

An aerial photograph showing the Deepwater Horizon oil spill cleanup operation. Several large oil tankers and support vessels are visible in the Gulf of Mexico, surrounded by extensive oil slicks that appear as dark, swirling patterns on the water's surface. The vessels are positioned around the central area of the spill, likely engaged in containment and skimming efforts. The water is a deep blue, and the oil slicks are a dark, almost black color, creating a stark contrast.

GREENPEACE

# DEEPWATER HORIZON ONE YEAR ON

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## AN ACCIDENT WAITING TO HAPPEN

On March 31, three weeks before the BP Deepwater Horizon disaster, President Barack Obama announced plans to open offshore oil drilling along the east coast of the United States from Virginia to Florida and the eastern Gulf of Mexico, ending a decades-long moratorium. He further announced research to assess the feasibility of offshore drilling in the Beaufort and Chukchi seas off the north coast of Alaska.



Explaining the 2010 decision was “intended to reduce dependence on oil imports, generate revenue from the sale of offshore leases and help win political support for comprehensive energy and climate legislation,” the New York Times wrote “the sheer breadth of the offshore drilling decision will take some of [the president’s] supporters aback ... Even as Mr. Obama curries favors with pro-drilling interests, he risks a backlash from some coastal governors, senators and environmental advocates, who say that the relatively small amounts of oil to be gained in the offshore areas are not worth the environmental risks.”

Noting “opposition to offshore drilling — for fear of pollution of the seas and coastline — has been one of the key galvanizing forces of the environmental movement for more than 40 years,” *Politico* quoted Greenpeace Executive Director Phil Radford warning offshore drilling “threatens our oceans and the coastal communities that depend on them with devastating oil spills.”

Previously, the vast majority of offshore oil drilling in the United States had been conducted from platforms in the western and central Gulf of Mexico. Three weeks after President Obama’s announcement, one of those drilling platforms, the *Deepwater Horizon*, hovering 40 miles (60 km) southeast of the Louisiana coast, lost control of the well, exploded and caught fire, killing 11 men and injuring 16 others. Two days later, the rig sank, rupturing the riser pipe from the wellhead. Later that same day, crews using Remotely Operated Vehicles reported “large amounts of oil” flowing from the seabed. The largest oil spill in U.S. history was underway.

## CONTROLLING THE MESSAGE

For the next several months, until the leak was finally capped in July and the well “killed” in September, the world witnessed efforts on the part of a great many individuals who worked around the clock to bring the spill under control and prevent an even greater tragedy for the Gulf. At the same time, several diligent and determined researchers challenged official figures and portrayals regarding the rate of oil being leaked, the total extent of the spill, the fate of the oil and the state of the gulf ecosystem.

But from the moment the rig caught fire until now, the overriding concern of the industry and its apologists—including far too often the Obama Administration—has been to downplay the spill’s size and impacts, to look away from the fundamental failings that allowed the accident to take place and turn the page as swiftly as possible and return to business as usual.



# DEEPWATER HORIZON ONE YEAR ON

## DOWNPLAYING THE SPILL SIZE

At no stage did BP or the Coast Guard conduct accurate measurements of the amount of oil emanating from the broken riser pipe. This decision meant any assessment of the spill's ultimate size had to be inferred and put BP in a position where it could challenge any final figure as an over-estimate, and thus seek to reduce the amount of any fine it would have to pay. This uncertainty foretells a legal dilemma for the Obama—and successive—administrations. Either contest BP's assertions of a low estimate of oil spilled, thus extending litigation—perhaps for years—arguing this crucial point and delaying final resolution and reparations for injured parties or agree to BP's number—which independent experts have doubted since the beginning—and let justice be cheated. Certainly, from the moment the leak began, BP sought to minimize its size.

