WCU coastal scientists respond to the Gulf oil spill crisis

Macon County News Thursday, 10 June 2010

CULLOWHEE – Scientists from Western Carolina University's Program for the Study of Developed Shorelines are lending their expertise to help determine the best way to mitigate damage to coastal communities from the massive oil spill in the Gulf of Mexico.

The scientists from PSDS, an internationally known program that uses science to influence public policy affecting management of shorelines across the globe, are evaluating the many coastal engineering proposals for responding to the oil spill.

"So far, we have conducted two aerial reconnaissance surveys of the area that is being affected by this environmental disaster," said Rob Young, PSDS director. "In addition, scientists from the program have been working on the ground in coastal Louisiana to assess the impact."

Young said scientists are concerned that some of the solutions being considered may actually result in greater damage to the environment, including a proposal to begin building a long sand berm to prevent oil from reaching wetlands and beaches in Louisiana.

"We understand that people desperately want to see action being taken to prevent oil from reaching these sensitive areas. We share that sense of desperation," Young said. "But there is little evidence that this project will work. It cannot be built quickly enough to block the approaching oil."

Young also argues that the berm would be susceptible to erosion, reducing its effectiveness in keeping oil from reaching the shore, and would alter tidal currents, leading to the erosion of natural barrier islands that protect the coast from hurricanes.

He and other scientists have called upon the Obama administration to establish a scientific review panel to vet all proposals for large-scale coastal engineering in response to the spill.

"The panel should include experts from science agencies such as the U.S. Geological Survey and the National Oceanic and Atmospheric Administration, as well as leading academics," he said. "The review panel should still be charged with responding very quickly to permit applications, but the public needs to have a higher level of confidence that the best science is being brought to bear on this problem. It is a problem that will be measured in years, not days."

Scientists from WCU have made three trips to the Gulf Coast since oil began pouring from a deep-water oil well, including a visit to Isle Grand Terre, just east of Grand Isle, La., on May 28.

"As we walked the beach, we were horrified," said Adam Griffith, a research scientist and WCU graduate. "Oil in large pools was evident on the beach. Hermit crabs wandered around next to bubbles of oil while dolphins frolicked in water that wasn't quite the right color. Foul fumes were everywhere and oil could be seen oozing out of the wetlands."

Images from the PSDS excursions are available online at http://psds.shutterfly.com.

"Our goal is to obtain highquality imagery in large volumes to serve as an archive of environmental conditions at specific places," Griffith said.

For more information on the Program for the Study of Developed Shorelines, visit http://psds.wdu.edu.