

MINUTES

Statewide Mapping Advisory Committee Meeting

Wednesday, July 13, 2022, 1:30 – 3:30 PM
NC Secretary of State's Office - Hybrid Meeting

Welcome/Introductions

In attendance: Paul Badr (Chair), Tim Johnson, Alice Wilson, Darrin Smith, Rich Elkins, Colleen Kiley, Kitty Kolb, Christian Vose, Richard Greene, Nathan Bland, John Lay, Gary Thompson, Cam McNutt, Bob Coats, Stephen Dew, Matt McLamb, Jeff Essic, Pam Carver, Eric Wilson, Zsolt Nagy, Steve Averett, Sean McGuire, John Derry, Michael Baranowski, Ben Shelton, Yvonne Harding

Working Groups and Related Geospatial Data

Hydrography Working Group

Cam reported the working group has been meeting monthly and has assembled twice since the last SMAC meeting. He, Colleen, and John Derry have been convening in between group meetings to keep things organized and moving forward. Cam also collaborates routinely with consultants and DEQ staff to discuss the various components going into this data set.

Several people from the HWG met with IT staff from DOT and DEQ to discuss housing the database on DEQ servers. Cam indicated there may be a potential problem given the anticipated size of the data set. Also discussed were the types of web services needed to be generated to support ATLAS as well as more comprehensive requirements for all prospective data users within state and local governments.

Things for the HWG to consider over the next few meetings include:

- Final review of proposed schema
- Specifications for minimum 2D waterbody size and double line streams
- Line smoothing and cartography
- 2D waterbodies (specifications, gaps, etc.)
- Relating metadata to HSSD
- Integration with Watershed Boundary Dataset (WBD) for 12, 10, 8, and 6 digit
- Finalize attribution (including those local government may be interested in)
- Maintenance plan
- Documentation

Consultants are assembling the statewide data set now. The proposed feature classes are currently: streamlines (lines), 2D water bodies (polygons), origins (points), and watersheds (polygons). Tabular data will include DEQ water quality assessment and name information, non-DEQ ATLAS tables, and HSSD data.

Paul asked Cam what a realistic timeframe is to have Task 3.1 from the SMAC 2021-22 Work Plan completed, given this action has lingered and been drawn out. Cam is meeting with the consultants later today and will frame an updated schedule for delivery, which will include timeframes for the SMAC and GICC to approve. He hopes to have something presentable to the SMAC at their October meeting.

NC Board on Geographic Names

Cam informed the SMAC that Dr. Burrell Montz retired as a professor from East Carolina University and relinquished her seat on the NC BGN. Cam has a few names of people to fill that seat and will work to get that completed.

The following names were discussed by the NC BGN and are brought forward to the SMAC for discussion:

- There is a small unnamed water embayment near Southwest Creek that a proponent from Camp Lejeune would like to have named **McCutcheon Bay**. The embayment is in proximity to Jacksonville and the Marine Corps Air Station New River. The name commemorates General Keith McCutcheon, a Marine aviator in WWII, Korea, and Vietnam. The SMAC voted to approve the name McCutcheon Bay.
- **Crabtree Falls** is currently named Upper Falls. It is on Big Crabtree Creek between Blue Ridge and Sevenmile Ridge in Yancey County. The NCBGN is seeking SMAC approval of the rename with the condition that a new name be proposed for the existing Crabtree Falls that is nearby. The NCBGN believes the renaming of the other Crabtree Falls will reduce confusion as this would align commonly used local information with public USGS maps. The SMAC approved the rename with the conditions as outlined.
- There is an unnamed fall in the Nantahala National Forest (Unicoi Mountains) on Santeetlah Creek in Graham County that a proponent from Douglasville, Georgia would like named **Atsadi Falls**. The term “atsadi” is Cherokee for fish. The proponent reports that the name is already in use locally by waterfall enthusiasts. The name Bemis is from a now-defunct logging company that operated in the area for years and had a logging camp less than a mile from the falls. The name Bemis Camp Falls was put forward by the Graham County Board of Commissioners as a counterproposal to the proposed name Atsadi Falls.

The SMAC asked the NC BGN to ensure that the EBCI has no objection to the name Bemis Camp Falls. Cam concurred. No vote was taken on Atsadi Falls/Bemis Camp Falls at this time.

- A second unnamed falls in Graham County is proposed to be named **Lisas Falls** by the same proponent as Atsadi Falls. This name would commemorate the proponent’s mother. The Graham County Board of Commissioners submitted the name Stewart Falls as a counterproposal. The USFS also opposes the name Lisas Falls.

