

FACT SHEET #1
NWS River Forecast Process in the Amite/Comite River Basin

The National Weather Service is responsible for issuing river and flood forecasts and warnings to mitigate the loss of life and property and support the nation's economy. In the Amite/Comite River Basin, the NWS divides this responsibility between the New Orleans/Baton Rouge Weather Forecast Office (LIX) and Lower Mississippi River Forecast Centers (LMRFC). In general, LIX is responsible for data collection and coordinating with the emergency management community and the public. The LMRFC is responsible for preparing the river forecast from hydrologic models run locally. LIX adds local information inclusive of the lower end of the basin. That information may include additional details of the expected impact upon local communities and associated roads. This information is then disseminated through various media sources and coordinated with Emergency Managers.

LMRFC Forecast Process

The LMRFC's routine forecast cycle is based on precipitation, stage, and reservoir data collected at 7AM each day. Using data collected from NWS cooperative observers and automated data collection sites, the LMRFC executes hydrologic models and prepares forecasts of river stages for the next five days. River forecast model runs include observed rainfall that has fallen before 7AM and forecasted rainfall for the next 12 hours ending at 7PM. These routine forecasts are normally available by 930AM each day.

When flooding occurs, LMRFC will update forecasts as needed. For minor flood events, LMRFC will update forecasts at all locations based on data collected in the evening and valid at 7PM CDT (6PM CST). These forecast updates are based on observed rainfall ending at 7PM CDT (6PM CST) and 12 hours of forecasted rainfall ending at 7AM CDT (6AM CST) the next morning. During major flood events, these forecasts will also be updated based on data collected at 1PM CDT (12 Noon CST) in the afternoon and at 1AM CDT (Midnight CST) in the morning. These updates should be available about 2 hours after data are collected. LMRFC continually monitors the hydrologic situation and will update forecasts between these times when stages indicate that current forecasts are no longer valid or the observed rainfall differs significantly from the amounts of forecasted rainfall used in river forecast preparation.

LMRFC sends these forecasts to Weather Forecast Offices (WFO) including LIX when prepared. LMRFC normally waits an hour after issuing the products to the WFO to place the forecasts on the Internet. During major flooding, LMRFC may only wait 30 minutes before placing products on their website.

WFO LIX Product Dissemination Process

LIX receives the LMRFC products over the NWS communications circuits. Using the NWS computers, LIX then prepares river summaries, river statements, flood warnings, and flood statements. These products not only give the crest information, they also include road closures and the relationship between past flood events. In addition to preparing flood warnings, LIX also coordinates with local emergency managers and river authorities to provide information on the flooding.

Fact Sheet #1
NWS River Forecast Process in the Amite/Comite River Basin