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**NOAA-LSU STUDY: PORTIONS OF GULF COAST SINKING AT SIGNIFICANT RATE**  
*Increased Attention Given to Address Public's Vulnerability to Severe Weather*

An analysis by the National Oceanic and Atmospheric Administration's (NOAA) National Geodetic Survey (NGS) indicates portions of coastal Louisiana and Mississippi could lose up to one foot of elevation over the next decade. Population zones will face increased dangers from storm surge and flooding due to the ongoing subsidence of coastal areas along the northern Gulf of Mexico, NOAA announced at the National Hurricane Conference in New Orleans today. NOAA is an agency of the Department of Commerce.

To increase personal and economic safety of population zones in coastal areas along the northern Gulf of Mexico shoreline, NGS and NOAA National Weather Service have joined forces to help mitigate the impact of storm surge and flooding from future hurricanes and coastal storms.

"We have diagnosed a problem, and NOAA is uniquely capable to recommend and implement a remedy," said retired Navy VADM Conrad Lautenbacher, Ph.D., undersecretary of commerce for oceans and atmosphere and NOAA administrator. "We are taking long-term and near-term steps that will save lives during dangerous storms, prevent further subsidence, and closely monitor the situation so that we are always working with the most current data."

In cooperation with state and local agencies, NOAA is taking a two-stage approach to address the problem of increased vulnerability to flooding and tidal surges made increasingly worse by coastal subsidence. In the near-term, NOAA National Weather Service has installed monitoring systems that will give more accurate forecasts of coastal water levels, and is using the new information on ground elevations in the forecasting of coastal storms. The long-term strategy involves drastic coastal reclamation that is intended to halt the coastal subsidence.

“Every year, we see new storms that impact a growing number of communities, roadways and infrastructure,” said Bill Proenza, director, NOAA Weather Service, Southern Region. “Our goal at NOAA is to provide the most timely, accurate information possible on the direction and severity of tropical storms and hurricanes. We recognize the changing landscape of coastal Louisiana and Mississippi increases the threat from future storms.”

At the current rate of subsidence, scientists at NGS and LSU estimate 15,000 square miles of land along south Louisiana will be at or below sea level within the next 70 years. Subsidence has already caused parts of cities to sink several feet below sea level including New Orleans is a prime example.

“We will be using the analysis in collaboration with NOAA Weather Service’s storm-track and storm-surge projections,” said Charlie Challstrom, NGS director. “That collaboration gives federal, state and local government and the public the ability to see the growing vulnerability of coastal areas and communities to flooding and storm surge.”

Using techniques developed by NGS and the Louisiana Spatial Reference Center at Louisiana State University (LSU), an analysis was made of changing elevations spanning the entire length of the Louisiana coastline.

“We found that subsidence or loss of elevation ranges from one-third to 1.5 inches per year across south Louisiana as well as coastal Mississippi,” said Dr. Roy Dokka, executive director of the LSU Center for Geoinformatics. “A sinking coastline puts coastal communities increasingly at risk to future storm events.”

A presentation on the analysis and impact of subsidence to coastal Louisiana and Mississippi has been scheduled for April 17 at the National Hurricane Conference. The presentation is also available online at <http://www.ngs.noaa.gov/News/Louisiana/LAHurricane.html>.

“Census reports indicate that this area of the country is rapidly growing in population, making a quick response time more and more critical to saving lives,” Lautenbacher said. “Additionally, the northern coast of the Gulf of Mexico is critical to the national economy and our energy supply.”

NOAA National Geodetic Survey defines and manages the National Spatial Reference System (NSRS) - the framework for latitude, longitude, height, scale, gravity, orientation and shoreline throughout the United States. NSRS provides the foundation for transportation and communication systems, boundary and property surveys, land records systems, mapping and charting, and a multitude of scientific and engineering applications, such as disaster mitigation and emergency response.

NOAA National Weather Service is the primary source of weather data, forecasts and warnings for the United States and its territories. NOAA National Weather Service operates the most advanced weather and flood warning and forecast system in the world, helping to protect lives and property and enhance the national economy.

The Commerce Department's National Oceanic and Atmospheric Administration (NOAA) is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and providing environmental stewardship of the nation's coastal and marine resources.

On the Internet:

NOAA - <http://www.noaa.gov>

NOAA National Weather Service - <http://www.nws.noaa.gov>

NOAA National Geodetic Survey - <http://www.ngs.noaa.gov>