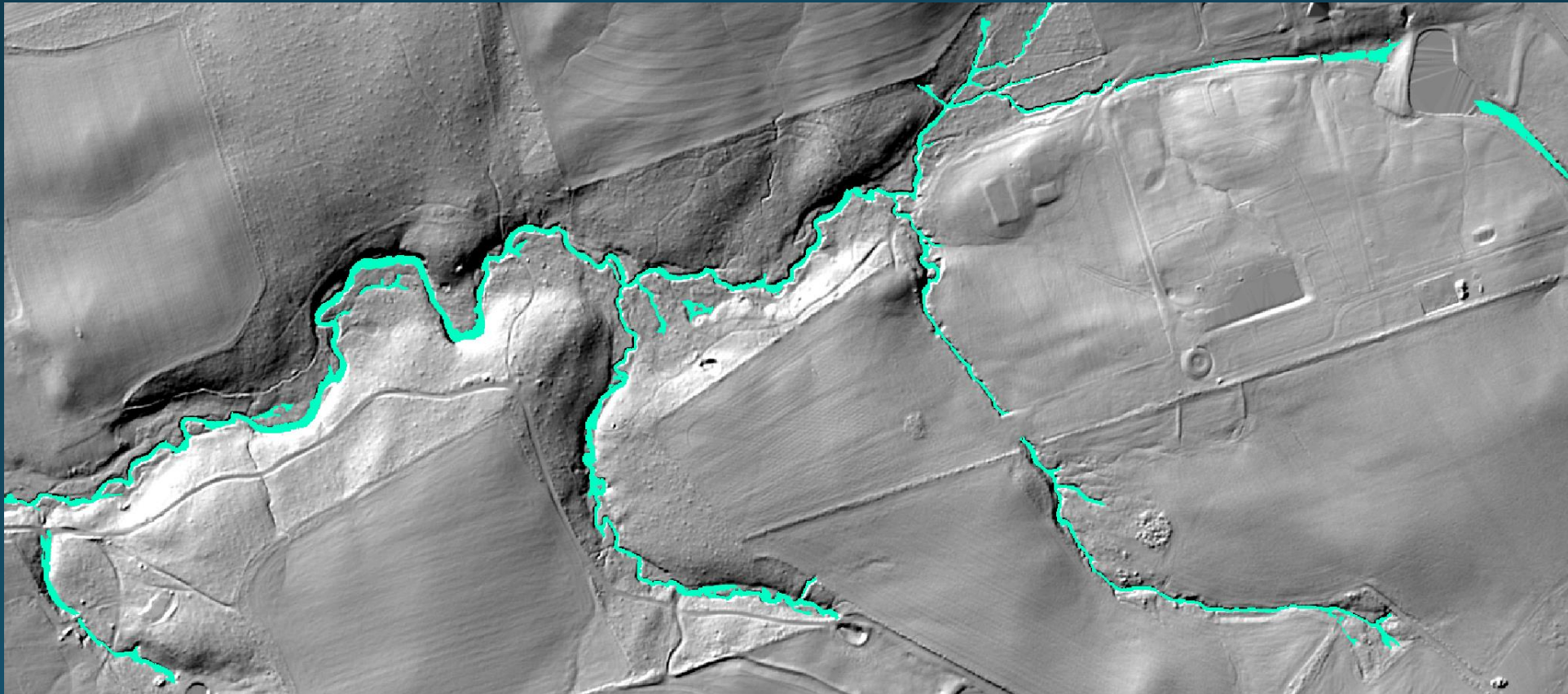


# Objective 2: High-Res Hydrography