Given the close geographical connection to Stewart Cabin and nearby features named Doc Stewart Ridge and Art Stewart Ridge referenced in the Graham County counterproposal, the NC BGN recommended to the SMAC the name Stewart Falls for this unnamed feature. The SMAC unanimously approved the name Stewart Falls.

- The next discussion was also based on a name from the same proponent as Atsadi Falls and Lisas Falls. **Little Huckleberry Falls** is the proposed name for a waterfall in Graham County. This feature is currently unnamed and is associated with the nearby feature Little Huckleberry Knob, as stated by the proponent.

The Graham County Board of Commissioners submitted a counterproposal for this feature, suggesting the name Santeetlah Bluff Falls. The Board cited that these falls are quite some

distance from Little Huckleberry Knob and that they are on a tributary of Santeetlah Creek, which flows through the middle of the area known locally as Santeetlah Bluffs. Given this information the NC BGN recommended that the SMAC approve the name Santeetlah Bluff Falls. The SMAC voted unanimously to approve the name.

Working Group for Orthoimagery and Elevation

Gary reported that the working group met earlier in the week on Monday and that he has all the committee members he needs for the LiDAR Business Plan subcommittee. Gary said he will have a report from this subcommittee at the October SMAC meeting.

Orthoimagery

Ben indicated the NC Orthoimagery Project is in the middle of the data QC process for the 2022 (Northern Piedmont and Mountains) area. County review of the imagery collected in the areas shown in yellow began Monday (see Figure 1).

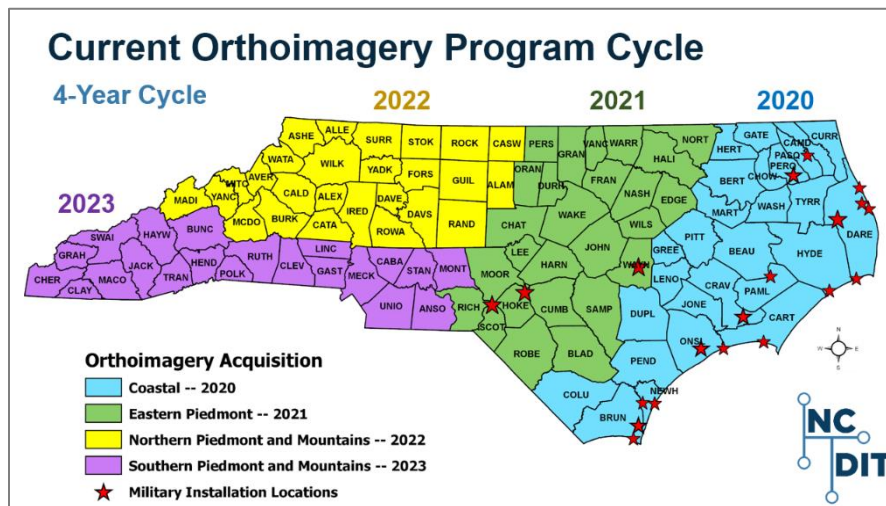


Figure 1: 4-year imagery collection cycle

The imagery has been given to the service provider so it can be loaded into the new online review platform called VOICE Insight. There were a few hiccups with the release, but the contractor assures the team that the review will be completed by September 3rd. Areas to be fixed will be submitted to the mapping contractors. The project schedule is still on track, with delivery of the final imagery to PSAPs in mid-November.

Funding is in place for the 2023 Southern Piedmont and Mountains project area, 50% of which is considered “mountain tiles” and therefore has stricter acquisition standards with somewhat higher associated costs. Qualification-based selection of contractors for the 2023 area will begin later this month with those contracts in place by the end of the year.

True orthos will be collected for Asheville and Charlotte. The collection of the 4-band color-infrared will continue. After this 2023 cycle is complete there will be color-infrared imagery for the entire state.

Source imagery file types for web services will change from MrSIDs to Cloud-Optimized GeoTIFFs (COG). Therefore, data downloaded through the image services will be in COG format, not MrSID. The COG format will operate as any TIF file would with a slightly larger filesize than the MrSID files.

Elevation

John reported contour creation is complete and all elevation data has been copied to one of CGIAs AWS S3 buckets. There have been no USGS LiDAR updates, however there are some missing data in eastern NC that will be completed soon.

