

COASTAL NORTH CAROLINA

Dennis, Floyd combination deals worst flooding in memory

Associated Press

RALEIGH – North Carolina still was waterlogged from Hurricane Dennis' meandering six-day journey through coastal North Carolina when Floyd came along.

The extraordinary combination dealt eastern North Carolina the worst flooding in memory.

"It's rare you would have two storms dumping that much rain right on top of each other," said David Lindbo, assistant professor of soil science at North Carolina State University. "Dennis dropped a bunch, and Floyd dropped a bunch. There's only so much the ground can take."

As bad as the initial flooding seemed, it only worsened in Tar River towns such as Tarboro, Rocky Mount and Greenville.

"A flood is like a wave, and so the wave takes time to travel along the river," said Jerad Bales, a hydrologist with the U.S. Geological Survey in

Preliminary data show Floyd flood waters exceeded the 500-year level in some places.

Raleigh. "For a given distance traveled, travel time increases as channel slopes decrease – the wave moves slower in flat terrain. The wave may also increase in magnitude as it moves downstream and accumulates water from the tributaries."

Hydrologists use statistics to predict flood recurrence intervals. A 100-year flood at a specific location is one for which there is a 1 percent

chance a flood of that magnitude would recur there in any given year. A 10-year flood equals a 10 percent recurrence rate, and a 500-year flood a .2 percent chance.

Preliminary USGS data show that Floyd flood waters exceeded the 500-year flood level in some places – the Tar River in Rocky Mount and Tarboro, Ahoskie Creek near Ahoskie, the Trent River near Trenton and the Northeast Cape Fear River near Chinquapin.

Hurricane Dennis dumped 5.78 inches of rain in Rocky Mount. Two weeks later, Floyd unloaded 15.65 inches. Worse, some areas got an

extra shot of rain from unrelated thunderstorms a couple of days before Floyd hit.

"All of these things just more or less compounded," said Robert

Evans, an associate professor of logical and agricultural engineering at NCSU. "We were already at flood stage when this event happened."