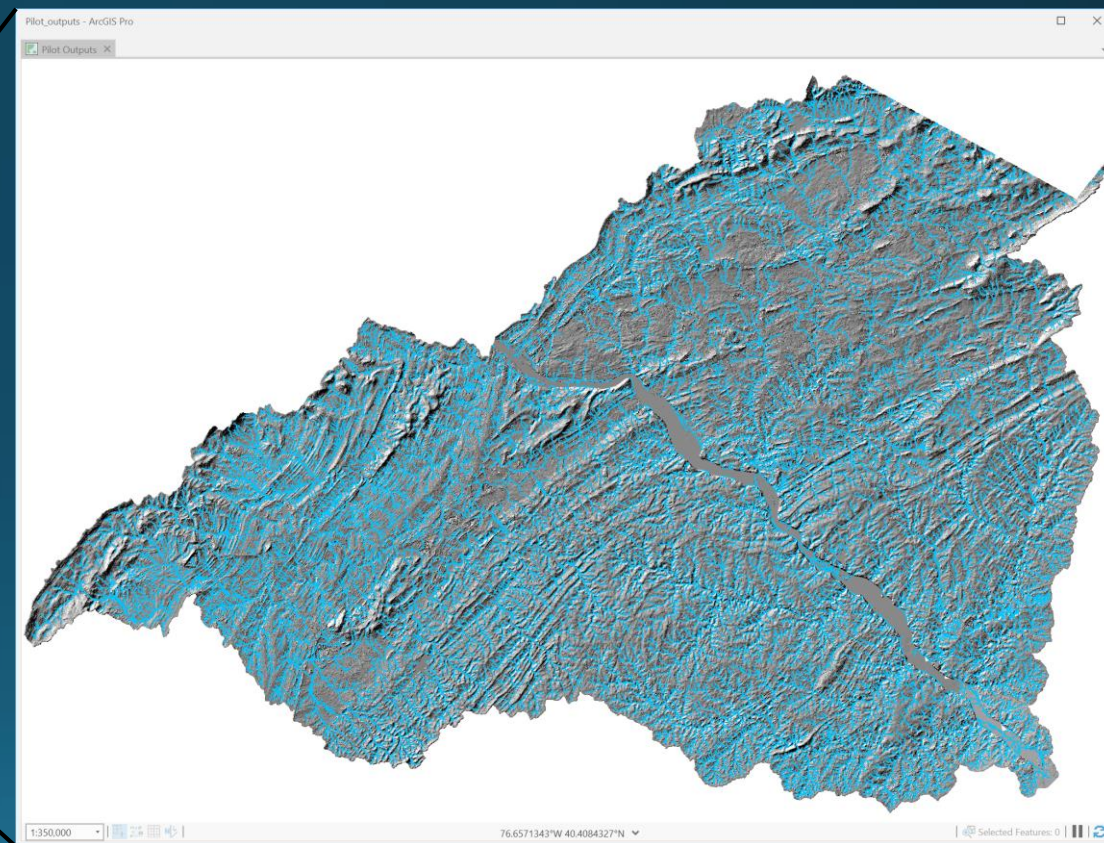
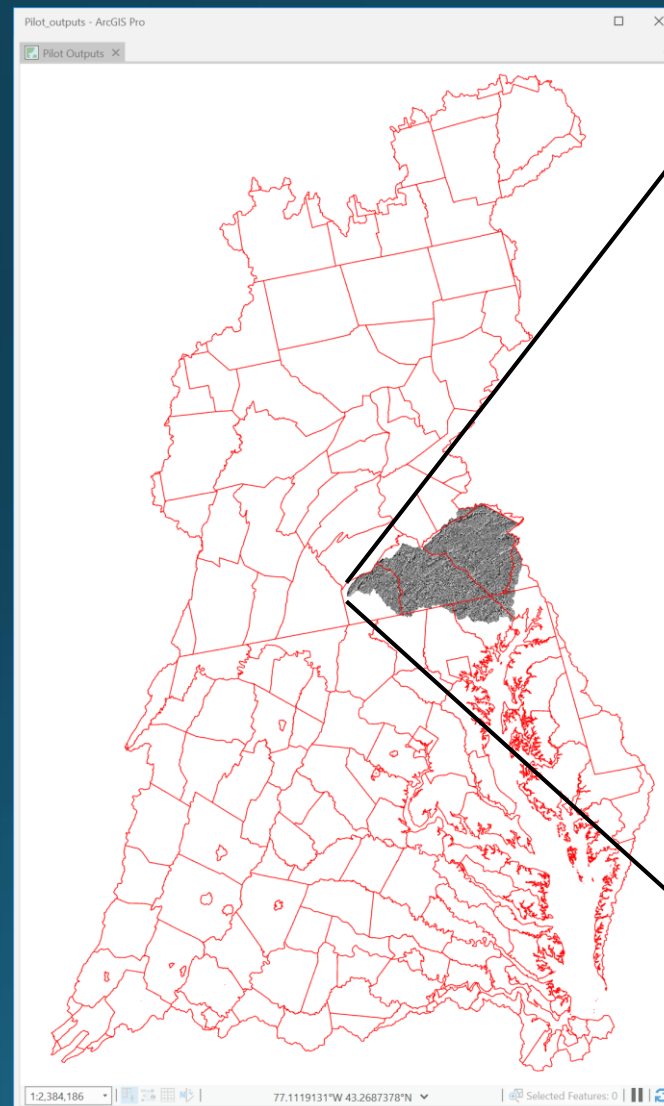
September 4, 2019: Update to the LUWG