Geodetic Control

Gary gave his geodetic control report. There have been a new CORS (Continuously Operating Reference Station) points installed in Franklin and Knotts Island (the latter is almost functional). Gary is working on land agreements with private landowners for installation of stations around the Sparta earthquake area.

Reference Frame

Gary continued his report. Implementation of new vertical and horizontal datums will now be in 2024-25. Gary is currently making changes to GS102 so the new datums can be incorporated into the current legislation.

Working Group for Seamless Parcels

Cadastral

Rich filled in for Pam. As of yesterday, 91 counties have supplied cadastral updates so far in 2022. In Q1 79 counties provided updates and a total of 76 in Q2. So far, 9 counties have updated their parcels in Q3. Figure 2 shows the status map parcel age by county.

Counties are urged to upload their parcel data to the transformer tool at least every 6 months. This is a good benchmark to hit because uploading requires an NCID which will lock a user's account if not used every 3 months. Also, Rich reminded counties to upload and transform their parcels, even if it is off their typical schedule, in the event a hurricane or tropical system is approaching NC.

Rich introduced Nathan Bland who has replaced John Bridgers.

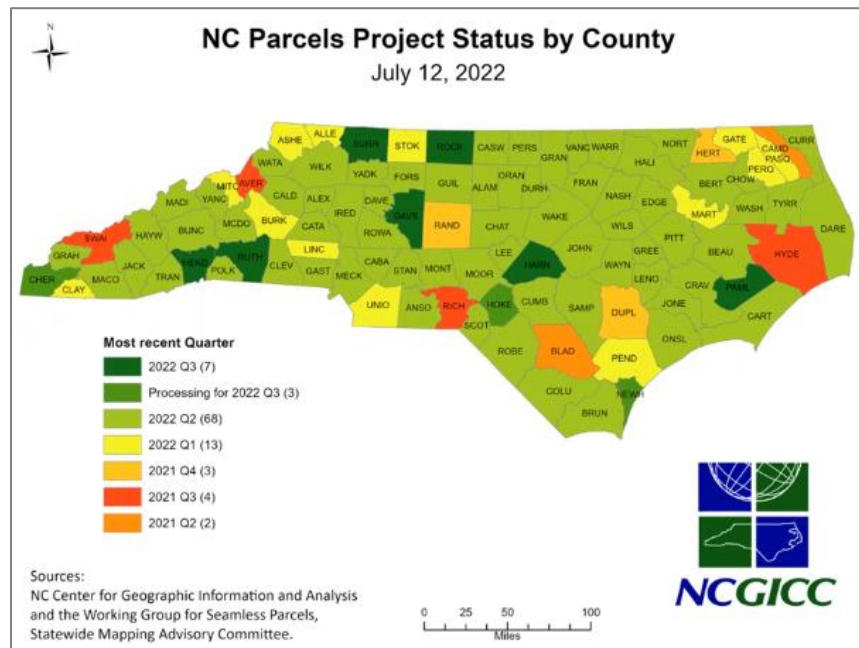


Figure 2: Parcel project status map

Administrative Units

Municipal Boundary and Annexation Web Application

Colleen reported the web app has been beta tested by a few counties and there are only very minor issues to fix. These won't affect the full release of the app. The need for approving boundaries will be reiterated at the GICC outreach meetings throughout the state this fall.

County and State Boundaries

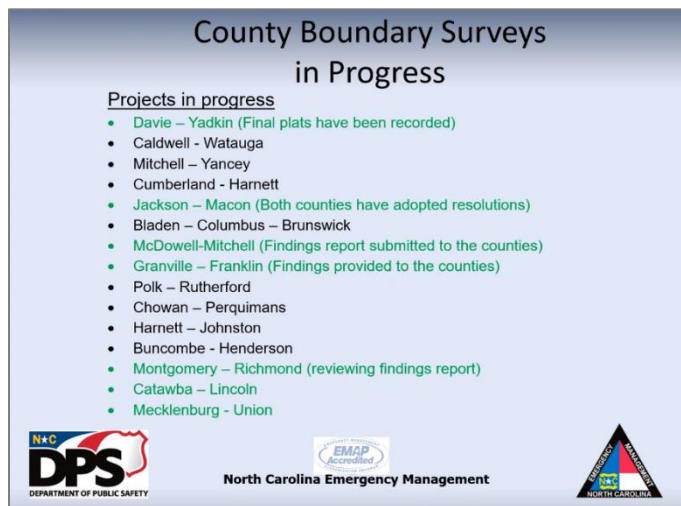


Figure 3: County boundary mapping progress

Gary indicated there are 7 sets of county boundaries currently being worked on, as shown in Figure 3. Of note are the boundaries for Catawba - Lincoln and Mecklenburg - Union: these are two older survey mappings that counties never accepted. The NC Geodetic Survey is now back in discussions to get those boundaries finalized.

