

STAC Update: Water Quality GIT

Lindsey Gordon

Water Quality Goal Implementation Team Staffer

Chesapeake Research Consortium



Personal Background – Education/Research Experience

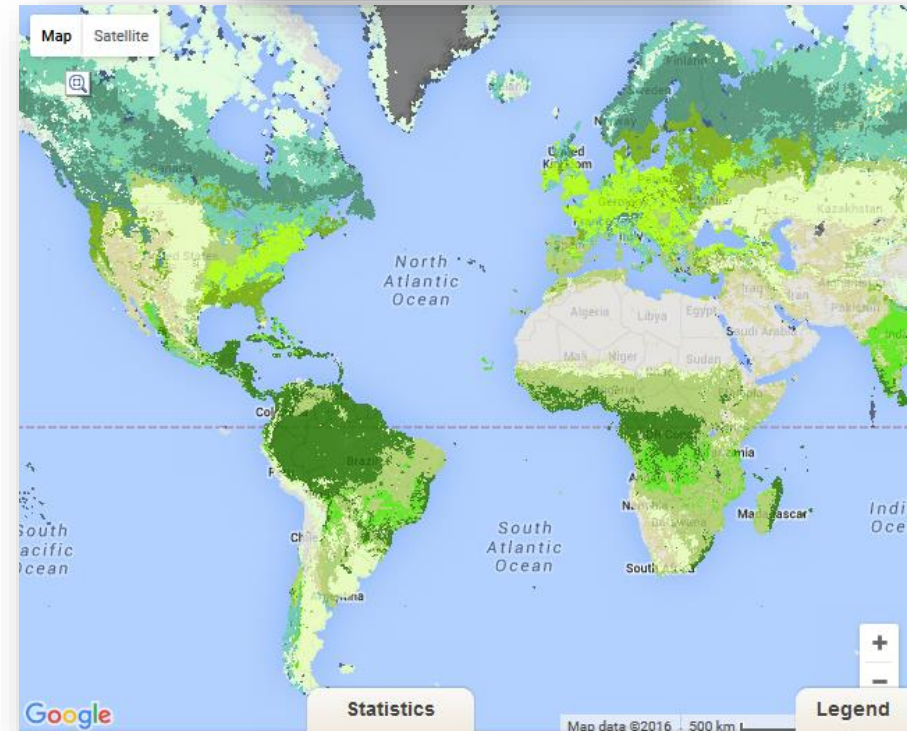


Bachelor's (2014) and Master's (2015) in Geography and Environmental Systems from UMBC

→ Focus in land change science, GIS, and low-intensity agriculture using meta-analysis.

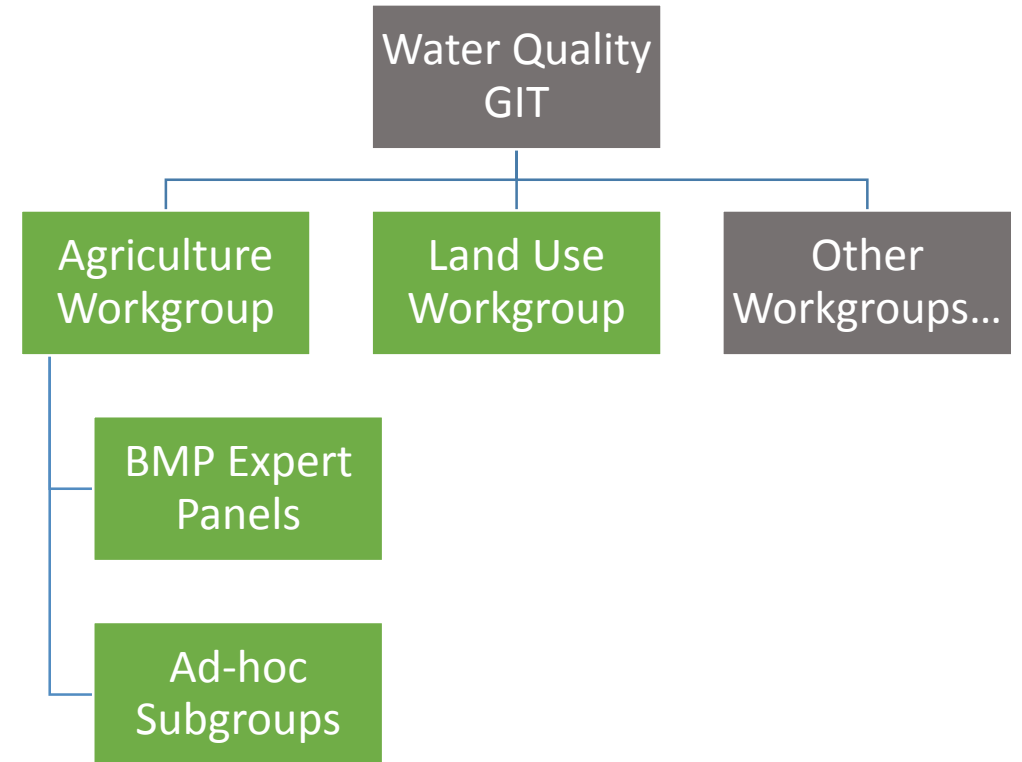
2013-2014: Research Experience for Undergrads (REU)