David Saavedra



# Lower Susquehanna Pilot

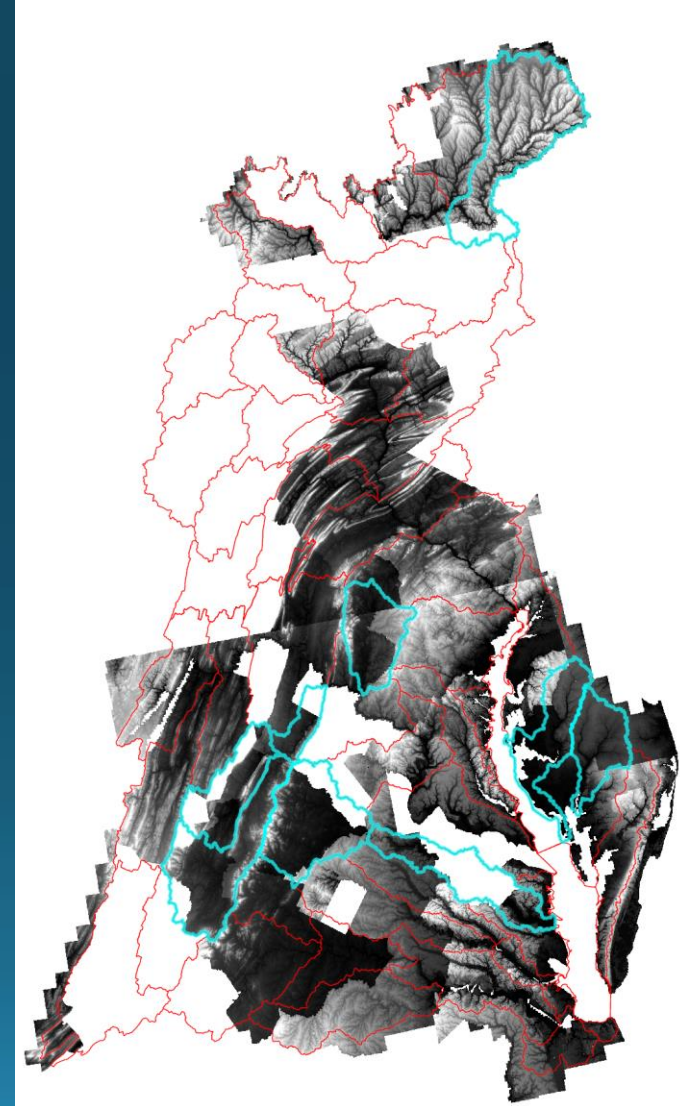
- Pilot progress:
  - Initial data generation complete
  - Manual QAQC of commission and omission errors
  - Timeline forward:
    - Present to Advisory Committee for scientific input (early September)
    - Incorporate feedback (October)
    - Present data to local stakeholders for input (November)