Initially, the company estimated oil was gushing into the Gulf at the rate of approximately 1,000 barrels, or 42,000 gallons, a day. By the end of April, a government estimate had upped that figure to 5,000 barrels, or 210,000 gallons, daily. Although the latter number became widely repeated, it was soon challenged. Ian MacDonald, an oceanographer at Florida State University, made his own rough calculations using satellite imagery and concluded that the leak could “easily be four or five times” the government estimate, which the New York Times reported had been arrived at using a protocol that is specifically not recommended for such large spills. BP senior vice president Kent Wells claimed that there was “just no way” to measure the amount of oil gushing from the pipe, but scientists who use underwater equipment to measure the flow rate of natural hydrothermal vents countered that that equipment could easily be used to do so. Two such researchers from the Woods Hole Oceanographic Institution were in fact in communication with BP and were poised in early May to fly to the Gulf to begin measuring the flow, until being contacted by BP and told not to come. They were not given a reason.

By mid-May, researchers such as Dr. Samantha Joye from the University of Georgia had discovered the oil was forming enormous undersea plumes, including one 10 miles long, three miles wide and up to 300 feet thick in places. This again suggested that figures of spill rate derived from mea-

surements of surface slicks were gross underestimates. By now, however, BP was categorically refusing any entreaties to measure the amount of oil entering the Gulf. “The answer is no to that,” said BP spokesperson Tom Mueller. “We’re not going to take any extra efforts now to calculate flow there at this point.”

That was in May and in public. By early July, in correspondence with the US Coast Guard, BP Exploration and Production COO Doug Suttles requested approval to apply dispersants at the wellhead based on a flow rate of 53,000 barrels per day. (Bob Cavnar “Disaster on the Horizon,” Chelsea Green Books, p. 93)

In December, a BP white paper delivered to the presidential commission investigating the spill estimated the actual amount of oil spilled may have been 20–50 percent lower than the government's official 4.9 million-barrel estimate.

Following the establishment of the multi-agency Flow Rate Technical Group and the availability of high-resolution video, estimates became more accurate, and proved to be in excess even of those calculated by Ian MacDonald. The Flow Rate Technical Group ultimately concluded that the well initially spewed 62,000 barrels a day, easing to 53,000 as the well slowly depleted itself, for a grand total of 4.9 million barrels, or 205.8 million gallons, by the time the well was capped. The group calculated that 800,000 barrels were captured at source, meaning 4.1 million barrels actually entered Gulf waters; however, the first peer-reviewed estimate, published in the journal *Science* in October, nudged this final figure up to 4.4 million barrels, or 185 million gallons. The *Science* study reached its conclusions using the same methodology for measuring hydrothermal vents that BP had rejected in May.

In addition to the oil, massive quantities of natural gas were also spewing into the Gulf. This gas “spill” was not part of the news story, but scientists were watching and wondering about the environmental impact. The most recent studies published in February 2011 estimate the gaseous hydrocarbons may have comprised 40 percent of the total spill by weight. (<http://www.nature.com/ngeo/journal/v4/n3/full/ngeo1067.html>)

