**Status Report:** Goshen County, Wyoming LiDAR Collection **Through**: November 30, 2016

## Quick Facts:

- Approximately 2,200 square miles
- Collection and derived products to adhere to FEMA and USGS/3DEP requirements
  - o Quality Level 2
    - ≤0.71 Aggregate Nominal Pulse Spacing (m)
    - ≥2.0 Aggregate Nominal Pulse Density (pls/m2)
    - ≤19.6 Nonvegetated Vertical Accuracy (NVA) (cm)
    - ≤29.4 Vegetated Vertical Accuracy (VVA) (cm)
  - o Deliverables
    - Raw Point Cloud
    - Classified Point Cloud
    - Hydro-flattening breaklines
    - Hydro-flattened DEM
    - Spatial files
      - Project Area (Goshen County)
      - Buffered Project Area (100-meter buffer)
      - Tile Index
      - Survey Points
    - FEMA Technical Reference data
    - Reporting/Metadata
- MIP Case number currently being developed by TOM and RPML
- Task Updates through November:
- Finalized ground control and QC checkpoint survey
- Completed LiDAR flights
  - o 14 total lifts
  - Some reflights performed on November 1<sup>st</sup> due to cloud interference indicated in acquisition QC
- Collected data confirmed to fill extent of buffered project area (100-meter buffer of County boundary)
- Spot checks of raw points indicated flight plan meets nominal pulse spacing and density requirements
- Minimal concern with crop interference at time of collection
  - o Flight plan and timing of collection perceived to mitigate significant crop coverage
  - Some risk to small areas yet to be harvested but LiDAR processing technicians confident ground penetrating returns in those areas will be sufficient
- Only weather impact during collection were clouds that necessitated a small amount of reflight

   Collection completed prior to winter storm Argos moving through the project area
- Boresighting effort to align raw swath data nearly complete
- LiDAR technicians using ground control points to tie data to project coordinate system and datums <u>Stakeholder Engagement:</u>
  - PM and Survey team liaised with Shelly Kirchhefer and the Goshen County Sheriff's office in advance of collecting ground control and QC checkpoints throughout the County

Plans for December:

- Finalize boresight
- Prepare unclassified swath-based point cloud for independent QA/QC
- Begin processing classified point cloud
- Plan activities for Independent QA/QC of unclassified point cloud product

<u>Risks:</u>

• None at this time