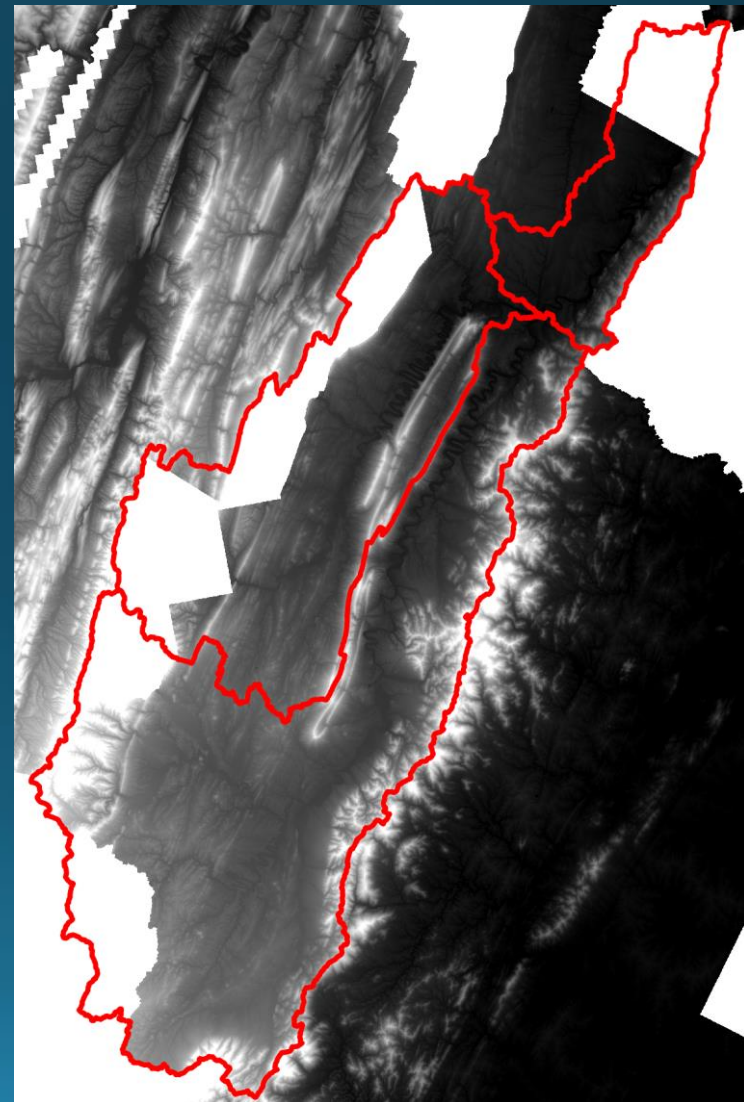
# Possible next geographies

- Shenandoah (02070005, 02070006, 02070007)
- Rappahannock(02080103, 02080104)
- Nanticoke (02080109)
- Choptank (02060005)
- Monocacy (02070009)