# DEEPWATER HORIZON ONE YEAR ON

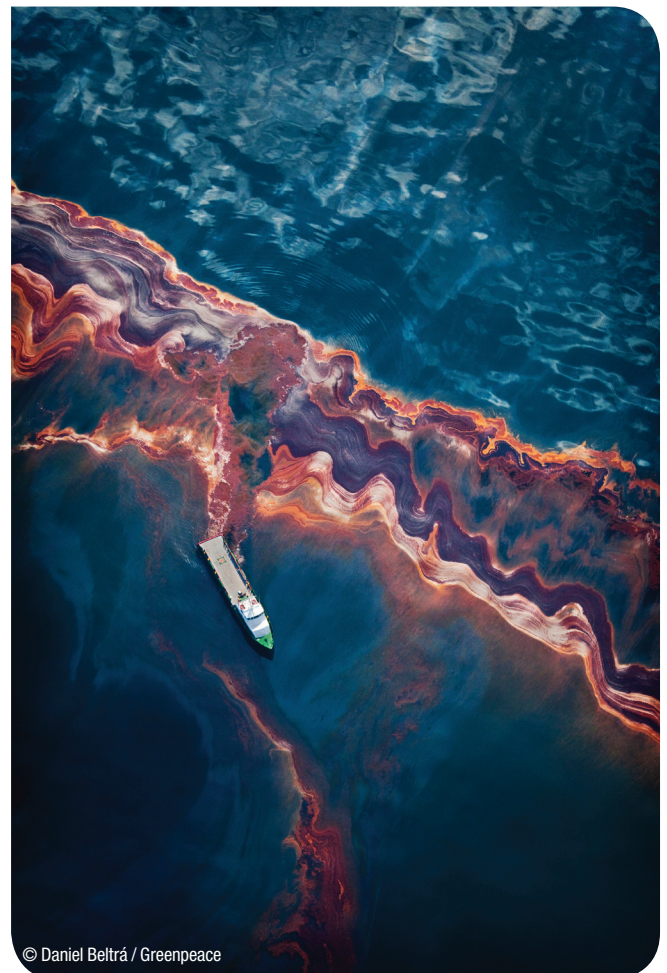
## CLAIMING VICTORY

By early June, oil from the spill washed along the coasts of the Gulf of Mexico. It continued to do so, at varying rates and frequency, for several months. As late as late November 2010, oil was still reaching deep into Louisiana marshes, coating baby crabs and adult shrimp. And yet industry and government have been desperate to claim success in removing oil from the Gulf, and to thus turn the page on the story, almost from day one.

Perhaps most jarring was the August 4, 2010 comment by Carol Browner, at that time the president's special adviser on energy and climate change, that "more than three-quarters of the oil is gone. The vast majority of the oil is gone." Her claim was based on a governmental Oil Budget Calculator, which estimated that 17 percent of the oil had been captured at the wellhead, 8 percent burned or skimmed at the surface, and 49 percent naturally or chemically dispersed, dissolved or evaporated. The claim was immediately attacked by independent scientists. Michael Blum of Tulane university pointed out that "the estimates can also be interpreted as indicating that 50 to 75 percent of the oil remains in the environment," given that oil that had been dispersed or dissolved had not disappeared, but remained in the water. Ian MacDonald criticized the inclusion of the 17 percent that had been captured at the wellhead—"No one cares about oil that wasn't released," he said—and argued that many of the figures were "complete theoretical conjecture." He continued: "To present such a bunch of speculation as actual scientific fact doesn't strike me as the actions of a responsible regulatory agency. I don't know that it's necessarily inaccurate, but to say as a scientific fact that it's gone from the system, that it has biodegraded ... I'm sorry, that's baloney."

E-mail correspondence acquired by Greenpeace under the Freedom of Information Act shows that concern was shared by some responsible for the report on which Browner based her claim, and that the administration was keen to portray a rosy scenario as soon as possible. Heather Zichal, then deputy to Carol Browner in the White House, reported in late July that she was "getting pressure" to complete and

release the oil budget calculator as soon as possible. Bob Perciasepe, deputy administrator of the Environmental Protection Agency, expressed concern about the portrayal of the percentages of oil that had been chemically and naturally dispersed, arguing that "the percentages are very rough and should not be considered accurate" and predicting that "these calculations are extremely rough estimates yet when they are put into the press—which we want to happen—they will take on a life of their own." Following the report's release and Browner's comment, NOAA administrator Jane Lubchenco sent an e-mail appearing to distance her agency from it—"I would hope that everyone would emphasize that this was an interagency report, not just a NOAA report"—and also, like MacDonald and Blum, taking issue with Browner's core assertion: "It is not accurate to say that 75% of the oil is gone."





# DEEPWATER HORIZON ONE YEAR ON

## DETERMINING IMPACTS

Documents recovered by Greenpeace FOIA requests also demonstrate the extent to which BP was anxious to steer scientific research into the spill, by securing representation on all Natural Resource Damage Assessment committees, seeking to gain authority to approve the scope of NOAA missions, hoping to steer research toward “restoration” instead of impacts and pushing a positive message. BP provided extensive funding for researchers who were willing to work within the company’s parameters, while other scientists chose to turn down such offers when advised that their work would likely be involved in potential defense litigation against state or federal government and would potentially not be published for three years.

Additionally, several independent researchers found BP unresponsive to requests for access or data, while University of South Florida researchers who were among the first to announce the discovery of undersea plumes say they were effectively told to “shut up.”



