

# Statewide Mapping Advisory Committee Meeting

## Minutes

**Wednesday, April 20, 2016; 1:30 PM – 3:30 PM**

**NC League of Municipalities**

**Executive Board Room, David E. Reynolds Building, 308 W. Jones St., Raleigh, NC**

**Welcome/Introductions** – Ryan Draughn, Chair, called the meeting to order and welcomed Alice Wilson, John Farley, Sarah Wray, Sean McGuire, Hope Morgan, Gary Thompson, Kenneth Taylor, Cam McNutt, Jeff Essic, Joe Sewash, Tim Johnson, David Giordano, and on the phone Stephen Dew, Marcus Bryant, Steve Averett, and Dr. Tyrel Moore.

## Minutes

The committee approved the January 13, 2016 Minutes.

## Framework+ Datasets

Ryan called on members to report on opportunities, development, maintenance, and issues for Geospatial Framework datasets for North Carolina.

- *ORTHOIMAGERY*

Tim Johnson (CGIA) provided a brief status report on the Orthoimagery Program. The Southern Piedmont and Mountains (2015) delivered imagery products to all 24 counties (Public Safety Answering Points (PSAP) and GIS coordinators) as well as Fort Bragg and Camp Mackall in a series of regional distribution meetings in last two weeks of January. Public release via *NC OneMap* occurred on schedule in the first week in February. The first 4-year cycle of updates is complete. The delivery to a county now includes imagery 7 miles beyond the county boundary, as directed by the NC 911 Board. David Giordano added that a county mosaic (MrSID file) for offline data delivery will include that 7-mile extent around the county. In coordination with neighboring states, the project includes imagery from South Carolina, Tennessee and Georgia to fill out the 7-mile extension for counties along the state borders.

Mr. Johnson reported that some imagery tiles in the Sandhills region were successfully re-flown, at a contractor's expense, where imagery did not meet state specifications for visual quality. The 2015 imagery in those locations was delivered to PSAPs as part of a complete package and is suitable for use in emergency communications and for other purposes. The re-flown imagery products will be delivered to the affected counties over the next couple of months. Mr. Giordano added that imagery services from *NC OneMap* will replace the tiles in question in the "imagery latest" version and "imagery all" version. Mr. Johnson clarified that the 2016 coastal imagery that did not meet state specifications (flooding) will be replaced, not delivered, in the final products.

For the coastal phase (2016), acquisition was completed early in the flying season for the most of 27-county region, and final flights were completed by March 16. The only complication was winter flooding in the Lenoir/Craven area. A few additional flights

were accomplished to meet state specifications related to standing water. The project is using the 2014 coastal Lidar data for digital elevation models in the process of orthorectifying the imagery. Outreach to PSAPs and counties will occur in June. Quality review will begin in July, preceded by training in using the visual quality tool.

The project team submitted a proposal for the Eastern Piedmont region (2017) to the NC 911 Board on April 8. Mr. Johnson will brief the 911 Board on the proposal on April 22. The proposal includes cost reductions owing to the use of second generation sensors and application of the improved Lidar data.

- *TRANSPORTATION*

John Farley (NCDOT) reported that the ROME Project (all public roads) will include data entry for a backlog of road updates beginning in June. NCDOT is involved in the planning stages for applying street centerline data to Next Generation 911. The centerlines from the ROME project will need to be enhanced for routing and geocoding purposes.

- *CADASTRAL*

Pam Carver (Working Group for Seamless Parcels) displayed a status map showing 52 counties with parcel data updated in 2016 in the NC Parcel Transformer. The other 48 counties have data transformed in 2015. The Working Group is encouraging county data managers to use the tool on their own to keep data current in the Transformer. So far, 23 counties have registered with the Transformer to get log-in permission for self-service updates. This includes some of the smaller counties. More outreach is planned during the spring update cycle. The project team is requesting spring and fall updates, targeting the least busy times for county parcel data managers. Ms. Carver pointed out that transforming a county dataset takes just a few minutes using the online tool. The Transformer is authenticated by NCID which needs to be updated within 90 days.

