

NOAA Web Update July 23, 2010

DEEPWATER HORIZON Incident



Situation: Friday 23 July —

Second Federal Analysis Gives Further Clues about Location and Movement of Subsurface Oil

NEW ORLEANS — The National Oceanic and Atmospheric Administration, the U.S. Environmental Protection Agency, and the White House Office of Science and Technology Policy today released its second peer-reviewed, analytical [summary report](#) about subsurface oil monitoring in the Gulf of Mexico. The report contains preliminary data collected at 227 sampling stations extending from one to 52 kilometers from the Deepwater Horizon/BP wellhead. Data shows movement of subsurface oil is consistent with ocean currents and that concentrations continue to be more diffuse as you move away from the source of the leak. This confirms the findings of the [previous report](#).

The report comes from the Joint Analysis Group (JAG), which is comprised of the afore mentioned agencies and was established to facilitate cooperation and coordination among the best scientific minds across the government and provide a coordinated analysis of information related to subsea monitoring in the Gulf of Mexico.

The JAG report contains data analysis of fluorometric measurements and comments on the methods used to monitor dissolved oxygen levels. Data were collected on the R/V *Brooks McCall*, R/V *Ocean Veritas*, R/V *Walton Smith*, NOAA Ship *Thomas Jefferson* and NOAA Ship *Gordon Gunter* between May 19 and June 19, 2010. The fluorometric data provide additional information on the likely presence of subsurface oil and its location in the water column. The report indicates that subsurface oil concentrations are highest near the wellhead and become more diffuse farther away from the source.

[Read entire article.](#)

NOAA Response

- 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

Winds are forecast to be ENE on Friday at 10-15 knots, and then begin increasing as a tropical depression moves into the north central Gulf. On Saturday, winds are forecast to be E/SE at 20-30 knots then decrease on Sunday to 10-15 knots. Today's overflights and aerial imagery indicate the surface oil is continuing to break up into numerous patches. Trajectories indicate the leading edge to the north will continue to move northwestward into Breton Sound and towards the Chandeleur Islands. Oil moving westward around the Mississippi Delta is collecting in the convergence line associated with the fresh water outflow – this oil will continue moving westward threatening the Delta and shorelines west to Caillou Bay.

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

The new closure announced yesterday, July 22, continues to be in effect. NOAA re-opened [26,388 square miles](#) of Gulf waters to commercial and recreational fishing on Thursday. The re-opening of a third of the overall closed area was announced after consultation with Food and Drug Administration (FDA) and under a re-opening protocol agreed to by NOAA, the FDA, and the Gulf states.

Modeling and mapping the actual and projected spill area is not an exact science. NOAA Fisheries Service strongly advises fishermen not to fish in areas where oil or oil sheens (very thin layers of floating oil) are present, even if those areas are not currently closed to fishing. Any changes to the closure are announced daily at 12 p.m. Eastern at sero.nmfs.noaa.gov and take effect at 6 p.m. Eastern the same day.

Sea Turtles and Marine Mammals (effective July 21, 2010)

A total of 709 **sea turtles** have been verified from April 30 to July 21 within the designated spill area from the Texas/Louisiana border to Apalachicola, Florida. One dead turtle stranding was reported in Louisiana. Nine hatchling turtles were released in Florida from nests that were moved from the northern

Gulf of Mexico. There are 207 live sea turtles in rehabilitation centers. These include 164 sea turtles captured as part of the on-water survey and rescue operations, and 43 turtles that stranded alive. A total of 184 stranded or captured turtles have had visible evidence of external oil since verifications began on April 30. These include 167 that are alive and 17 that are dead. All others have not had visible evidence of external oil.

Of the 709 turtles verified from April 30 to July 21, a total of 478 stranded turtles were found dead, 58 stranded alive. Four of those subsequently died. Eleven live stranded turtles were released, and 43 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 no 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 21, 66 stranded **dolphins** have been verified in the designated spill area. Of the 66 strandings, five were live strandings, three of which died shortly after stranding, one was released and one is in rehabilitation. Sixty-one dolphins were found stranded dead. Visible evidence of external oil was confirmed on four dolphins. We are unable at this time to determine whether the three 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. This report contains corrections based on new information. The status of one live dolphin was changed from oiled to unoiled based on further evaluation.

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](#).