

THE GULF COAST



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ABOUT

The Gulf Coast is a large body of water bordered by the Mexican Coast and the U.S. states of Florida, Alabama, Mississippi, Louisiana, and Texas. The Gulf of Mexico is home to over fifteen thousand species. Some famous animals that spend time in the Gulf include the loggerhead sea turtle (*Caretta caretta*) and the whooping crane (*Grus Americana*). Loggerhead sea turtles nest along the Gulf of Mexico after migrating there from their feeding grounds. The migrating whooping cranes depend on the marshes of the Gulf Coast to overwinter.

HUMAN IMPACTS

Humans are active in the Gulf of Mexico and operate many off-shore oil drilling sites in the area. The Gulf of Mexico was the site of one of the largest ocean oil spills in history, the *Deepwater Horizon* spill. Furthermore, urban runoff, as well as the agricultural runoff from the croplands of the Midwest and the central United States, has caused a dead zone to form every year in the waters of the Gulf of Mexico. This is because the excess nutrients from sewage and fertilizers in the runoff stimulate algae growth. As the algae decompose on the bottom of the ocean, it reduces the oxygen to such a low level that most ocean life cannot survive. Also, the land along the Gulf is well-developed. Many cities and towns dot the coastline, so nighttime lights are common near the beaches, causing significant light pollution.

IMPACTS TO WILDLIFE

The Deepwater Horizon spill coated birds with oil, threatening their ability to fly and their survival. Even though the Deepwater Horizon oil spill happened many years ago, some worry that leftover oil continues to harm migrating birds that stop along the Gulf Coast. Runoff also pollutes the waters, creating low oxygen conditions. The low oxygen of the Gulf's dead zone has been shown to alter migration routes of fish. Animals on land are affected by Gulf activities, too. The nighttime lights on the beaches along the Gulf Coast can confuse newly hatched loggerhead sea turtles as they attempt to return to the waters of the Gulf. This is because the hatchlings depend on moonlight reflections to guide them to the ocean.

MAPPING

Create a map showing the Gulf Coast. Mark the surrounding counties, cities, and bodies of water. Use Google Earth to explore the satellite image of the area. What signs of human impact do you see? These might include fences, lights, active construction, roads, traffic, and human settlements (towns, houses/buildings). Determine which human impacts exist in this area and add these to your map. Make sure to include a key on your map so that people looking at it will know what your symbols and lines mean.