- *ELEVATION*

Hope Morgan (Department of Public Safety) reported on North Carolina LiDAR. She shared a one-page guide on the Geiger Photon sensor technology and requested review and comments by SMAC before it is distributed as an overview document. She will send digital copies to Mr. Draughn for distribution.

Phase 4 will be done in two parts. Acquisition began in March after being delayed by funding, and stopped when leafing out started not long after. Acquisition will resume in November when leaf-off conditions return to the region. Ms. Morgan distributed a chart showing deliverables and dates for the 20-county Phase 4 area. Products from both parts of Phase 4 are expected around May 2017. Contractors are delivering 8 points per meter (compared to 2 points in the first 3 phases). Data from the validation range (including Dorton Arena) is excellent. NCDOT is validating data as well. She looks forward to analysis of the new data.

The plan for Phase 5 is to fly in winter 2016-2017, subject to funding.

- *HYDROGRAPHY*

Cam McNutt (NC Department of Environmental Quality (DEQ)) reported that the Division of Water Resources (DWR) biennial water quality review was recently completed. For the first time, someone in the public commented about the problem of differing stream names between datasets. Mr. McNutt displayed an example. Some distinct waterbodies share the same name in NC databases. DWR maintains separate databases for water classifications and water quality assessments. Names in the databases are subject to NC statutes and rules and may not match names in the national Geographic Names Information System (GNIS) database. DWR naming can be lengthy, including items like reservoir operating levels, to serve state rules. This may be a good time to synchronize the names between DWR and GNIS databases. Mr. McNutt will develop a response to the public comment, and he welcomed recommendations for that response from SMAC members now or by email. There are about 12,000 streams in NC, and about 5,000 do not have an exact match with a name in GNIS. Mr. Draughn pointed out the SMAC promotes application of standards to the benefit to stakeholders, but he acknowledged that it could be a huge undertaking.

Kenneth Taylor pointed out that streams that were dammed to become lakes pose complications in the naming. For example, Reedy Fork did not become Reedy Lake; the lake was named Brandt Lake, unrelated to the source stream name. However, DWR is describing the hydrography as it exists today, not how it was in 1920, for example.

Sean McGuire asked if NC laws would need to be modified to enable name changes. Mr. McNutt pointed out that changing a name does not affect the rules, but some rules have specific stream names in them. All rules are under review. He would like ideas to be considered good ideas by SMAC. There is time for consideration. The Stream Mapping Advisory Committee has discussed this in the context of reviewing the data model for stream mapping. Much time was spent on the topic eight years ago, but attention is needed again.

The Stream Mapping Advisory Committee will write a one-page description of this stream naming issue. Regarding case-by-case attention versus systematic basin by basin work, Mr. McNutt explained that basin-wide plans are now on a 10-year update cycle and are not directly connected to stream assessments that are on a two-year cycle on a statewide basis. After DWR responds to public comments, he plans to formalize the issue and put it in front of SMAC and other committees.

Also, as part of the public review, DWR explained why the number of waterbodies in the statewide assessment increased from 13,280 to 13,390 from 2014 to 2016. Addition of a waterbody is based on location of a monitoring station. If a waterbody exists in the high resolution dataset, Mr. McNutt extracts the waterbody and adds it to the set for the assessment. A waterbody may be unnamed. The waterbody features each have an ID and an assessment unit number; additional attributes are joined from tables. Since 2008, DWR has added 171 unnamed tributaries to the dataset used for assessment purposes.

- *GEODETIC CONTROL*

Gary Thompson (NC Geodetic Survey) requested approval of the charter for a new working group on the 2022 reference frame and implications for North Carolina. CGIA sent a copy to SMAC for review on April 7. He added that the working group plans to report findings and recommendations to the National Geodetic Survey in August or September 2016. Mr. Thompson has identified members with expertise in this subject based on the list in the charter. Mr. Farley added that NCDOT's locational survey would be affected and urged Mr. Thompson to include that aspect of NCDOT's work. Hope Morgan added that the new reference frame, fixed plate or not, will affect private business as well, particularly software vendors. Alice Wilson pointed out that the new reference frame could affect local emergency communications among the many local operations that rely on data representing location.