2014: Graduate research Assistant under Dr. Erle Ellis, UMBC



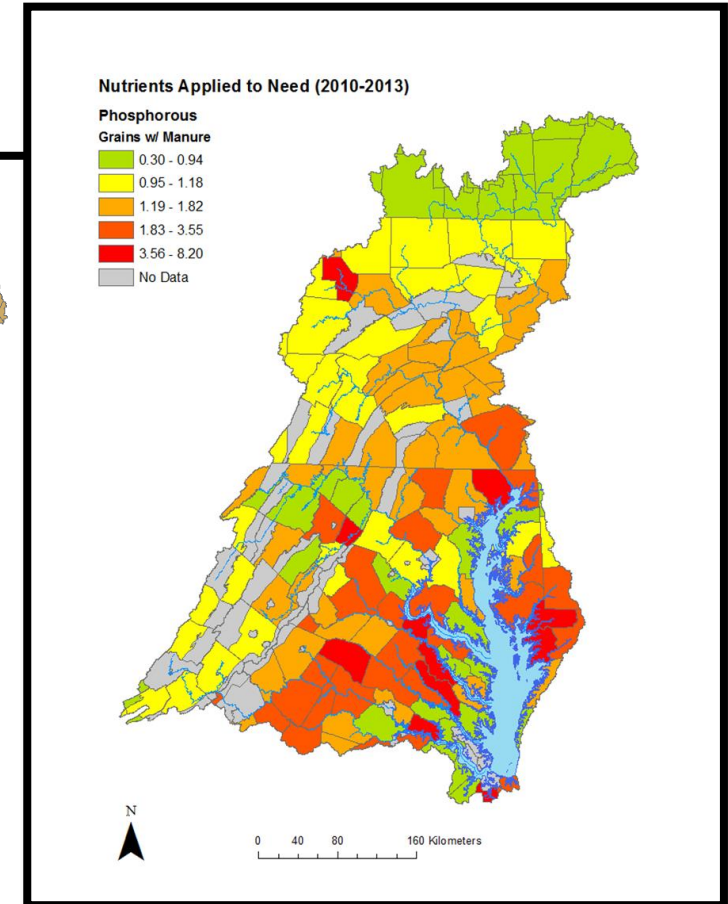
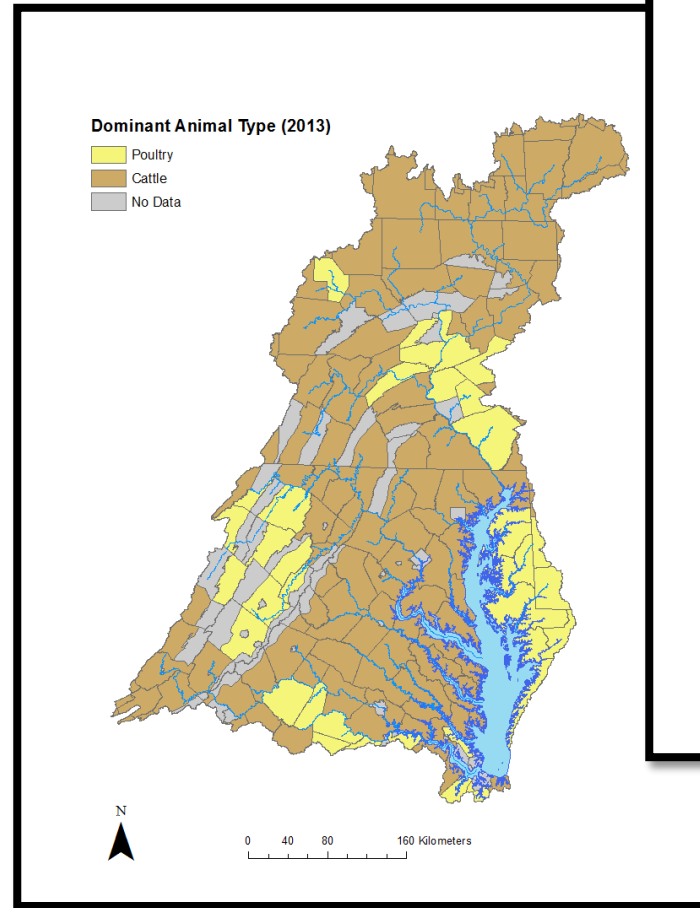
Workgroup Updates

