

Deepwater Horizon MC252

Loop Current Location Relative to Oil Slick

July 20, 2010



The National Oceanic and Atmospheric Administration (NOAA) is closely monitoring the Deepwater Horizon MC252 (BP oil spill) slick's proximity to the Loop Current in the Gulf of Mexico.

- The Loop Current is an area of warm water that comes up from the Caribbean, flowing past the Yucatan Peninsula (Mexico) and into the Gulf of Mexico.
- It generally curves east across the Gulf and then flows south parallel to the west Florida coast; there it becomes the Florida Current as it moves through the Florida Straits, joins the Gulf Stream and travels up the Atlantic Coast, veering progressively farther away from the coast.
- Sometimes the northern part of the Loop Current separates from the main Loop Current, forming a large rotating region of water, known as an eddy.
- There are also smaller eddies that form along the edges of the Loop Current.

Both the location of the Loop Current and location of the oil slick are dynamic and constantly changing. The present location of the oil is identified daily through analysis of satellite imagery, observer overflights and advanced technology on aircraft. This information is also keeping us informed of how far away the oil is from the Loop Current each day. If oil from the spill enters the Loop Current, it would take at least a few days or more to reach the Florida Straits. During this transit time, the natural processes of evaporation and dispersion would reduce the oil volume significantly, and make it less toxic. The remaining oil would be mostly in the form of tarballs.

The figure below, updated daily, shows the location of the oil spill based on satellite imagery. It also depicts the present location of the Loop Current, an eddy north of the Loop Current called Eddy Franklin, and a counter clockwise eddy between Eddy Franklin and the Loop Current. There has been no indication of oil in or near the Loop Current for over four weeks. Much of the visible slick has moved to the northwest, but with no northwest winds in the forecast, Eddy Franklin separated from the Loop Current, and no eddies in position to move oil toward Eddy Franklin, the risk of the Loop Current transporting a significant amount of oil is very low. NOAA will continue to monitor the situation daily.