Voted: SMAC approved the Charter for the 2022 Reference Frame Working Group.

Mr. Thompson clarified that the working group will do its work between now and July, submit a proposed report to SMAC in July, and then to the Council in August for approval, and finally to the National Geodetic Survey.

Mr. Thompson added that coordination with neighboring states could strengthen the case for recommendations. He will chair the working group and proceed.

- *GOVERNMENTAL UNITS*

Mr. Thompson reported that NC Geodetic Survey is working with 11 counties on county boundary surveys. Cabarrus and Rowan counties are reviewing a report. Lenoir and Greene will receive a report soon. Regarding the re-establishment of the NC-SC state boundary, Mr. Thompson reported that Senate Bill 575 will be brought up in the short session. NC Geodetic Survey expects to begin work on the NC-VA boundary this year.

Regarding municipal boundaries, John Farley reported that coordination between NCDOT and the Department of the Secretary of State in compiling a comprehensive set of statewide municipal boundaries means that NCDOT need not maintain a separate dataset of boundaries based on the Powell Bill.

- *ADDRESSES*

Joe Sewash (CGIA) reported that on February 11<sup>th</sup>, staff from the Census Bureau headquarters met with General Assembly staff and the Office of State Budget and Management to discuss preparation for Census 2020. That will involve address information collected from local governments and assembled into a statewide dataset. The *AddressNC* team is tracking progress with the Federal Geographic Data Committee (FGDC) and the status of their address data layer and integration into the national address database, through the FGDC steering committee.

The Next Generation 911 GIS Data Working Group is assessing the draft National Emergency Numbering Association (NENA) GIS schema. This includes a group working on evaluating the address recommendations in that document. The US Thoroughfare, Landmark, and Postal Address Data Standard from the FGDC is out for public review

through April 25. Also, in February, the NG911 NOW Coalition was created by NENA, the National Association of State 911 Administrators (NASNA), and the Industry Council for Emergency Response Technologies (iCERT). They have set a goal and recommendation for nationwide implementation of NextGen 911 by December 1, 2020. The National States Geographic Information Council (NSGIC) has developed a press release supporting that initiative. This will have bearing on development of address points in NC.

Ms. Wilson added that she will bring an addressing issue to the Local Government Committee having to do with US Postal Service assignment of zip codes and associated town names and examples of inconsistencies with local addressing and jurisdictional boundaries. She described one example that had implications for property insurance based on jurisdiction of residence.

## **Standards and Practices**

(Standards and practices are covered in working group reports this meeting.)

## **Working Groups**

### *WORKING GROUP FOR SEAMLESS PARCELS*

Pam Carver, co-chair, reported that the Working Group for Seamless Parcels completed proposed updates to the core cadastral data content standard for North Carolina. She displayed the document with changes tracked. The revisions make the standard consistent with the *NC Parcels* standard schema as well as the core cadastral standard of the FGDC.

She noted that, compared to the 2005 standard adopted by the Council, the proposed revisions remove a field for “zoning,” for the reason that zoning district boundaries are independently developed and maintained and may not be consistent with property boundaries. Different planning jurisdictions within municipalities and counties may have unique zoning ordinances, and zoning is not comprehensive in most counties.

The working group also identified two additional fields that were not included in the NC Parcels schema – a second owner name for ownership research purposes and a field that indicates “present use value” whereby a county may assess a value for land in agriculture, forestry and/or horticulture that is lower than a market value for the land. This is useful in analysis for planning related to working lands and conservation.

Mr. Draughn explained that David Giordano will distribute the proposed revised core cadastral standard to SMAC for a 30-day review period. Comments, questions, and suggestions to [jeff.brown@nc.gov](mailto:jeff.brown@nc.gov) are welcome.

