

Case Study: The Gulf Coast and the BP Oil Spill

About the Gulf Coast

The Gulf of Mexico is bordered by five of the United States: Florida, Alabama, Mississippi, Louisiana, and Texas. It is also bordered by Mexico and is the location of Cuba. The gulf itself covers an expanse of 600,000 square miles and has developed a circulation pattern for the waters (General Facts about the Gulf of Mexico, 2011). Water enters the Yucatan Strait, flows through the Loop Current, and exits through the Florida Strait (2011). The way in which the water flows creates the well-known current, the Gulf Stream. The Gulf Coast acts as a major drainage pool for the thirty-three major rivers and two-hundred and twenty-seven estuaries from the United States alone (2011).

The states that line the Gulf have excellent opportunities to take advantage of the resources the gulf has to offer. With 16,000 miles of coast in the United States alone, the Gulf provides easy access to fishing, natural resources, and recreation opportunities (2011). The population of the Gulf is expected to hit 61.4 million by 2025 with Florida and Texas expected to house most of the new population (2011). Tourism boosts the economy by \$20 billion each year and seven of the top-ten seaports are located along the Gulf Coast (2011). The Gulf “yields more finfish, shrimp, and shellfish annually than the south and mid-Atlantic, Chesapeake, and New England areas combined,” and is home to about 45,000 bottlenose dolphins (2011).

About the Oil Spill

On April 20, 2010, a tragic disaster hit the Gulf Coast. British Petroleum’s (BP) Deepwater Horizon rig exploded spewing crude oil into the ocean from the three major cracks in the rig. It rivaled the 1989 Exxon Valdez spill within days of exploding (Gerstein, 2010). A few years earlier, BP was fined \$20 million for neglecting to prevent leaks in a pipeline in Alaska’s Prudhoe Bay (2010). From June 5, 2010 to June 14, 2010, BP had collected 127,000 barrels of oil in their containment cap alone; while it is believed that a total 60,000 barrels of oil a day are gushing into the Gulf (Gerstein, 2010). The oil slick can be seen from space and covers an area of 130 miles by 70 miles even though BP has dumped 50,000 barrels of heavy mud on the leaks to help stop the flow of oil (2010). After the insistence from government officials, BP began drilling a relief well that will intersect with the original well and will pull up oil so that BP can dump more mud and concrete into the old well and retire it for good (Walsh, 2010). During the period between the explosion and BP’s decision to drill the relief well, they had attempted to use a variety of tactics to quell the leaks: “top-hats, containment domes, top kills, junk shots” (2010).

How the Spill Has Affected the Gulf

“I’m not too worried about oil on the surface,’ says one scientist. ‘It’s the things we don’t see that worry me the most” (Begley, 2010). The oil that has been leaking from the well has done more than float to the surface and become an eyesore; it has also been trapped beneath the surface of the waves and carried methane to other parts of the Gulf (2010). At first officials (both for the government and BP) attempted to dispel these findings, however, the independent scientists who boldly made these claims have been proven correct (2010). Not only has the oil spill affected the shorelines and marshes, it has also seeped into unexplored ocean and could possibly disrupt the natural ecosystems that thrived there before the spill (2010). Louisiana State

University chemist, Ed Overton, said, “‘It's [the oil spill] going to cause very substantial and noticeable damage--marsh loss and coastal erosion and impact on fisheries, dead birds, dead turtles--but we'll know what that is. It's the things we don't see that worry me the most. What happens if you wipe out all those jellyfish down there? We don't know what their role is in the environment. But Mother Nature put them there for a reason,’” (2010). The dispersants that are used to help break up oil spills are making the environment under water even worse by “‘changing the chemistry and physics of the oil,’ says biological oceanographer Ajit Subramaniam of Columbia University's Lamont-Doherty Earth Observatory. ‘They are creating micro layers of oil that are being carried by the deep currents.’ Even without dispersants, the crude gets broken into zillions of droplets suspended in the water column and corralled there, prevented from rising to the surface” (2010). Two main plumes of the oil and methane mix have been found and the largest is 22 miles long, 6 miles wide, and 3,000 miles thick (2010). Not only do the plumes deprive the areas of oxygen but they also suffocate marine-life by clogging up their respiratory systems with oil (2010).