- Started working for CRC in August, 2015
- Agriculture Workgroup:
 - 7 BMP expert panels underway, 2 upcoming
 - Work on finalizing Phase 6 model
- Land Use Workgroup:
 - Development of Phase 6 land use database
 - New high-res data covering CBW
 - Forecasting 2025 land use conditions



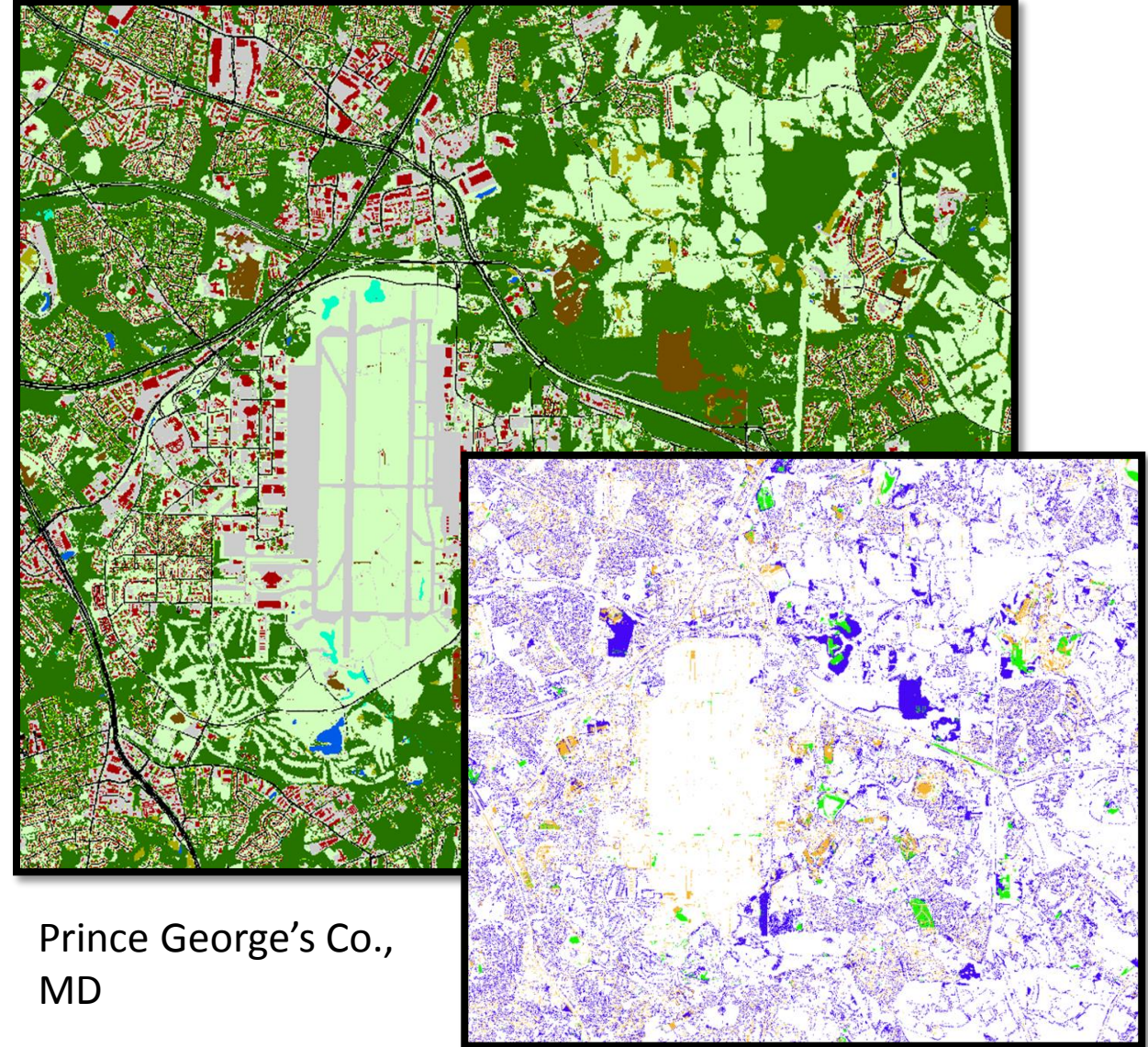
Professional Development/Independent Projects

