

Written Testimony of Michael F. Hirshfield, Ph.D.  
Committee on Natural Resources  
*Outer Continental Shelf Oil and Gas Strategy and Implications of the  
Deepwater Horizon Rig Explosion*  
May 27, 2010

## **Introduction**

Thank you for the opportunity to provide testimony before the House Natural Resources Committee. I want to start by thanking Chairman Rahall and his fellow committee members for their efforts in addressing the daunting issues of energy policy, climate change, and the many threats faced by our oceans and marine life from habitat loss to ocean acidification. I am the Senior Vice President for North America and Chief Scientist for Oceana, a global ocean conservation organization headquartered here in Washington, D.C. that works to restore and protect the world's oceans. In addition to our headquarters in Washington DC, Oceana also has staff located in Alaska, California, Georgia, