



*North Carolina*  
Geographic Information Coordinating Council  
• Federal Interagency Committee

MINUTES  
FEDERAL INTERAGENCY COMMITTEE  
August 12, 2009

3916 Sunset Ridge Road,  
Raleigh, North Carolina 27607  
9:00 AM – 11:30 AM

The meeting was called to order by Doug Newcomb, Vice Chairman at 9:00 AM and introductions were made around the room and with those on the phone with presentations and discussions following.

Members in attendance:

Doug Newcomb, USFWS – Vice Chairman  
Steve Strader, USGS - Secretary  
Matt Duvall – USDS/NRCS  
Silvia Terziotti – USGS  
James Lambeth – USDA/FSA  
Holly Hixson – USFS  
David Wyatt – Eastern Band of Cherokee  
Drew Pilant – EPA  
James Couch – EPA

Guests:

Janet Lowe – NC DOT  
John Dorman – NCEM  
Hope Morgan – NCEM  
Jeff Lovin – Woolpert  
Rick Wallace – Surdex

CGIA Staff Representative:

Zsolt Nagy – NC CGIA, Raleigh, NC

- a) Presentation by Mr. John Dorman, Director, Geospatial and Technology Management Office, Division of Emergency Management on the Sea Level Rise Risk Management

Study: Potential Impacts, Risk Assessment, and Management Strategies and the NC Integrated Hazard Risk Management Program.

With the largest estuarine system on the US Atlantic Coast, NOAA has identified North Carolina as a state with significant vulnerability to sea level rise (SLR). There is a need to evaluate the environmental, economic, and ecological impacts of SLR on the coastal area and to develop/implement successful mitigation/adaptation scenarios. Using four (4) time slices between the present and 2100, the study develops reasonable scenarios for SLR, storminess, flooding, and development, and assesses risk due to permanent and temporary flooding using dynamic interactions rather than a bathtub approach. The study does not include reduction of greenhouse gasses (GHG), inland rainfall flooding, wind as a separate hazard, other natural hazards such as drought or heat waves, and does not attempt to develop community-level action plans. The primary audience for the study is the US Congress, the NC General Assembly, the Governor of NC, FEMA/NFIP, and other coastal states. Coastal counties and municipalities, Federal departments and NC state government agencies with regulatory authority, military bases in NC, and DHS are secondary audiences. The risk assessment approach will use a source-pathway-receptor framework to identify different sources of hazards, define the pathway between the sources and the receptors of the hazards, and define the receptors of the risk, including land, ecology, agriculture and aquaculture, buildings and coastal structures, critical infrastructure, and societal impacts. Previous research studies, datasets, hazard models, etc. will be leveraged and multiple scenarios will be developed. With plausible scenarios developed for 2025, 2050, 2075, and 2100, the study will turn first to near term mitigation and adaptation strategies for the 2009 to 2025 time period. The study website is <http://www.ncsealevelrise.com> for more information and updates.

An Integrated Hazard Risk Management (IHRM) program is ongoing in parallel to the SLR study. This program addresses the widest identifiable range of natural hazards, develops data and tools for communities throughout the state to estimate natural hazard risks, and provides a way to communicate these risks, thus aiding in decision making and mitigation efforts. This program looks statewide with four (4) NC counties, New Hanover, Edgecombe, Durham, and Macon, identified as pilot communities for updates to natural hazard risk mitigation plans based on the IHRM program results. The website is <http://www.ncihrm.com> for program information and updates.

Mr. Dorman provided his presentation as a ppt file, available for download at <http://www.ncgicc.org/Committees/FederalInteragencyCommitteeFIC/tabid/295/Default.aspx>

- b) Presentation by Mr. David Wyatt, GIS Manager, Eastern Band of Cherokee on GIS for the Eastern Band of Cherokee

As the GIS manager, Mr. Wyatt has been involved in trying to increase the efficiency of the GIS activities for the tribe. Special laws and regulations concerning tribal lands create a great deal of bureaucracy for things to get done on the lands. The tribe has approximately 1000 employees to run tribal business, employees falling into departments

such as construction, engineering, building inspection, floodplain monitoring, housing, utilities, etc. All aspects of the tribe are managed internally. Historically, data created, used, and archived by the various departments of tribal government have been in hardcopy form, many times with the same information existing in multiple departments. The goal is to capture all of the tribal information in a relational database so that any specific piece of data exists only one time within the data base but can be accessed and used by all departments. Currently, there are four aspects to this enterprise approach: 1) CAD 911, 2) GIS, 3) Electronic Document Management, and 4) Financial Management.

