

LAND QUALITY SECTION

HIGHLIGHTS OF YEAR-END ACCOMPLISHMENTS

November 1, 2005

Land Quality

- Provided dam safety inventory information to emergency management personnel and staffing the Emergency Operations Center during Hurricane Ophelia.
- Conducted workshops on erosion and sediment control for several hundred contractors, design professionals and local government personnel.
- Performed over 2,298 inspections of dams to determine the potential threat to public safety and initiated corrective actions, where necessary.
- Performed over 16,050 environmental inspections of construction sites and over 742 inspections of mines, and initiated compliance actions, if necessary.
- Issued plan approvals for over 3,573 erosion and sedimentation control plans, 301 mining permits and 103 dam safety permits.
- Established position in the Mooresville Regional Office to implement the Express Permitting Program for sedimentation plan approvals, continued implementation with one position in the Wilmington Regional Office, and reviewed express permit applications with existing staff in the remaining regional offices.
- Released 1,013 acres of reclaimed mine land.
- Developed and implemented improvements to Internet based, statewide database of permitted mines and dams and began development of new sediment program database in IBEAM.
- Responded to hundreds of public inquiries on erosion and sediment control, dam safety and mining.

Geodetic Survey

- Established 363 geodetic monuments
- Recovered and updated descriptions of 1027 existing geodetic monuments.
- Submitted 36 geodetic projects to the National Geodetic Survey for inclusion in the National Spatial Reference System.
- Surveyed 147 kilometers of county boundary and 81 kilometers of state boundary
- Established 11 Global Positioning System base stations.
- Expanded the NC Real Time Kinematic Network (coverage area is Raleigh to Morganton).
- Assist the NC Floodplain Mapping program complete new Digital Flood Insurance Rate Maps (DFIRMS) in western NC.

- Continue to implement the National Height Modernization System in NC.
- Assist CGIA with the Streambed Mapping Project.

Geological Survey – Accomplishments for 2005

- Initiated a 3-year Landslide Hazard Mapping Program as mandated in Senate Bill 7: Hurricane Recovery Act of 2005. The goal of this new program is to create Landslide Hazard maps for 5 western North Carolina counties affected by the remnants of hurricanes Frances and Ivan in September 2004. Hired six additional staff members to determine immediate and potential threat to lives and properties due to landslides. Provided emergency technical assistance to local and state emergency management personnel with landslides; participated in technical review committees to determine causes of landslides and where other landslides may happen; presented information on landslides to local government and interest groups; prepared several reports on the landslides causing damage and fatalities; posted locations of known landslides and useful public safety information to news media and Division's web page. Published Information Circular 32: A Citizen's Guide to Landslides in North Carolina.
- Continued work on a geologic hazards atlas of North Carolina in coordination with the State Division of Emergency Management.
- Completed geologic mapping of approximately 215 square miles in the north central piedmont and in the Asheville vicinity. Also mapped the geology of the central part of the Blue Ridge Parkway.
- Continued work with the USGS on determining subsurface geology and geomorphology of Outer Banks and Cedar Island, including Cape Hatteras and Cape Lookout National Seashores.
- Continued work with the USGS and the Division of Water Quality to determine ground water pollution potential of animal waste nutrients through the surficial aquifer in the central coastal plain.
- Answered public inquiry and performed public outreach through a number of presentations; received hundreds of requests for information; and received over 2.5 million hits on the Geologic Survey's web page.