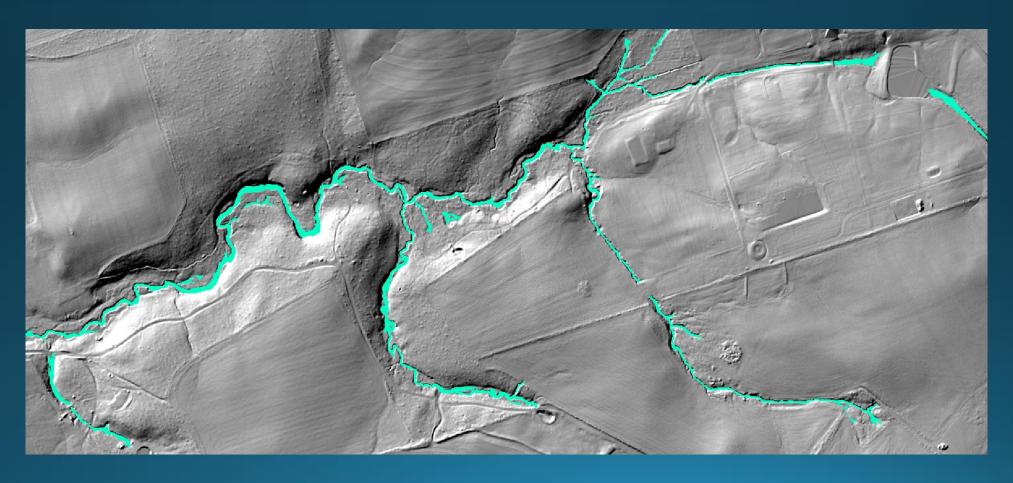


Objective 2: Hydrography updates

David Saavedra – August 2020 LUWG meeting

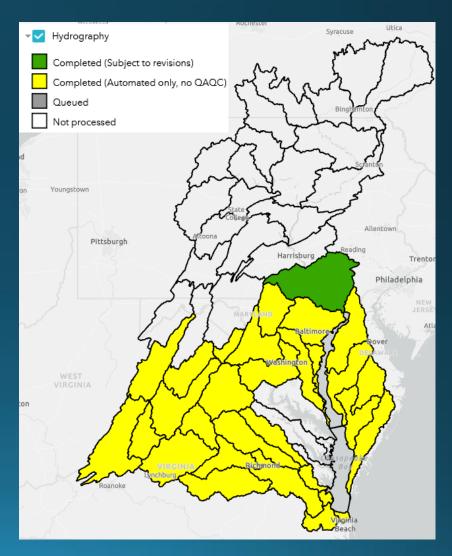


Production schedule



 Initial channel maps produced on HPCF for all HUC8 watersheds with complete DEM coverage

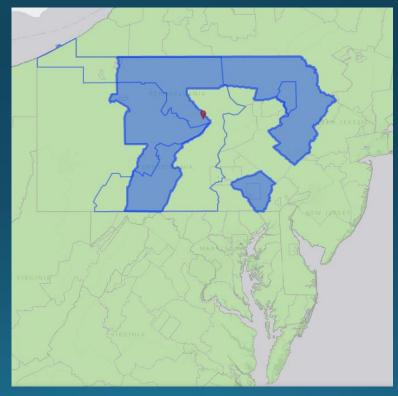
 Incomplete or outdated DEM coverage for remainder of HUCs not processed

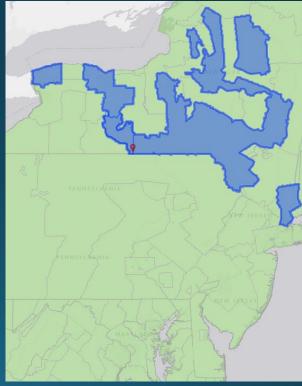


LiDAR updates

CONSERVATION INNOVATION CENTER CHESAPEAKE CONSERVANCY

- 2019 North Central PA LiDAR coming soon? – Would complete remainder of MD and PA HUCs
- 2018 FEMA R2 Central NY LiDAR?
- Will decide to process old LiDAR or wait for update by January 2021





Data refinement



- Manual review in Lower Susquehanna to classify channel-like features in to "stream" and "non-stream" classes (i.e. ditch, gully, detention feature, etc.) to serve as training data for machine learning model
- ML model will assess multitude of layers from initial terrain classification and additional layers to determine probability of a feature belonging to a each class
- Focus reviewers' attention on features that were not easily classified by computer to expedite review process







- MD DNR Applications for residuum mapping in Blue Ridge
 - "[The valley networks] are proving to be exactly what I needed for my current residuum mapping project and couldn't get close to with NHD streams or my own lidar derivatives."
- VA DEQ/DCR Applications for livestock exclusion mapping
 - Ability to map streams through pastures with greater accuracy and detail will be very useful
 - Potential to map nutrient/sediment bypass despite livestock exclusion
- EPA Region 3 Stream Stability Index and <u>Watershed</u> <u>Resources Registry</u>
 - Detailed/accurate stream locations, bank height and width estimates, valley bottom extents, will be useful





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