As a result, Greenpeace sent its ship Arctic Sunrise to the Gulf, to provide a platform for independent researchers to investigate. Over the course of over two months, the Sunrise, its crew and guest researchers studied the Gulf from west to east, top to bottom, close to the spill site and farther afield. The Arctic Sunrise hosted scientists studying sponges, plankton, whales, chemistry and benthic ecology.

Caz Taylor and Erin Grey of Tulane University towed plankton nets to collect blue crab larvae, which they examined for signs of oil and dispersant. A consortium of scientists from the Littoral Acoustic Demonstration Center (LADC) deployed and retrieved acoustic monitoring buoys to record vocalizations of sperm and beaked whales, information that could help shed light on what impact the spill might have had on populations of those species. Rainer Amon and Clifton Nunnally of Texas A&M University looked for signs of oil in the water column and on the seabed. And using a Dual Deep Worker submersible, we worked with Steve Ross of the University of North Carolina and Sandra Brooke of the Marine Conservation Biology Institute to examine possible impacts of the oil on deep sea corals.

Not all the conclusions have yet been reached; science can be a deliberate process. But some signs are already evident. Caz and Erin discovered mysterious orange blobs turning up in their larval samples; if they turn out to be oil or dispersant, it will be a strong and worrying sign that contaminants are entering the food chain. Natalia Sidorovskaia of LADC reports their preliminary findings indicate a decrease in the presence of sperm whales in the vicinity of the Deepwater Horizon site; further studies will determine whether that decrease is temporary or permanent, but if it is the result of any increase in mortality, it will be reason for considerable concern, given statements by NOAA scientists that the loss of even three adult sperm whales could be enough to lead to the demise of the entire population in the Gulf.

The Texas A&M team, not unexpectedly, found plenty of evidence of oil in the waters and sediments of the Gulf, several months after it began gushing. Their instruments found clear signs of an oxygen deficiency in the Gulf’s waters, in an area stretching from around the Deepwater Horizon disaster site to 300 miles (500km) to the west—signs that hydrocarbon-eating bacteria were still working on devouring oil in the water. The infamous plume still existed—perhaps not visibly, but the essence of it was still there, in October, a full six months after the blowout.



# DEEPWATER HORIZON ONE YEAR ON

But the levels of dissolved oxygen were not low enough to suggest that bacteria had been eating the oil to the degree that officials had indicated was likely the case. If the oil was largely no longer at the surface and if it appeared to be in the water column at lesser amounts than might have been expected, then where was it? Amon and his colleagues suspected it was settling on the bottom—and so it proved. Using a “box core”—a steel device that captures mud from the bottom and the water just above it—the scientists hauled aboard a series of samples from 4,000 feet (1,300 meters) below the surface. And in several of the samples was clear evidence—in sight and smell—of oil. At around the same time, researchers on board the research vessel Cape Hatteras similarly found oil on the bottom, up to 140 miles from the wellhead. And while the presence of oil should not in and of itself have been especially surprising given that the area had just experienced the largest spill in the nation's history, its discovery raised some questions, as Kert Davies of Greenpeace pointed out:

“Why is the oil so fresh and smelly and liquid? Aren't those oil loving bacteria supposed to be breaking it down? Or is it more like what other scientists have said, that the bacteria are unlikely to be as active at such extreme pressure [and] low temperatures?” he asked rhetorically in a blog from on board the Arctic Sunrise. “How much is down here? Did it come straight from the busted well? Was it hit with dispersant that made it sink? Or did it rain down from the surface after being hit with dispersant? All open questions.”

Fortunately, the deep sea corals that scientists and crew explored weeks later with the Dual Deep Worker submarine showed no sign of oil contamination. Sadly, it increasingly appears as if that was an aberration. In November, a team of researchers led by Charles Fisher of Penn State University discovered a community of corals that included many recently dead colonies and others that clearly are dying. The corals, said Fisher, had “been impacted fairly recently by something very toxic.” He added: “The proximity of the site to the disaster, the depth of the site, the clear evidence of recent impact, and the uniqueness of the observations all suggest that the impact we have found is linked to the exposure of this community to either oil, dispersant, extremely depleted oxygen, or some combination of these or other water-borne effects resulting from the spill.”