Because of rigorous laws and regulations for tribal lands, permitting processes for anything that will disturb tribal ground in any way are significant and time consuming, with all tribal government departments usually being involved. As an example, the site plan review process includes 130 forms to be completed/approved to build a house on tribal property.

The Department of Interior (DOI), Bureau of Indian Affairs (BIA) has been responsible for creating and maintaining parcel data for tribal land holdings since 1880. A number of systems have been used but all have been paper systems. The GIS department at the Eastern Band of Cherokee received permission to scan the entire paper holdings of land records for the Eastern Band of Cherokee, approximately 1.5M pages, and enter the data into 7 GIS databases based on document type and content. The data covers every land parcel on tribal lands, from origination after removal to present day.

Next steps for the tribal GIS are 1) to consolidate environmental studies and data for the environmental database; 2) add additional environmental meters to aid in warning capabilities for residents due to flooding problems in the Town of Cherokee resulting from heavy rains; 3) do more extensive hazard mitigation work as money becomes available.

- c) Discussion on recommendations for replacement candidates for the Federal representative to the GICC and Chair of the FIC in response to the resignation of Mr. Jerad Bales, USGS from those positions.

Action: The full FIC membership is being asked to provide the name, position title and contact information for anyone from the Federal community in North Carolina who they think would be a good candidate as the Federal representative to the GICC. Of course, you should discuss this with the person prior to sending in the requested information. The Federal representative to the GICC, appointed by the Governor of North Carolina per [North Carolina General Statutes Article 76, §143-725 through §143-727](#), will be the Federal voting member on the GICC and the Chair of the FIC. The appointee will interface with high level officials from Federal agencies in the state as well as high level officials from state and local governments in North Carolina, will represent the Federal community at the quarterly GICC meetings, and will chair the meetings of the FIC and FIC EC during the year. Recommendations should be provided ASAP to any or all of the following:

Doug Newcomb, USFWS at [Doug\\_Newcomb@fws.gov](mailto:Doug_Newcomb@fws.gov)  
Steve Strader, USGS at [sstrader@usgs.gov](mailto:sstrader@usgs.gov)  
Tom Tribble, CGIA at [Tom.Tribble@its.nc.gov](mailto:Tom.Tribble@its.nc.gov)

These recommendations will be provided to Mr. Tim Johnson, Director, CGIA, for review and possible submission to the Governor's staff. The Governor is not required to use any of the recommendations from the FIC.

- d) Discussion on filling the one remaining at-large seat on the FIC Executive Committee (EC)

The FIC meeting attendees were asked if there were any volunteers/recommendations for filling the final at-large seat on the FIC Executive Committee (EC). When the meeting began, the FIC EC was comprised of: 1) Doug Newcomb, USFWS, FIC Vice-Chair; 2) Steve Strader, USGS, FIC Secretary; 3) Laura Pickens, USFWS, at-large member; 4) Holly Hixson, USFS, at-large member; 5) Matt Duvall, USDA-NRCS, at-large member; and 6) David Wyatt, Eastern Band of Cherokee, at-large member, leaving one open at-large position to be filled. After some discussion of the duties of the position, Mr. Drew Pilant, Environmental Protection Agency (EPA) indicated his willingness to serve in an at-large position. After requesting and receiving no other volunteers or recommendations, Mr. Pilant was nominated, seconded and approved by voice vote as an at-large member of the FIC EC.

