

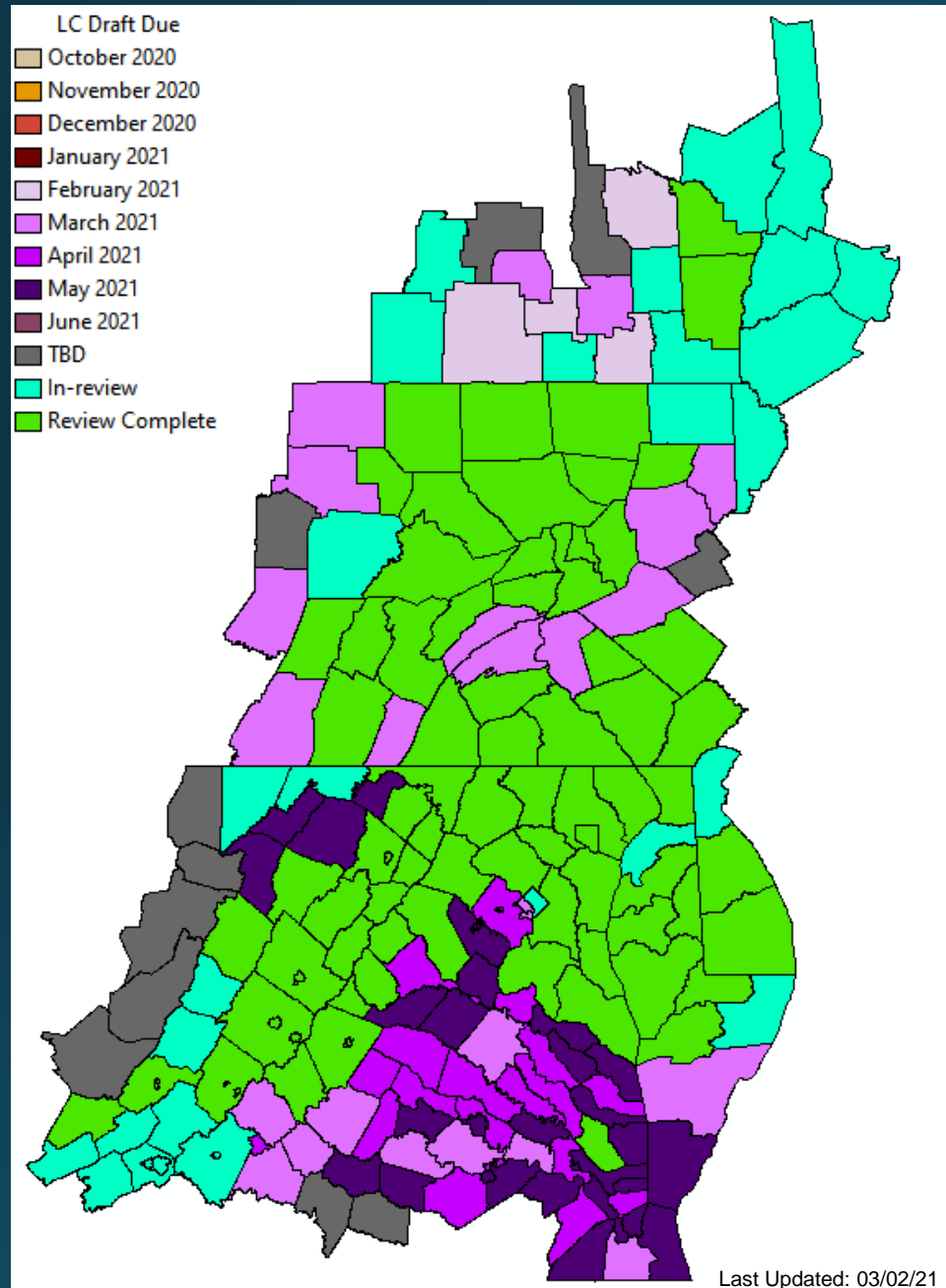
Objective 1 and 2 Land Cover and Hydrography Update

March 3, 2021: LUWG

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Land Cover Production Schedule



Localities Currently In-Review:

- Montgomery, VA
- Bedford City and County, VA
- Bath, VA
- Botetourt, VA
- Craig, VA
- Giles, VA
- Highland, VA
- Roanoke City and County, VA
- Salem, VA
- Susquehanna, PA
- Wayne, PA
- Clearfield, PA
- New Castle, DE
- District of Columbia
- Allegany, MD
- Garrett, MD
- Kent, MD
- Worcester, MD
- Allegany, NY
- Chemung, NY
- Cortland, NY
- Livingston, NY
- Broome, NY
- Otsego, NY
- Herkimer, NY
- Oneida, NY
- Schoharie, NY
- Delaware, NY

Upcoming Localities to Review:

- Onondaga, NY
- Schuyler, NY
- Steuben, NY
- Tioga, NY
- Tompkins, NY
- Yates, NY
- Dauphin, PA
- Elk, PA
- Fulton, PA
- Indiana, PA
- Juniata, PA
- Lackawanna, PA
- Luzerne, PA
- McKean, PA
- Perry, PA
- Schuylkill, PA
- Somerset, PA
- Accomack, VA
- Alexandria, VA
- Amelia, VA
- Amherst, VA
- Appomattox, VA
- Arlington, VA
- Buckingham, VA
- Campbell, VA
- Caroline, VA
- Charles City, VA
- Chesapeake, VA
- Chesterfield, VA

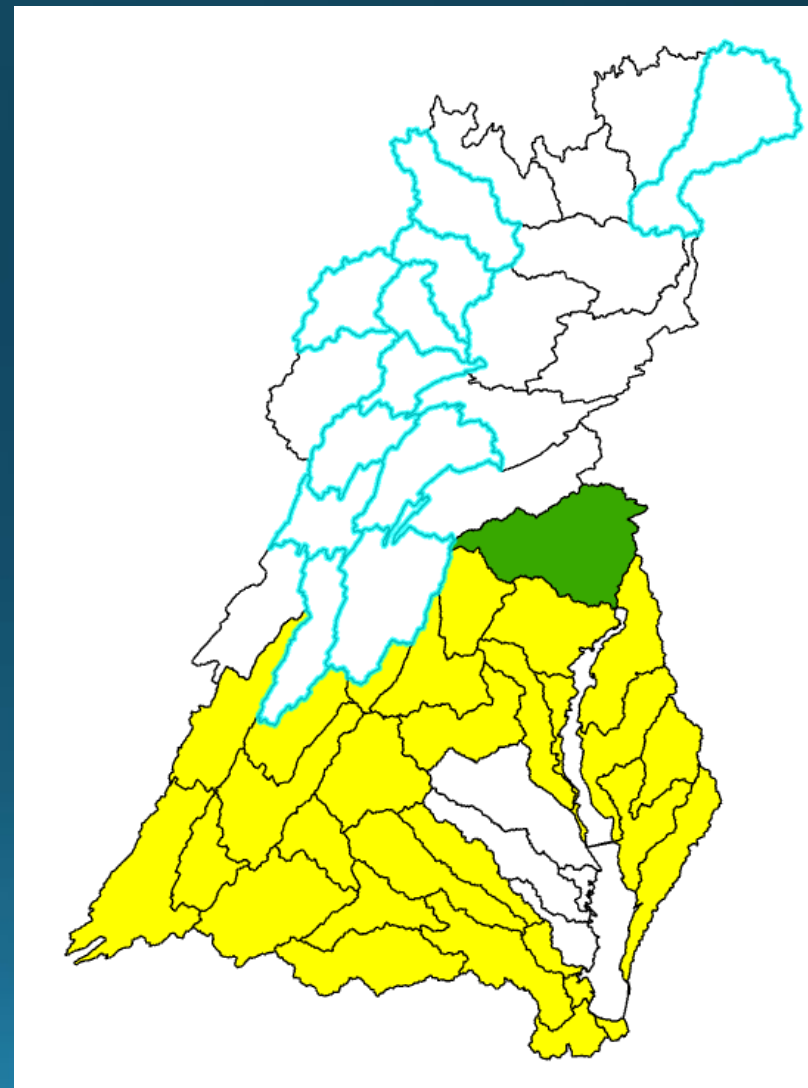
Systematic Errors Documented

Providing upcoming localities this list of Systematic Errors found in previous counties, plus screenshots of examples:

- Missed buildings due to misclassification as impervious surface, or due to many areas not updated to match new 2017 NAIP Imagery.
- Over-classification of impervious surface in suburban areas.
- Misclassification of barren in rural areas, when it should have been low vegetation or impervious.
- Under-reporting of shrubland.
- Improper delineation of water bodies.
- Water misclassified as low vegetation or impervious often leading to errors like disconnected streams.
- Tree canopy and impervious surface shadows get misclassified as water.
- Few areas that were in development and are packed dirt, have been classified as impervious.
- Forest misclassified as low vegetation, when it should be tree canopy or shrubland.
- Systemic inconsistency in the classification of gravel/dirt roads and driveways. Some places they are classed impervious roads and associated tree canopy over impervious roads. Other places they are classed barren or impervious surfaces. Some places roads are clearly visible but are missed and classed as tree canopy or low vegetation. Other places clearly visible road is properly classed but then abruptly and inaccurately stops.
- Inconsistencies in linear features -streams, rights of way, transmission lines.

Objective 2: Hydrography updates

- 2019 PA North Central Lidar in-hand: completes coverage for 11 additional HUC8s (highlighted in blue)
- 2018 PA South Central “3 County” collection would complete coverage for 5 more HUC8s (eastern side of Susquehanna)



Objective 2: Hydrography updates

- UMBC is updating parallelized supercomputer scripts to reflect methodological improvements we've made while waiting for new lidar, including:
 - Bank height and width estimation
 - Tabular summaries of geomorphon outputs to save space over writing outputs as .tif
- CC is preparing new lidar for processing including:
 - Resampling, reprojecting, and snapping to match other hydrography and LU/LC products
 - Clipping and organizing lidar by HUC12 for processing
 - Uploading DEMs to supercomputer

Questions?

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