In February, Samantha Joye of the University of Georgia released preliminary findings of December research showing microbes were removing oil from the bottom far less rapidly than expected. In September, she described a substantial layer of oily sediment, in places up to two inches thick, spreading for miles along the seafloor; returning two months later, she surprised to find how little of this oil had dissipated or degraded. “There's some sort of a bottleneck we have yet to identify for why this stuff doesn't seem to be degrading,” Joye told the American Association for the Advancement of Science annual conference in Washington, D.C. “Magic microbes consumed maybe 10 percent of the total discharge, the rest of it we don't know,” Joye added. “There's a lot of it out there.”



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# DEEPWATER HORIZON ONE YEAR ON

Indeed, in January 2011, researchers from the University of South Florida (USF) found a layer of oily sediment that was actually five times thicker than they had recorded in August 2010, and which spread for many miles in all directions from the wellhead.

The long-term environmental consequences can, as yet, only be speculated upon. Even the scale of the damage that has already been done remains uncertain. Officially, as of November 2010, 6,814 dead animals had been collected, including over 6,000 dead birds, almost 700 sea turtles, and 101 dolphins, porpoises and whales. But many casualties may have simply not been witnessed, the birds and other creatures who crawled deeper into the marsh to escape the oil onshore or the giant filter-feeding whale sharks, seen swimming in water thick with oil shortly after the Deepwater Horizon sank, prompting Eric Hoffmayer of the University of Southern Mississippi to observe that, "At the end of the day, if these animals were feeding in an area where there was surface oil, and if they ingested oil, there is a good possibility that they died and sank to the bottom. At this point we have no idea how many animals have been impacted."

In March 2011, a paper in the journal *Conservation Biology* concluded that total mortality of dolphins and whales as a result of the spill may have been 50 times higher than the original estimate, and that as many as 5,050 may have been killed, out of sight. Furthermore, impacts on Gulf wildlife may be continuing, almost twelve months after the accident. In March, 39 dead sea turtles washed ashore on the islands and mainland of the Mississippi Sound, most of them the endangered Kemp's Ridley turtle. During the first three months of the year, 139 cetaceans washed ashore dead along the Gulf coast, compared to an average of approximately 31 for the years 2002-9. Some researchers who were contracted by the National Marine Fisheries Service (NMFS) to document the increased mortality and to collect samples for analysis complained that they were instructed in a letter from the agency that "no data or findings may be released, presented or discussed ... without prior approval" and that they had privately admonished by federal officials for 'speaking out of turn' to the media. Some also expressed disbelief at the amount of time that NMFS was taking to deliver samples to laboratories for testing. "It is surprising that it has been almost a full year since the spill, and they still haven't selected labs for this kind of work," observed one.

Meanwhile, the USF team that reported increased oil in sediments from the deep sea bed also was surprised to discover "black goo" in nearshore sediments off the coast of Alabama in January. It looked like oil, but smelled of sulfur, not petroleum. Laboratory analysis revealed the goo was composed of dead plankton and other organisms that had adhered to each other. Water from the mud, according to one of the research team, was "toxic as all bejesus". According to USF's David Hollander, it's certain "that these unique sediments have accumulated within the past year and that their origin is contemporaneous with the timing of the oiling and use of dispersants."



Remarkably, despite the continued uncertainty and signs of previously-unanticipated damage, Kenneth Feinberg, the lawyer appointed by the Obama administration to oversee a victims' compensation fund for the spill, asserted in February that "it is reasonable to conclude" the Gulf will achieve "full recovery by the end of 2012."

It is a claim given little credence by researchers such as Ian MacDonald.

"The Gulf is not all better now," he has said. "We don't know what we've done to it."



# DEEPWATER HORIZON ONE YEAR ON

## AND THEN WHAT?

On May 22, 2010, President Obama announced the formation of a National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, which he tasked with determining the causes of the accident and providing recommendations on how to prevent—and mitigate the impact of—any future spills that result from offshore drilling.

Eight days later, Interior Secretary Ken Salazar imposed a six-month moratorium on deepwater offshore drilling. In a press release, Salazar stated that the moratorium would “provide time to implement new safety requirements and to allow the Presidential Commission to complete its work...With the BP oil spill still growing in the Gulf, and investigations and reviews still underway, a six month pause in drilling is needed, appropriate, and prudent.”