If large marine animals are not affected directly as a result of the oil spill, their dietary needs will eventually harm them as an indirect consequence of the oil spill. Plankton will likely ingest the oil and as one of the lowest organisms on the food chain, the oil they ingest will find its way up to the top of the food chain; and linchpins (organisms that act as the garbage collectors underwater) will fail to clean up the dead organisms that will pile up on the ocean floor, therefore, depriving other creatures of nutrients that are by-products of the disposal of the dead organisms (2010). The list of marine-life that could potentially be affected by the oil spill goes on and on, anything from coral reefs to fish to crustaceans to tube worms (2010).

The costs of the spill are overwhelming: 12,000 people from Louisiana alone have applied for unemployment since the spill, most from the southern part of the state; the cost of the spill for BP as of June 14, 2010 was \$1.6 billion; it is estimated that the spill will cost taxpayers \$1.5 billion because the government had put a \$75 million cap on oil company liability for oil spills (though this cap may be raised to \$10 billion); and as of June 14, 2010, 26,500 Gulf residents have been paid \$62 million in tax claims due to the oil spill (Gerstein, 2010). It is estimated that four hundred species are going to be affected by the spill; at least thirty species of birds will be affected due to the spill also coinciding with breeding season; 25 million migrating birds could potentially be scarred by the spill (2010).

It is not just wildlife being affected by the spill. The tourism industry has also been pummeled. Oil coming onto shores has caused authorities to advise people against going to the beaches for swimming and people have been cancelling their trips to the Gulf. For Mississippi, it could mean a loss of \$120 million in revenue from tourism (Jervis, 2010). A big fear for tourism agencies in the Gulf is that previous repeat tourists who were forced to travel somewhere new for the summer will continue to go to new places in future years (2010). This in turn will continue to decrease revenue brought in by tourism.

Gulf Coast Recovering Process

BP is attempting to help the states affected by the oil spill. Mississippi, Alabama, and Louisiana received \$15 million each from BP, while Florida received \$25 million (New Orleans is asking that BP shell out another \$75 million to them alone to help maintain their image); all the states plan on using the majority of the money to fund advertising campaigns to draw in tourists (Jervis, 2010). BP has also set aside \$20 billion for “tourism and leisure businesses” who file compensation claims (2010).

Daniel R. Brown, superintendent of Gulf Islands National Seashore in Florida, is optimistic. Although oil has been brought onto the shores, with time, sand has settled on top of the oil and brought back the original white sandy beaches (Beard, 2010). Although they still have to get the oil from under the sand, it brings hope to Brown. BP cleanup crews have been using different techniques to get the tar out: Beach Techs, Sand Sharks, and Sand Mans; however, Brown would prefer the use of hand tools in order to protect organism living in the upper layers of sand since the machines damage so much (2010). In Alabama, “Thunder on the Gulf” and local festivals (with fresh seafood) has helped to boost tourism numbers (2010).

50,000 people from local, state, and federal agencies have come together to help clean up Louisiana, whether it be squeegee-ing off oil from the surface of the water to pulling up clumps of dead marsh grass that has collected oil to operating machines that scare away birds from areas with oil (The Shores of Recovery, 2011). All of this will be paid for by BP eventually; however, BP has refused to pay for certain things. For example, the Mississippi River is being used to help flush out the oil from the coast shores. The oysters that live in that area will die off due to the lack of salt water; people who harvest these oysters will not benefit from BP because BP feels that the oysters were not affected by the oil and they do not need to fund a reseeding of oyster farms (2011). Due to the media’s reporting that beaches were ruined after the oil spill, many people have been deterred from visiting the coast even a year after the spill because of fears that the beaches are still coated with oil; many tourism agencies have to fight twice as hard to attract tourists to the beaches (2011).

Discussion Questions

1. For the states affected by the oil spills, what would be some ideas on how to invigorate their tourism numbers? What types of strategies could be employed?
2. Has BP done enough to help the Gulf Coast? Why or why not?
3. What types of plans could tourism and other recreation agencies put in place to help protect their revenue streams from fluctuating tourism numbers?

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