- e) Agency reports

**USFWS** (Doug Newcomb) – The Strategic Habitat Conservation (SHC) efforts are underway at 2 scales in North Carolina. The prototype North Carolina - Virginia area, encompassing the Chowan, Roanoke, Tar, Neuse and Cape Fear river basins, and the South Atlantic Landscape Conservation Collaborative area, encompassing all of the prototype North Carolina - Virginia area and the Coastal and Eastern Piedmont regions of North Carolina, South Carolina, Georgia, and also North Eastern Florida. See [http://training.fws.gov/EC/resources/SHC/understanding\\_and\\_background.html](http://training.fws.gov/EC/resources/SHC/understanding_and_background.html) for the official documentation on Strategic Habitat Conservation.

Surveys are currently occurring in the NC-VA SHC area for King Rail, one of the focal species in the prototype effort.

The South Atlantic Landscape Conservation Collaborative is an effort to coordinate resources/investigations into species/habitat analysis, conservation, and restoration between conservation partners at a larger landscape scale. Amy Keister is on detail in our office to work on the initial setup for the South Atlantic Landscape Conservation Collaborative. I can see if she is available for the next FIC meeting.

The lidar-based canopy height layer for North Carolina is essentially complete. There are

some areas (mainly in the Phase I areas) with missing/suspect data. I will be working with John Lay at the North Carolina Floodplain Mapping program to try to resolve these problems.

**USGS/NGPO** (Steve Strader) – *The National Map 2.0* is the primary focus of NGPO. A new *The National Map* viewer, based on the NGA Palanterra viewer technology, is set to be released in beta form in September 2009, with release of the final version in December 2009 in concert with the 125<sup>th</sup> Anniversary of the USGS Topographic Map series celebration. The new viewer will greatly increase the capabilities for the public to use *The National Map*.

USGS digital topographic maps covering North Carolina will be produced during FY 2010 by the USGS. They will be produced as GeoTIFF files and will be viewable, downloadable, and printable. They will include NAIP 1-meter color ortho-imagery resampled to 2 meters, roads, names, elevation, and hydrography. USGS topographic map production has entered a three (3) year cycle so that North Carolina will come up for map production again in 2013.

Question from Zsolt Nagy - Will it be possible to use the 2009 NAIP imagery in the North Carolina map production? Since the production process for the maps is largely automated and since 17,000+ maps will be produced over many states in FY 2010, the process will utilize the most recent NAIP imagery that is available at that point. If the production of the North Carolina maps is very late in FY 2010, it may be that the 2009 NAIP imagery will have been delivered and prepared for use by that time. Otherwise, the 2008 NAIP will be used.

**USEPA** (Drew Pilant) –

1) US EPA Ecosystem Services Research Program / Coastal Carolinas  
<http://www.epa.gov/ord/esrp/> "This site describes the science objectives, research activities, and accomplishments of the Ecosystem Services Research Program in EPA's [Office of Research and Development](#) (ORD) to advance ecosystem services research and improve knowledge to protect, and restore the services of nature.

Ecosystem services are the many life-sustaining benefits we receive from nature--clean air and water, fertile soil for crop production, pollination, and flood control. These ecosystem services are important to our health and well-being, yet they are limited.

The Ecosystem Services Research Program is transforming the way we account for the type, quality, and magnitude of nature's goods and services so that they can be considered in environmental management decisions. The research is providing the data, methods, models, and tools needed by states, communities, and tribes to understand the cost and benefits of using ecosystem services."

### Coastal Carolinas Ecosystem Services Research Program

<http://www.epa.gov/ord/esrp/quick-finder/coastal-carolina.htm> As part of this effort, research will be conducted in the coastal counties of North and South Carolina to develop an inventory of the services provided by the region's ecosystems. Scientists also will develop information to document the value of these services and will begin to quantify the impacts on these services caused by changes in human populations, agricultural practices, and climate change. Special emphasis will be given to coastal area wetlands and, in particular, to the role of wetlands in controlling reactive nitrogen, an important environmental stressor associated with agricultural fertilizer application, air pollution, and water quality problems.

The North and South Carolina coastal counties represent an ideal area for studying ecosystem services and the factors that impact these systems. This area contains extensive natural landscapes that are facing unprecedented pressures from population growth, landscape alteration, and climate change. This area includes the tidal counties from Currituck Sound south to the Savannah River. It also includes the Albemarle and Pamlico Estuaries, Cape Hatteras, and the Outer Banks and the major cities of Wilmington, Myrtle Beach, and Charleston.