The moratorium would not end all offshore production in the Gulf, and would affect only 33 deepwater drilling sites, fewer than one percent of the oil and gas platforms in the region; even so and as oil continued to gush into the Gulf, the industry, rather than accept the prudence of a pause, fought the moratorium in court. After the initial pause was overturned, the administration established a second, revised moratorium in June.

Meanwhile, the commission began its investigation into the spill, ultimately publishing its final report in January 2011. At the heart of its findings was a conclusion that neither government nor industry, in their combined desire to extract as much oil as possible as widely as possible, paid adequate attention to the potential risks associated with an inherently dangerous undertaking:

Investments in safety, containment, and response equipment and practices failed to keep pace with the rapid move into deepwater drilling. Absent major crises, and given the remarkable financial returns available from deepwater reserves, the business culture succumbed to a false sense of security. The Deepwater Horizon disaster exhibits the costs of a culture of complacency ... There are recurring themes of missed warning signals, failure to share information, and a general lack of appreciation for the risks involved ... But that complacency affected government as well as industry. The Commission has documented the weaknesses and the

inadequacies of the federal regulation and oversight, and made important recommendations for changes in legal authority, regulations, investments in expertise, and management.



The commission concluded that, although offshore drilling is inherently dangerous and even though what happened to the Deepwater Horizon could “be traced to a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic failures in risk management that they place in doubt the safety culture of the entire industry,” the accident could and should have been prevented.

To increase the likelihood of preventing such accidents in the future, the Commission made a number of recommendations. While some, such as the establishment of an industry-run safety organization similar to that established by the nuclear industry following Three Mile Island, smacked too much of foxes guarding the hen house and ignored the inadequacy and lack of transparency that has bedeviled the nuclear model, others were more substantive and welcome. They ranged from the establishment of an independent agency within the Department of the Interior with enforcement authority to oversee all aspects of offshore drilling safety as well as the structural and operational integrity of all offshore energy production facilities, to involving NOAA and the United States Geological Survey in drilling lease review, to spending the majority of money from BP disaster fines and penalties on environmental restoration in the Gulf of Mexico.

# DEEPWATER HORIZON ONE YEAR ON

In December 2010, one month before the commission published its findings, the Obama Administration announced a partial reversal of its March position, stating that it would no longer proceed to allow offshore offshore drilling off the Atlantic coast or in the eastern Gulf of Mexico. Secretary Salazar told reporters that the decision to remove those areas from drilling until at least 2017 was “based on our nation’s experience with the *Deepwater Horizon* oil spill.”



By the time the administration had taken some new areas off the table, however, it had already re-opened entry to the existing buffet. In October, Salazar announced the deepwater drilling moratorium in the Gulf, which had been imposed in May and which had been scheduled to expire on November 30, would be lifted one month early—conveniently enough, in advance of midterm elections to Congress. Greenpeace denounced the decision as “pure politics of the most cynical kind.”

**THE MORATORIUM’S LIFTING DID NOT REQUIRE INDUSTRY OR GOVERNMENT TO ABIDE BY ANY OF THE STRINGENT RECOMMENDATIONS THAT WOULD BE MADE THREE MONTHS LATER BY THE NATIONAL OIL SPILL COMMISSION.**

## AVOIDING RESPONSIBILITY

The *Deepwater Horizon* accident resulted in an estimated 200 million gallons of oil spilling into the Gulf of Mexico; [4.9 million bbls x 42 gal/bbl = 206 million gallons] it was the largest spill in the history of the United States and one of the largest in history. The environmental impacts are still being assessed, but seem likely to include profound changes to the Gulf’s ecosystem.

In March, the results of a forensic inquiry into the Blowout Preventer, the piece of equipment that should have sealed the leak almost immediately oil began gushing, found that its design was fundamentally flawed in that it was unable to perform as planned because the force of the escaping oil caused the wellhead pipe to buckle—a finding that calls into question the safety of every offshore platform currently in operation. That same month, Justice Department investigators announced they had not ruled out bringing manslaughter charges against companies and managers responsible for the Deepwater Horizon accident.

