

## NOAA Web Update July 2, 2010

### DEEPWATER HORIZON Incident



**Situation: Friday 02 July –**

#### **NOAA Models Long-Term Oil Threat to Gulf and East Coast Shoreline**

As part of the ongoing effort to use the state-of-the-art technology and scientific tools to aid response operations, NOAA is using modeling of historical wind and ocean currents to project the likelihood that surface oil from the Deepwater Horizon/BP oil spill will impact additional U.S. coastline.

The modeling uses the high end of the flow rate estimate, and inputs the estimated amount of oil being skimmed, burned, and collected through the containment device—and accounts for the natural process of oil weathering. For further information, see [Deepwater Horizon: Statistical Modeling](#).

#### **NOAA Response**

New Fact Sheet: [What to Expect in South Florida from the Deepwater Horizon/BP Oil Spill](#) (Document format: PDF, size: 399.9 K).

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. NOAA's Office of Marine and Aviation Operations (OMAO) is supporting the response work in the Gulf with NOAA-owned ships and aircraft. Currently, NOAA has deployed six NOAA-owned vessels in response to the Deepwater Horizon oil spill.

Please see [GeoPlatform.gov/gulfresponse](#) for further information on the federal response to the Deepwater Horizon Incident.

#### **Trajectories**

Onshore winds (predominantly SE) are forecast through next week, with speeds from 5 to 15 kts. These onshore winds will continue to move the northern edge of the slick northwest, threatening the barrier islands of Mississippi/Alabama and the Florida Panhandle west of Freeport, Florida. The Chandeleur Islands, Breton Sound, and the Mississippi Delta also continue to be threatened by shoreline contacts. To the west of the Delta, these winds may bring oil ashore between Barataria Bay and Caillou Bay – any remaining floating oil may be moved quickly to the west due to the development of a strong westward coastal current in this region.

OR&R's modeling team continues to generate daily trajectories for the nearshore surface oil. The offshore trajectory maps (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**

There is no change to the fisheries closure area today. The June 28 closure remains in effect. ([See map.](#)) This federal closure does not apply to any state waters. Closing fishing in these areas is a precautionary measure to ensure that seafood from the Gulf will remain safe for consumers. The closed area represents 80,228 square miles, which is approximately 33.2 percent of Gulf of Mexico federal waters. This leaves more than 66 percent of Gulf federal waters available for 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 July 1, 2010)**

The Unified Area Command continues to build a sea turtle observer program for all on-water oil clean up operations. The observers will primarily focus on controlled burn and skimmer fleet operations. The command's Wildlife Branch is working now to determine when, where, and how observers can be best positioned to reduce risks posed to sea turtles by oil containment and clean-up activities. In addition, the Wildlife Branch will begin to train additional sea turtle observers this weekend.

Throughout the spill, federal and state biologists have been surveying for and rescuing oiled sea turtles offshore using small vessels carrying trained sea turtle collection teams. If sea turtle observers can improve the sighting and collection of sea turtles prior to burn and skimming operations, then this is another way to reduce risks posed to turtles by the oil spill. In offshore waters, both free floating patches of sargassum seaweed and spilled oil tend to accumulate in convergence zones, places in the ocean where strong opposing currents meet. Sea turtles, especially juveniles, use these areas for food and cover. Burn operations sometimes occur there because of aggregated oil. Burn operations are managed by the Unified Area Command and are not to occur if wildlife are spotted prior to ignition. Burns can be stopped immediately by allowing fire-resistant boom surrounding the operation to open and the oil to spread too thin to support combustion. For more on the United Area Command observer program, go to <http://www.deepwaterhorizonresponse.com/go/doc/2931/734531/>.

A total of 595 **sea turtles** have been verified from April 30 to July 1 within the designated spill area from the Texas/Louisiana border to Apalachicola, Florida. There are 142 sea turtles in rehabilitation centers. These include 99 sea turtles captured as part of the on-water survey and rescue operations, and 44 turtles that stranded alive. A total of 114 stranded or captured turtles have had visible evidence of external oil since verifications began on April 30. All others have not had visible evidence of external oil.

Of the 595 turtles verified from April 30 to July 1, a total of 437 stranded turtles were found dead, 52 stranded alive. Four of those subsequently died. Four live stranded turtles were released, and 44 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** on June 15, 2010, that was located 150 miles due south of Pascagoula, Mississippi and approximately 77 miles due south of the spill site last week. The whale was decomposed and heavily scavenged. Samples of skin and blubber have been taken and will be analyzed. The whale had not evidence of external oil. Sperm whales are the only endangered resident cetacean in the Upper Gulf of Mexico. There are no records of stranded whales in the Gulf of Mexico for the month of June for the period 2003-2007.

From April 30 to July 1, 56 stranded **dolphins** have been verified in the designated spill area. Of the 56 strandings, five were live strandings, three of which died shortly after stranding, one was released and one is in rehabilitation. Fifty one dolphins were found stranded dead. Visible evidence of external oil was confirmed on five dolphins, two live and three dead stranded animals. We are unable at this time to determine whether three of the dead stranded 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**

To help determine the type and amount of restoration needed to compensate the public for harm to natural resources as a result of the spill, a [Natural Resource Damage Assessment](#) (Document format: PDF, size: 90.8 K) will be conducted by NOAA and our co-trustee agencies. Although many agencies are involved in this process, NOAA is a lead federal trustee for coastal and marine natural resources, including marine and migratory fish, endangered species, marine mammals and their habitats. 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. For additional information, see the [DARRP Deepwater Horizon Web page](#).