Loss or impairment of coastal wetlands can lead to many adverse outcomes with real costs to human well-being, including reduced water quality and quantity, harmful algal blooms, loss of habitat, and reduced fish populations, impacting commercial harvests and recreational sport fishing.

### 2) Albemarle-Pamlico Basin Land Cover Change and Water Quality Viewers

EPA's Landscape Characterization Branch is developing methods to use remote sensing data for landscape change detection based on vegetation phenology. This viewer shows changes in the period of 2002-2008.

Another viewer shows water quality parameters for the Albemarle-Pamlico Basin derived from satellite imagery. See <http://maps6.epa.gov/aptw/viewer.htm>

### 3) SAR and Hyperspectral Imagery

NASA collected three flightlines of L-band polar metric synthetic aperture radar (SAR) data for EPA on August 13, 2009. The targets are in eastern NC and focus on wetlands, coastal areas and general land cover mapping. For more information on NASA's instrument and UAVSAR program, see <http://uavsar.jpl.nasa.gov/>

EPA has a new visible-infrared hyperspectral imaging spectrometer called Blue Dasher. The instrument has recently begun deployments for various landscape targets in North Carolina and Virginia.

**USDA/FSA** (James Lambeth) – Fifteen (15) states were added to the FY2009 NAIP collection, including North Carolina. Photoscience is flying imagery for NC. The

compressed county mosaics (CCM) will be available on the Data Gateway in October 2009. The CCM data will not include the IR band. Only the tiff data, available in May 2010, will include the IR band.

**USDA/NRCS** (Matt Duvall) – There are still a few county soil surveys, 3 to 5, which need to be SSURGO certified. Each county is discrete right now. As the certification is completed, efforts will commence to make the surveys non-discrete and to make the soil classes match between counties. One should subscribe to the soils data mart updater to get updates to the tabular data as it is made compatible.

We are working with CGIA to make soils available on NOneMap with a core set of data that is most commonly requested.

NRCS is reassessing the way technology (including GIS) is being used by its field offices.

**NC DOT** – Janet Lowe, co-chair of the Working Group for Roads and Transportation (WGRT), provided the following information via email to the FIC Secretary: The WGRT will be applying for a CAP grant from the Federal Geographic Data Committee (FGDC) later this year and hopes to count on support from the FIC in this endeavor. WGRT is working on updating the transportation standard and is hoping to do some joint development with the Eastern Band of Cherokee. Alex Rickard, the other co-chair to the WGRT, gave a full update to the GICC at the afternoon Council meeting and the slides of his presentation are now available online at the GICC website, <http://www.ncgicc.org/Default.aspx?tabid=138> , under the August 12, 2009 meeting presentations/handouts.

f) Other business and announcements

The Technical Advisory Committee (TAC), a sub-committee of the GICC, is being renewed by the GICC with Ms. Kelly Laughton as the TAC Chair. The federal community, through the FIC, will be asked to appoint a representative to that committee.

The NC Center for Geographic Information and Analysis (CGIA), with the signing of the state budget for North Carolina on August 7, has been moved to the Office of the State Chief Information Officer (OSCIO) retroactively effective to July 1, 2009.

The new charter for the NC Board on Geographic Names will be reviewed and likely voted on for adoption later today at the quarterly GICC meeting.

The revised orthophotography standard for the state will be reviewed and likely voted on for adoption later today at the quarterly GICC meeting.

- g) The next scheduled meeting of the FIC Executive Committee is October 15, 2009, 1 P.M. to 3 P.M. Specific information about the meeting will be sent to the Executive Committee members by the FIC Secretary.

The next scheduled meeting of the Federal Interagency Committee (FIC) is scheduled for November 10, 2009 (new date) at the USGS North Carolina Water Science Center in Raleigh, NC, 9 A.M. to 11:30 A.M. Meeting specifics will follow from the FIC Secretary.

The meeting was adjourned at 11:35 A.M.