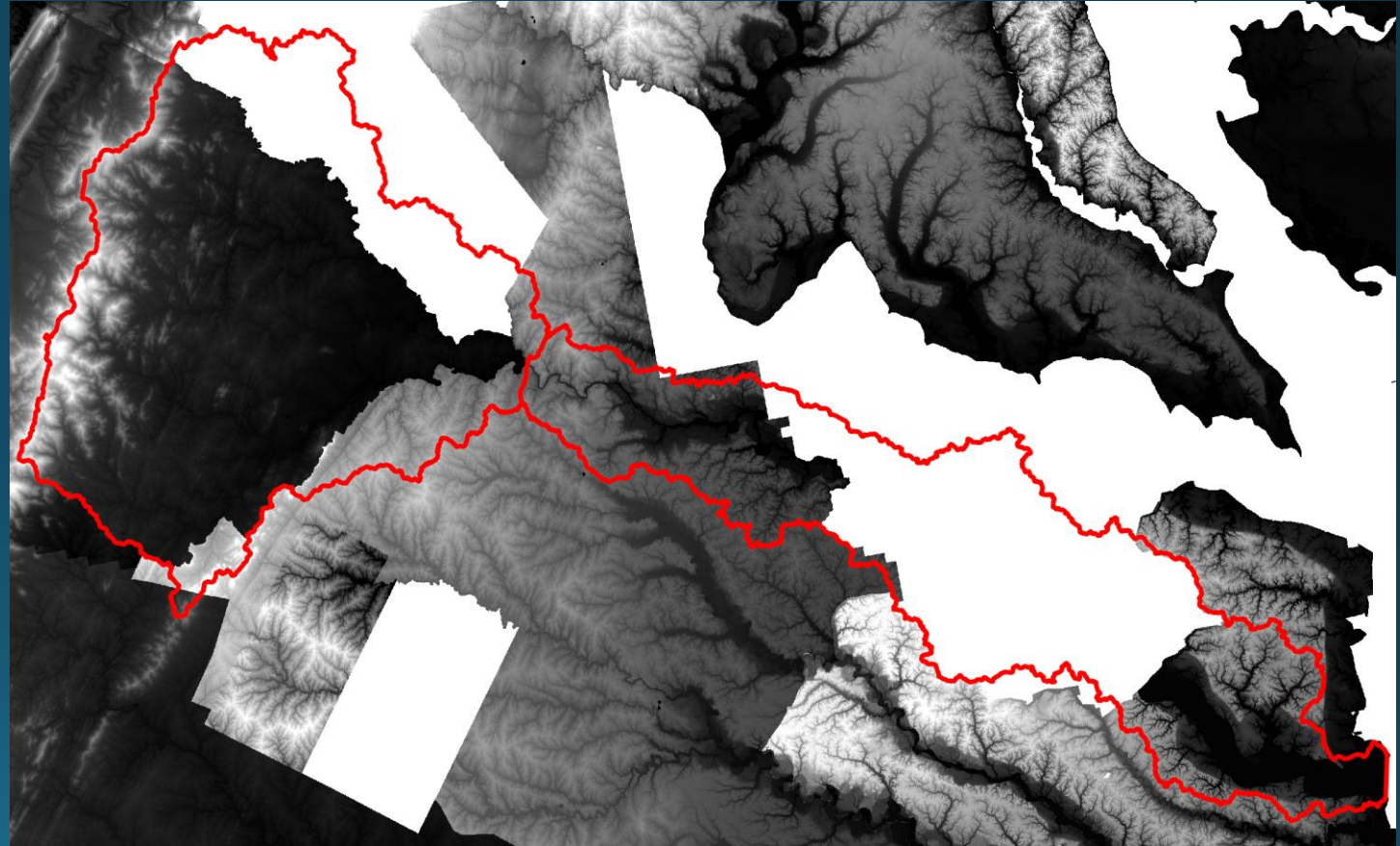
# Shenandoah

- Focal area for USGS research on stream temperatures and aquatic habitat
- Priority/pilot area for several VA DEQ projects including livestock exclusion fencing
- CIC involvement with local partners including
  - Alliance for the Shenandoah Valley
  - VA Dept. of Forestry
  - VA DEQ
- New (2017) QL2 lidar to be available in coming weeks to fill in gaps



