Disaster Lifecycles
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BP Oil Spill – April 20, 2010

Mitigation/Preparedness

Over the years BP and other oil companies implemented different methods to try and avoid oil spills. First there is the dual barrier concept that ensured that the failure of one barrier of the site will not cause a pipe leakage, whereas only the failure of both will cause a problem. In addition to this the Minerals Management Service (MMS) started to require “blowout caps” on the pipes that would cover the pipes and help prevent leakage. And finally the MMS also required well casings that aid in keeping hydrocarbons from seeping into the groundwater at the base of the drill site. These methods seemed to be all that BP needed to help prevent a spill since the MMS had been using these methods for some time and they had worked before. They even employed local citizens that would clean a spill if it ever did occur and made sure the surrounding residents were aware of possibilities. However, leading up to the massive spill, some of the rig workers ignored various warning signs that could have been addressed to avoid the spill.

Response

While the oil was spilling out of the well into the Gulf of Mexico, there was a lot of debate on what should be done to stop the flow of oil. When deciding, the well leaked for 87 days and around 3.19 million barrels of oil leaked into the Gulf before their efforts worked to stop the leak. Almost immediately, however, BP set forth on a massive $14 billion response to alleviate how far the oil spread. 2,500 miles of booms as well as 6,500 different response vessels worked while the oil was still spilling. Their purpose was to prevent the oil from spreading and destroying the fisheries and sea life more than the spill already had. One of their main struggles was preventing oil deep in the Gulf from spreading due to it being hard to reach. The booms that were set out were only meant to stop the oil from spreading relatively close to the surface and were ineffective for deep oil spreading. Another response effort was trying to cap the well and prevent the oil from leaking further. Many of their initial capping attempts failed but finally got the oil to stop through a successful capping. Although the failed attempts were tragic and led to more oil leaking into the gulf, the attempts provided valuable information to scientists on how to stop possible future oil leaks.

Recovery

Following the capping, there were immediate recovery efforts set forth to mitigate the effects of the 3.19 million barrels of oil now in the Gulf. BP was the key contributor to cleaning
the oil but the federal government took full control of the decisions made during the recovery. Using part of the funds from the $14 billion that BP spent on this disaster, they researched the short and long term effects that the Gulf of Mexico will experience in upcoming years. This money not only went to researching adverse effects from the spill, but also went towards significant research on the best ways to clean up the oil as well as stopping the spreading of the oil. The major way used to clean up the oil was through chemical dispersants which broke up the oil slick into droplets that were then broken down and degraded by natural bacteria. Controlled burns were also used to burn away the oil. Booms and skimmers were also used to contain the oil and eventually remove it from the surface. Despite the immense amount of oil that had leaked into the Gulf of Mexico, BP claimed in 2014 that the Gulf is now clean of any residual oil and has returned to a state of normality.
Hurricane Katrina – August 23, 2005

Mitigation/Preparedness

Hurricanes in the gulf coast are not too uncommon of an occurrence. For that reason, a lot of measures were put in place in order to lessen the damages caused by such storms. One thing that was used to prepare for flooding effects were levees. Levees are essentially large hills that were built by the Army Corps of Engineers that prevent flooding. The city of New Orleans was filled with levees because the elevation is actually below sea level. Unfortunately, the flooding was far too severe to be stopped by the levees and major flooding occurred. Calls for evacuation of the people near the coast and areas in the path of the Hurricane was another way that the government attempted to alleviate the risk of human life. Warnings of the storm had also been issued for a few days prior to the storm making landfall, however many of these warnings were brushed off because the storm was only classified as a tropical storm up until about a day before it actually struck land. Many shelters were also set up to prepare for this natural disaster. For example, the Superdome, the field that the New Orleans Saints football team owns, was used as a last resort shelter for those seeking a place to avoid the wrath of the storm. About 20,000 residents took asylum in the Superdome when they had nowhere else to turn to. The hardest part of the Hurricane was the lack of planning if the levees did not hold up. Relief in the event of a hurricane was well planned, however the unforeseen amounts of flooding rendered that plan essentially useless because the land vehicles were unable to reach any of the parts of the city that were already underwater.

Response

The instantaneous response to the disaster was outstanding. The United States Federal Government and FEMA sent great amounts of food and supplies to help people immediately after the storm. In addition, the Unites States Coast Guard Rescued around 33 thousands of the 60 thousands people who were stranded in the city. The National Guard had approximately 60,000 troops in the city, which helped regulate the process of recovery. Moreover, the Bush administration assured $ 105 billion to assist in the recovery process in all affected areas. Over the next months and years after the disaster, FEMA aided to pay for people's living arrangements for to help them return their properties. Despite all, The American Red Cross was able to provide meals and accommodation for many of the victims. Even regular civilian boats had a lead in helping rescue people trapped inside the city of New Orleans. Generally, this stage of the disaster cycle was a fundamental stage in reducing the overall damage caused by the hurricane and without it there could have been more damage. Such experience led to enhanced responses to other similar situation that occurred after it.
Recovery

In the case of hurricane Katrina the recovery was also decent. The damages were severe, where the highway system was completely destroyed in addition to the suspension of oil drilling for a long period of time. Also, there were many spills caused by the disaster. The United States government spent billions of dollars to recover the damages and the economic losses in the area. Since then a similar approach has been followed in other disasters causing the recovery process to be less crucial. The Army Corps of Engineers researched the situation and based on the information gathered, they remarked the levee system in New Orleans. The failing of levee system was one of the causes of the serious damages that occurred, however, after the development of such system New Orleans became more protected from future storms. Overall, the disaster also helped the government officials to learn for the mistakes and enhance the process of handling similar situations in the future.

Sources
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