

Hurricane Florence Response and Recovery in Onslow County

During the storm, GIS staff stationed at the Emergency Operations Center (EOC), ran FEMA's HAZUS software for estimating potential physical losses, and to get estimated debris numbers. As new forecasts were released by the National Weather Service, the models were updated and new reports were generated to share with Emergency Management Staff and Elected Officials. GIS staff also created several map services using our local data and data from NCDOT, NOAA, Weather.gov, and the National Hurricane Center in order to view live feeds as the storm approached Onslow County. These map services were available for display on the large screens in the EOC. Some of the map services included storm surge, flash flooding, road incidents and closures. While at the EOC, GIS staff and Tax Administrator Harry Smith discussed issues with Damage Assessment. This discussion led to the creation of an ArcGIS Online report for our citizens to report damages, which can be found at <http://cizr.onslowcountync.gov>.

After the storm, we used GeoCove's ARM360 Damage Assessment field application to document the damages. This app allowed multiple teams to add geographic location points to damaged structures as they drove all of the unincorporated areas of the county. Onslow County collaborated with every municipality in our county and provided the software and training and sometimes even provided laptops for the municipality to use as they identified damaged structures. Because of the joint collaboration between the county and the municipalities, we were able to run countywide reports to get the total loss amounts, and to run reports for each individual municipality, and for the unincorporated areas. The app uses GIS map layers and tools and made damage assessment run much smoother and quicker than the old pen and paper process we used during previous Hurricanes.

We did not utilize NC OneMap or than updating our parcel layer prior to the Hurricane hitting.

Hope Morgan gave a presentation at NCPMA Conference on her experience through Hurricanes Florence and Michael and some of the map services she talked about using at the State EOC would be quite helpful to individual counties during an event.

Patricia Pike
GIS Director
Onslow County

November 6, 2018