# Rappahannock

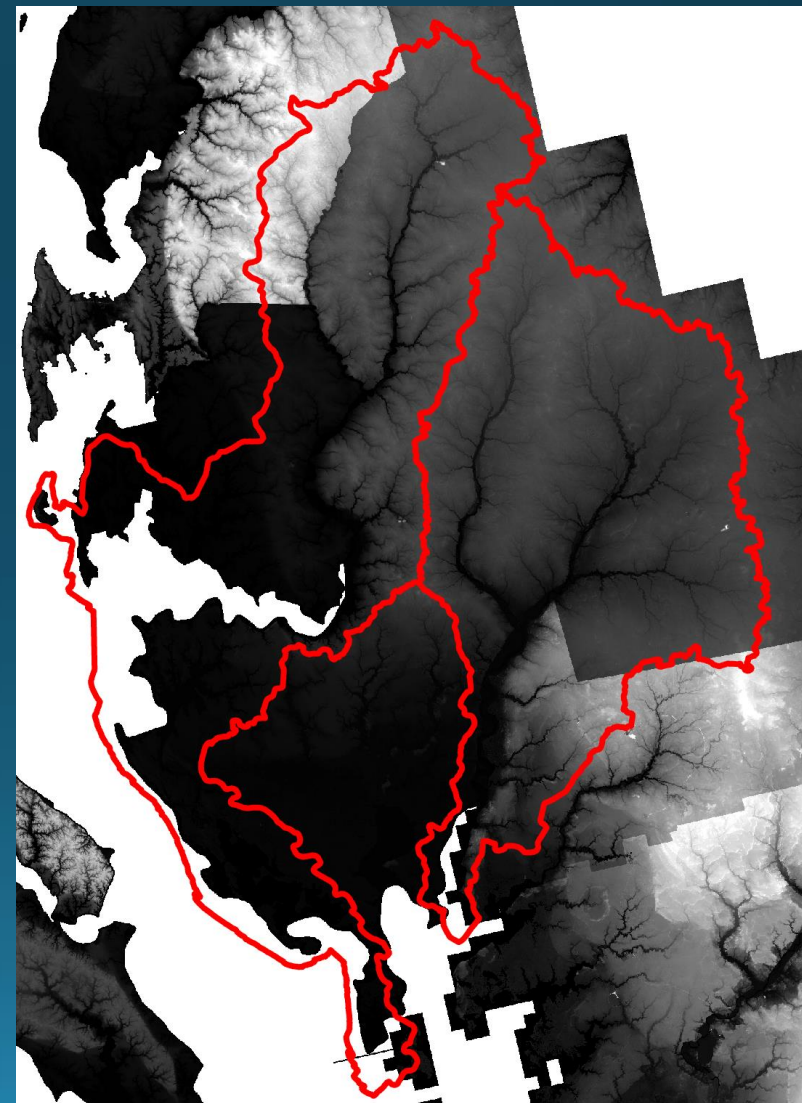
- Focal area for USGS hydrologic and water quality research over coming years
- VA Dept. of Forestry on-going healthy watershed/forest retention assessment
- Awaiting new QL2 lidar (currently in progress)





# Choptank & Nanticoke

- USDA Conservation Effects Assessment Project (CEAP) watershed
- USDA, DoD, DoI Sentinel Landscape
- Envision the Choptank collaborative
- Encompasses over half the DE portion of CBW
- Opportunity to scale methods in very flat physiography
- Nearly complete QL2 coverage



# Others

- Monocacy (02070009)
  - Unique physiography (blue ridge)
  - Wide range of land use (urban, ag, forest)
- Upper Susquehanna (02050101)
  - NY watershed with nearly complete lidar coverage
- West Branch Susquehanna, Juniata, Bald Eagle
  - CIC actively working with local conservation and restoration partners
- Patuxent, Patapsco, Middle Potomac/Anacostia
  - Good representation of urban environments
  - New lidar planned

# Suggestions and Feedback

- Data availability
  - Existing QL2 or better DEMs/lidar
  - New collections in progress
- Support of local interest
  - Existing partnerships
  - Active scientific research
  - BMP implementation
  - Local hydrography efforts for comparison
- Landscape representation
  - Represent diverse land use and physiography early
  - Agricultural, forested, developed
  - Tackle potentially “challenging” areas (i.e. extremely low relief)

[dsaavedra@chesapeakeconservancy.org](mailto:dsaavedra@chesapeakeconservancy.org)