Hope Morgan added that, in her annual letter to counties requesting copies of geospatial data for purposes of the Floodplain Mapping Program, she stated that if a county shared parcel data with *NC Parcels* she would obtain a copy from *NC OneMap*. For a few instances where a county sent parcel data to the Floodplain Mapping Program first, Hope is sharing source parcel data with *NC Parcels*.

#### *WORKING GROUP FOR ROADS AND TRANSPORTATION*

John Farley reported NCDOT is focused on completing the new roads and highways database and will get back to this working group this spring. The task is to update the state data content standard for street centerlines (2005) in ways that will integrate with the new roads and highways dataset and NextGen 911. Alex Rickard of Capital Area Metropolitan Planning Organization, chair of the working group previously, is willing to consult on this effort and share lessons learned. Joe Sewash added that he and Erin Lesh (current co-chairs of the working group) are working on a crosswalk between the NENA standard for NextGen 911 and the roads and highways model.

#### *METADATA COMMITTEE*

Sarah Wray, chair, reported that the Metadata Committee will develop metadata templates for the framework datasets. The committee is dividing into task groups for the framework datasets to apply the State and Local Government Metadata Profile specifically to themes. These will be useful in training and implementation. The committee is giving attention to metadata for data archiving purposes, particularly to *NC OneMap* orthoimagery retention. Also, the City of Greensboro has volunteered to be the initial Profile implementer and will provide staff time to assist the Metadata Committee. Greensboro represents a use case for starting with no geospatial metadata and implementing the new standard.

The Metadata Committee staffing is now in place, including temporary staff assistance from Lynda Wayne through CGIA, support from Jeff Brown of CGIA, and an intern from NC Central University under the guidance of Dr. Tim Mulrooney to assist with training.

Work continues on software tools and techniques. Training sessions are targeted for late summer and fall. Upcoming outreach includes a presentation to FOSS4G by Ms. Wray assisted by Ms. Wayne, and a presentation by Ms. Wayne at URISA in Toronto in collaboration with GeoDiscover Alberta.

#### *STREAM MAPPING ADVISORY COMMITTEE*

Cam McNutt (NCDEQ) reported that the committee met recently by phone to set a schedule for monthly meetings. He noted that the committee is no longer waiting for new DEQ buffer rules which are on hold for now. The current rules include approval by the GICC of new stream maps, and if an opportunity to review and comment on those rules comes up, Mr. McNutt will engage the SMAC. Work in the coming weeks includes an update to the StreamMAC work plan, and attention to the headwaters stream mapping project.

#### *NC BOARD ON GEOGRAPHIC NAMES*

Dr. Moore reported that the NC Board on Geographic Names (NCBGN) received two proposals on June 23, 2015 for naming unnamed streams “Spurr Creek” and “Winding Oak Creek” in Granville County. The processing of the “Spurr Creek” proposal accommodates the proponent’s request for a commemorative naming of “Spurr Creek.” The file will remain incomplete until additional details associated with the proponent’s request are received and reviewed by the USBGN and the NCBGN. The additional

information and time are needed by the USBGN to meet principles that stipulate: 1) at least five years have elapsed since the death of the person for whom the feature is proposed to be named, and, 2) it can be demonstrated that members of the family played historically significant roles in shaping the social and economic development of the area. Both of these requirements appear to have been met. The Granville County Board of Commissioners submitted letters in support of the proposed Commemorative naming of “Spurr Creek” as well as the naming of “Winding Oak Creek.” Summaries of the proposals, which appear in the USBGN Quarterly Reviews were provided to each of the NCBGN members. Four of the five Board members supported the proposals. One member did not reply. No action is needed today.

The NCBGN also received petitions to remove and rename two objectionable names for features, “Negro Mountain” and “Negro Prong” in Transylvania County. These features are located in the Pisgah National Forest. The proponents of these petitions work with the US Forest Service in restoring stream habitats in areas near the features in question. The US Forest Service is on record as supporting the removal and replacement of the objectionable or offensive names. Despite several requests from the USBGN and from Dr. Moore, none of the Transylvania County officials has offered the Local Opinion that is necessary for all proposals that pursue changes in the naming or renaming of features.

