

## NOAA Web Update June 21, 2010

### DEEPWATER HORIZON Incident



#### **Situation: Monday 21 June –**

The NOAA Ship *Thomas Jefferson* returned to Galveston, Texas, on June 11 from an eight-day research mission to investigate the presence and distribution of subsurface oil from the Deepwater Horizon/BP oil spill. The mission collected water samples for chemical analysis and tested the feasibility of using acoustic and fluorometric scanning to help find potential pockets of subsurface oil clouds. The science team onboard included researchers from NOAA, EPA, the University of New Hampshire and the Woods Hole Oceanographic Institution. NOAA continues to conduct a variety of research missions to study the impacts of the BP oil spill on the Gulf of Mexico—part of the federal government’s ongoing effort to engage the best scientific minds to inform response and recovery efforts. For further details about the research mission, read the full article, [Initial Observations from the NOAA Ship Thomas Jefferson](#), on the [Deepwater Horizon Response](#) Web site.

#### **Response**

NOAA provides coordinated scientific weather and biological response services to federal, state, and local organizations. Experts from across the agency have mobilized to help contain the spreading oil spill and protect the Gulf of Mexico’s many marine mammals, sea turtles, fish, shellfish, and other endangered marine life. NOAA spill specialists are advising the U.S. Coast Guard on cleanup options as well as advising all affected federal, state, and local partners on sensitive marine resources at risk in this area of the Gulf of Mexico. Overflights are conducted on a daily basis (weather permitting) to provide field verification of model trajectories. Please see [GeoPlatform.gov/gulfresponse](http://GeoPlatform.gov/gulfresponse) for further information on the federal response to the Deepwater Horizon Incident.

#### **Trajectories**

Winds are forecast to continue to be 10 knots or less and primarily from the E to SE, through Wednesday. Trajectories indicate continued slow movement of the slick to the east. Coastal regions between Dauphin Island, Alabama and Panama City, Florida continue to be threatened by shoreline contacts within this forecast period. More persistent SE winds later in the forecast period will increase the threat of shoreline impacts to the Chandeleur Islands and the Mississippi Delta during the latter half of the coming week.

OR&R’s modeling team continues to generate daily trajectories for the nearshore surface oil. The offshore trajectory maps (previously displayed on this page, showing oil interacting with the Loop Current) have been temporarily suspended because the northern end of the Loop Current has been pinched off into a large eddy (Eddy Franklin) so there is no clear path for oil to enter the Loop Current from the source. Also, there have been no reports of recoverable oil in the Loop Current or Eddy Franklin and the oil has moved to the north and away from the Eddy Franklin. We will continue to

monitor the area with overflights, vessel observations, and satellite analysis. When the threat of shoreline impacts to the Florida Keys increases, we will resume producing the offshore trajectory maps.

The Loop Current is an area of warm water that comes up from the Caribbean, flowing past the Yucatan Peninsula and into the Gulf of Mexico. It generally curves east across the Gulf and then flows south, parallel to the west Florida coast. An eddy is water that rotates.

## Closures

Today, NOAA modified the commercial and recreational fishing closure in the oil-affected portions of the Gulf of Mexico. This closure ([see map](#); PDF, 228 K) is effective on June 21, 2010 at 6 p.m. eastern time (5 p.m. central time). All commercial and recreational fishing, including catch and release, is prohibited in the closed area; however, transit through the area is allowed. The closure measures 86,985 sq mi (225,290 sq km) and covers about 36% of the Gulf of Mexico exclusive economic zone. The majority of federal waters in the Gulf of Mexico are open to commercial and recreational fishing. Any changes to the closure are announced daily at 12 p.m. eastern at [sero.nmfs.noaa.gov](http://sero.nmfs.noaa.gov) and take effect at 6 p.m. eastern the same day.

## Sea Turtles and Marine Mammals (effective June 20, 2010)

A total of 504 **sea turtles** have been verified from April 30 to June 20 within the designated spill area from the Texas/Louisiana border to Apalachicola, Florida. Between Saturday, June 19 and Sunday, June 20, 9 turtle strandings were verified (three live turtles and four dead turtles were discovered in Mississippi, two dead were found in Alabama). In addition, a dead turtle was collected by an offshore bird and turtle survey team. There are now 106 sea turtles in rehabilitation centers. These include 73 heavily-oiled sea turtles captured as part of on-water survey and rescue operations and 33 turtles that stranded alive. A total of 90 stranded or captured turtles have had visible evidence of external oil since verifications began on April 30. These include the 79 captured or collected turtles from on-water operations (73 live turtles, 3 collected dead and 3 found alive that died in rehabilitation), six live stranded turtles (two caught in oil skimming operations), and five dead stranded sea turtles. All others have not had visible evidence of external oil.

Of the 504 turtles verified from April 30 to June 20, a total of 383 stranded turtles were found dead, 41 stranded alive. Four of those subsequently died. Four live stranded turtles were released, and 33 live stranded turtles are being cared for at rehabilitation centers. Turtle strandings during this time period have been much higher in Louisiana, Mississippi, Alabama and the Florida Panhandle than in previous years for this same time period. This may be due in part to increased detection and reporting, but this does not fully account for the increase.

The NOAA Ship *Pisces* reported a dead 25-foot sperm **whale** was located 150 miles due south of Pascagoula, Mississippi and approximately 77 miles due south of the spill site earlier last week. The whale was decomposed and heavily scavenged. Samples of skin and blubber have been taken and will be analyzed. Sperm whales are the only endangered resident cetacean in the Upper Gulf of Mexico.

From April 30 to June 20, 50 stranded **dolphins** have been verified in the designated spill area. Of the total 50 stranded dolphins, 46 dolphins stranded dead, four dolphins stranded alive and two of those have subsequently died, one on the beach and the other euthanized. The other two include one in rehabilitation at Audubon Aquarium found Saturday and the one freed from oil booms. Visible evidence of external oil was confirmed on three dolphins. However, we are unable at this time to determine whether the two of the dolphins were externally oiled before or after death. Since April 30, the stranding rate for dolphins in Louisiana, Mississippi, Alabama and the Florida Panhandle has been higher than the historic numbers for the same time period in previous years. In part, this may be due to increased detection and reporting and the lingering effects of an earlier observed spike in strandings for the winter of 2010.

A stranding is defined as a dead or debilitated animal that washes ashore or is found in the water. NOAA and its partners are analyzing the cause of death for the dead stranded and dead captured sea turtles and the stranded marine mammals.

### **Assessment**

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) is conducting a [Natural Resource Damage Assessment](#) (PDF, 89 K). The focus currently is to assemble existing data on resources and their habitats and collect baseline (pre-spill impact) data. Data on oiled resources and habitats are also being collected.