- Working with USGS and Olivia Devereux to visualize agricultural BMP implementation data across Bay Watershed
- Useful to geographically assess where implementation is high versus low across the watershed (county scale)
- This information will be related to water quality monitoring data to assess impact of BMPs on water quality trends.



Professional Development/Independent Projects (cont'd)

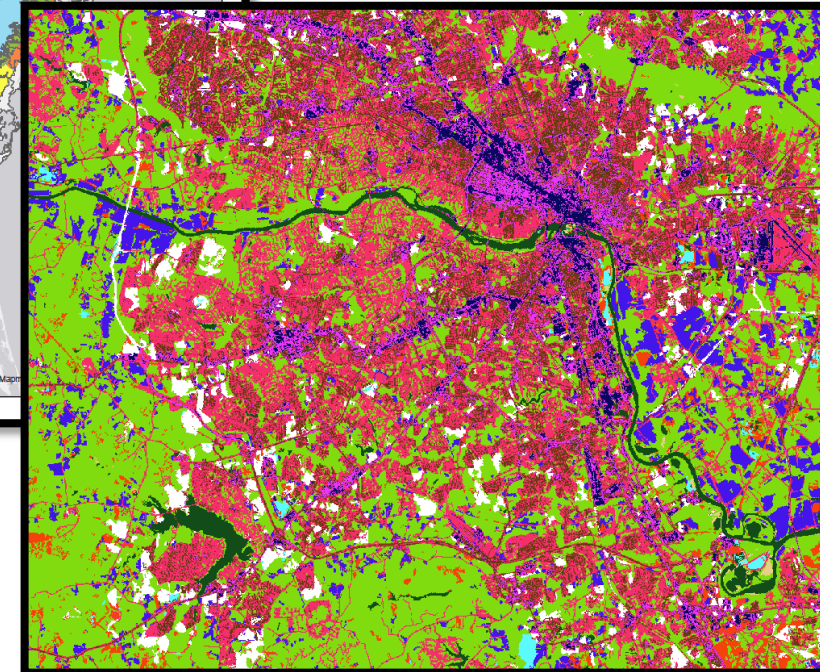
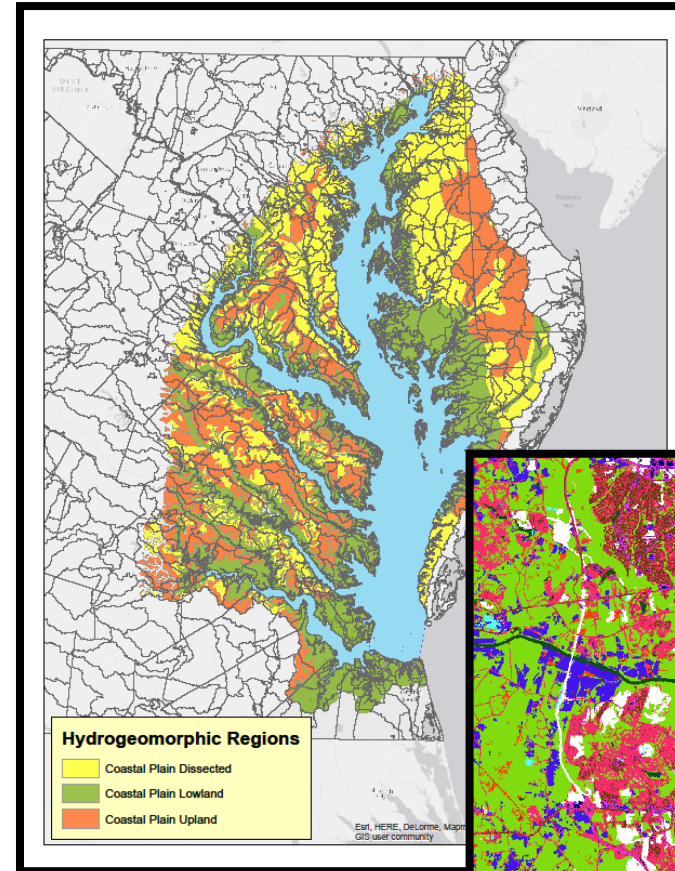
- Working with Peter Claggett to develop methods for assessing land change using new high-resolution data
- Separating true change from false change ('noise')
- Implementing USGS EROS's LCMAP inventory of land change data as a screening tool to identify hot-spots of change.