Discussions also continue with Virginia to create a boundary commission to study the border between that state and NC.

Working Group for Roads and Transportation

Road Centerlines

Eric reported the NCDOT GIS Unit has completed Q2 publication of their transportation-related data. Q3 is on schedule for typical release. In other news, the NCDOT Highway Performance Monitoring System (HPMS) was submitted to FHWA (Federal Highway Administration) for the year. This will assist with funding – about \$2 billion from the federal government. Conversations have started concerning an update to evacuation routes.

Working Group for Building Footprints

Building Footprints

Darrin informed the committee that the working group has had conversations with Oak Ridge National Lab about using their machine learning capabilities and the NC orthoimagery to accurately map building footprints.

The second item reported was the work done through the Working Group for Seamless Parcels with CAMA vendors to receive samples of their data. The working group wants to build relational tables with this data so core data for building footprints can be populated.

John indicated there are currently 3 interns updating building structures. There are 700,000 structures to check in the Phase 1 area (coastal region, 27 counties, see Figure 4) and so far 87,000 have been verified. They have added 37,000 new buildings to the data set but have also removed 37,000 that appear to have been altered in some way or were not actually buildings to begin with or did not meet the size criteria. It is the hope of NCEM that the interns will be able to complete up to 75% of the area before the internships are over. Gary is working to identify funding so the remainder of the region can be completed.

After summarizing the plan and subsequent discussion there was a motion and a second to approve the business plan. It was done so unanimously and will be forwarded to the GICC for adoption.

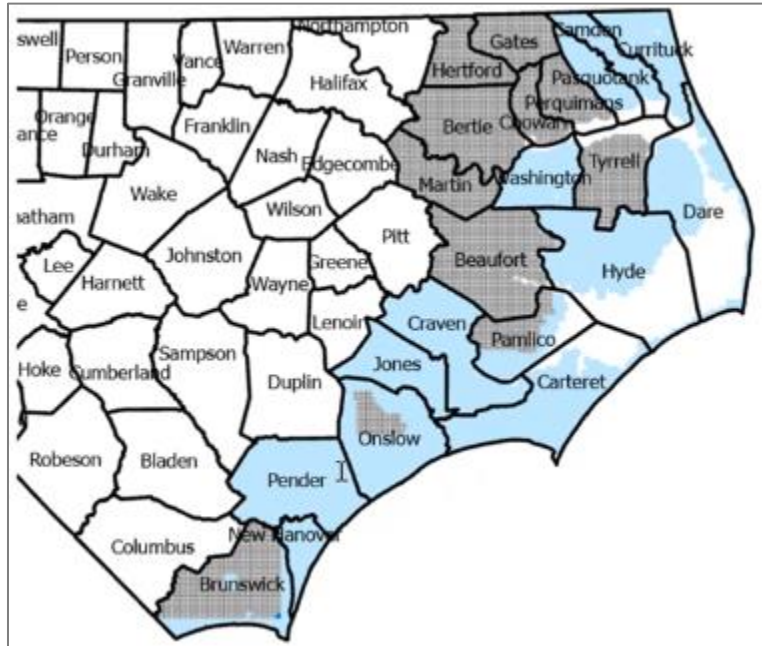


Figure 4: Status of building footprint QC by NCEM interns (blue has been completed)

NC Data Projects

Addresses

Darrin reiterated that Address NC project is driven by NG911 and follows it for completeness. Right now there are 5 counties lacking. Darrin expressed the interest to not release data in a piecemeal approach, but rather wait until all 100 counties are ready. Processes are in place for standardizing the data, QC, reporting, and creation of geocoding services.

Regular Status Updates

USGS/National Geospatial Programs Office

Kitty said there are areas in the Hurricane Florence data that have been fixed. This data will be uploaded to Rocky web with 60 days. The voided areas will still need time to be investigated.

Other Business

FY 2021-22 Work Plan Major Task Review

Of note, Eric believes there still is a need to refresh the road centerline content standard but will take this back to his team in the GIS Unit for further evaluation.

The 2022-23 Work Plan will be drafted and ready for review at the October SMAC meeting.

Meeting Action Item Review

None captured.

Adjourn