**YET, THE OIL INDUSTRY CONTINUES TO ACT AS IF NOTHING HAD HAPPENED, OR EVEN AS IF IT HAS BEEN THE WRONGED PARTY.**

In March, Transocean, the company that owned the Deepwater Horizon, awarded bonuses to its top executives for achieving the “best year in safety performance in our company’s history”. Industry apologists and conservative media continue to complain falsely that the Obama administration “shut down” offshore drilling in the Gulf of Mexico by establishing what one commentator referred to as a “perma-torium”. And industry advocates continue to complain about the pace at which the Interior department has been granting leases for offshore exploration and drilling.

Meanwhile, the oil industry continues to eye even more dangerous territory in its search for profit. As the Arctic Sunrise conducted its research in the Gulf of Mexico, crew of the Greenpeace ship *Esperanza* spent over 40 hours occupying the Stena Don rig in Baffin Bay, Greenland, highlighting the industry’s desire to expand into the perilous waters of the Arctic. When the Obama Administration removed the Atlantic and eastern Gulf of Mexico from drilling, it did not do the same for the Arctic waters of the Beaufort and Chukchi Seas; already, Shell has announced it plans to drill six exploratory wells in the region in 2012 and 2013, although it has yet to submit formal requests to do so. Such enthusiasm for drilling in the maritime Arctic has apparently not been stunted by BP’s December announcement that it was suspending work on its own Liberty oil field development in the Beaufort Sea because of a “number of problems that have arisen during the rig’s construction on a man-made island.”



# DEEPWATER HORIZON ONE YEAR ON

As a report commissioned and published by the Pew Environment Group made explicitly clear, the oil industry's plans for the Arctic once again demonstrate the complacency and failure to plan fully for possible disaster that was highlighted so clearly by the Gulf of Mexico spill:

Response plans not only fail to realistically account for the harsh climate and remote location, but they also make overly optimistic assumptions. For example, plans presume that 90 percent of the oil would be removed in an Arctic marine spill when less than 20 percent was actually recovered in the Gulf of Mexico and less than 8 percent in the 1989 Exxon Valdez oil spill.

Using booms to contain ocean spills, then removing the oil and burning it or applying chemical dispersants can be challenging enough in temperate waters. Assumptions about how these techniques would work in extreme Arctic conditions are based on small-scale, controlled experiments or guesswork.

The report highlighted numerous elements that make addressing a spill in the Arctic vastly more difficult than one in the Gulf or other temperate climes, not the least of them being the fact that ice, cold temperatures, and 10 to 30 foot seas can impede the deployment of boats and skimmers and tear containment booms or that low visibility and hurricane-strength winds can make finding oil slicks all but impossible. Indeed, simply getting equipment and trained personnel to a spill site in the Alaskan Arctic would be a monumentally difficult task, given such logistical issues as the existence of a solitary road connecting Prudhoe Bay, on Alaska's Beaufort Sea, to central Alaska, 415 miles south and the complete absence of any roads linking the Chukchi sea coast to the rest of Alaska. In addition, the nearest major port (Unalaska, in the Aleutian Islands) is 1,300 nautical miles from Point Barrow, where the Beaufort and Chukchi seas meet.

The report also highlights that computer models have not been developed to adequately predict how an oil spill in the U.S. Arctic Ocean would interact with sea ice and that little baseline science exists for measuring the effects of an oil spill on Arctic ecosystems and food webs that support walrus, polar bears and other marine mammals found nowhere else in the United States.

Such immense gaps in knowledge and readiness do not appear to be an impediment to oil companies' plans to drill in the Arctic. But the desire to drill in the Arctic has not in any way removed oil companies' enthusiasm for operating in more familiar environments.

## BACK TO BUSINESS

On April 3, 2011, media in the UK reported that BP had negotiated a deal with the Obama Administration to allow it to resume deepwater drilling in the Gulf of Mexico, drilling that it anticipated would resume in the summer of 2011, a little over a year after the Deepwater Horizon tragedy began unfolding. The following morning, Politico summed up the essence of the announcement in three words: "BP: What spill?"



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# DEEPWATER HORIZON ONE YEAR ON

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