Prince George's Co.,
MD

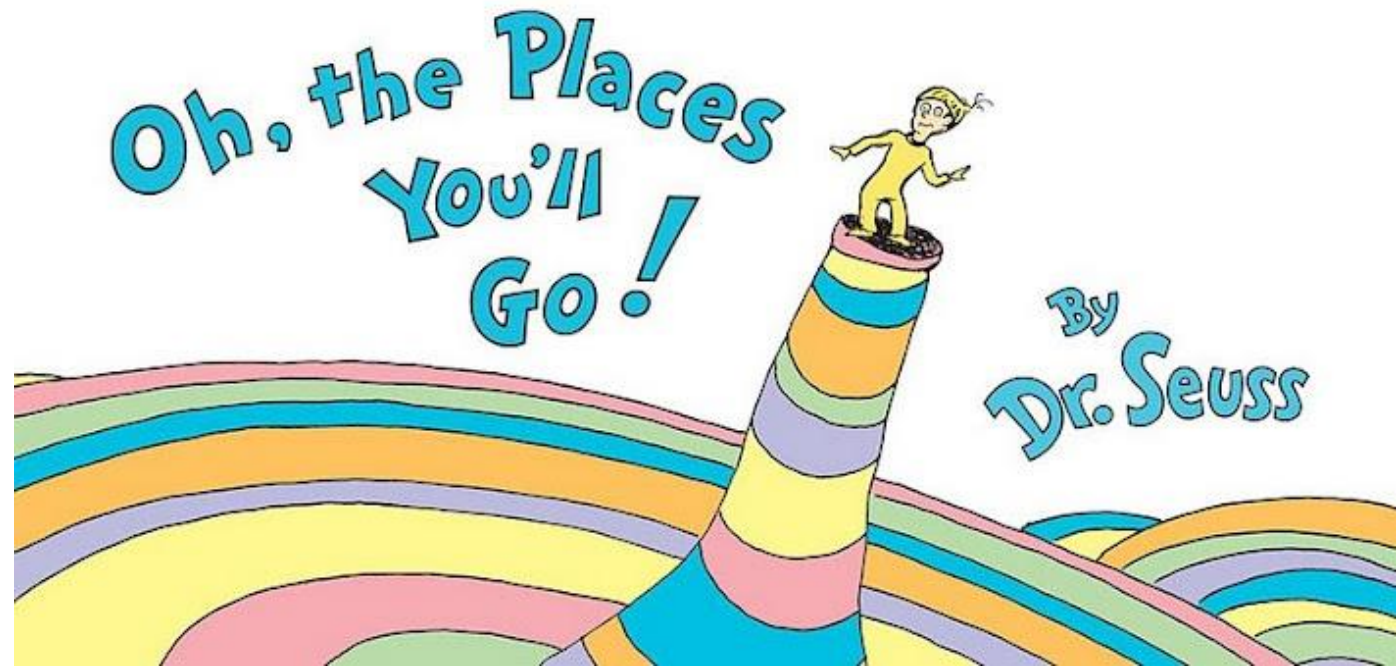
Professional Development/Independent Projects (cont'd)

- Place-based Mapping Project with GIT coordinators and staffers
 - Finding overlapping areas of project implementation across the watershed.
- Data preparation for forecasting 2025 land use conditions
- Summer 2016: processing land use data for Phase 6 model
- Work with UMD interns to assist with various GIS analyses.
- Miscellaneous mapping needs around the office



After CRC, what's next?

- Move to California
- Continue career in environmental science, possibly working with environmental non-profits.



Thank you! Questions?

Contact:

Lindsey Gordon

Water Quality Goal Implementation Team Staffer

Chesapeake Research Consortium

Chesapeake Bay Program

Office: 410-295-1380

Gordon.lindsey@epa.gov