The petitions for the commemorative renaming of the features focus on the life of Hiram Rhodes Revels (1827-1901) who was born in North Carolina and was the first black member of the U.S. Senate. He was born in Fayetteville, NC (225 mi. from summit) and lived during his youth in Lincolnton, NC (90 mi. away). These proposals also must comply with the USBGN's Commemorative Names Policy.

Regarding the name changes in Transylvania County, SMAC previously approved the name changes subject to completion of the step by USBGN to get local opinion. No action by SMAC is required at this time.

In a discussion of the status, Dr. Moore clarified that USBGN procedures require local opinion before a name change is finally approved by USBGN. Local inaction stops the federal process.

Mr. Draughn recommended inviting an official from USBGN to the next SMAC meeting to discuss procedures and practices to help clarify the work of NCBGN and SMAC. He also proposed that NCBGN procedures be clarified to ensure communication of new name change petitions to SMAC and CGIA for early awareness. In addition, Mr. Draughn recommended NC documents (guidance, offensive names procedures, and commemorative names procedures) be integrated into one document for clarity, consistency, and convenience to guide the NCBGN, SMAC, and the GICC.

There was discussion about interpretation of “offensive,” “objectionable” and “derogatory” names, subjective by nature. For a specific name, an interpretation begins with the petitioner. A feature may be un-named or re-named or not depending on the petition and evaluation by NCBGN and SMAC. As always, deliberations are guided by

principles and procedures adopted by the GICC and/or stated in USBGN documents.

Dr. Moore reported that NCBGN received a third proposal, to create a new name “Fox Creek,” in Buncombe County and the City of Asheville. This request went to the USBGN first. The proposal has the support of the City of Asheville. Dr. Moore confirmed that the required information is complete. NCBGN in its review noted that the organization proposing the name was thorough in its research and met all requirements in its submittal.

Dr. Taylor added that he received a message, as the State Geologist, seeking State approval of the name in Buncombe County, and he promptly passed it on to David Giordano as staff to the NCBGN. Dr. Taylor expressed appreciation for the coordinated coverage of issues and team efforts now compared to many years ago when a State Geologist would have made the call without involvement of a state board on geographic names.

Voted: SMAC approved the naming of Fox Creek, a previously unnamed creek in Buncombe County.

#### *ORTHOPHOTOGRAPHY PLANNING*

Gary Thompson reported that the working group met last week and had no new action items to report.

### **Regular Status Updates**

#### *NATIONAL GEOSPATIAL PROGRAMS OFFICE*

No report.

#### *NC ONEMAP*

David Giordano reported that, at some point this year, *NC OneMap* web services and imagery services will switch access from http:// to https:// to achieve encryption for more security. The https service URL is now available for use in addition to the http. You may switch now if you wish. When ready to make the transition fully, *NC OneMap* will communicate with consumers and give plenty of lead time to change to https before retiring the un-encrypted URL. The reason for the switch is that there are more and more web applications that use https and can run into problems when trying to consume services via http.

Also, to conserve disk storage space on the image server for the previous and current cycles of imagery acquisition (i.e., 2010 and beyond) *NC OneMap* will change the format of downloadable imagery tiles from the Geospatial Portal from TIFF to MrSID. In the compressed format (MrSID), *NC OneMap* will be able to offer county mosaics for download as well. Imagery in TIFF format will not be stored on the image server but will be stored offline. Also, the MrSID imagery will be used as the source data in the image services.

### **Work Plan Prioritization, In-Meeting Task Review, and Other Data or Mapping Items from the Group**



No additional items.

**Adjourn** --The meeting adjourned at 3:40 PM.

**2016 SMAC Meeting Dates**  
Wednesdays  
July 20 (changed from the 13<sup>th</sup>)  
October 12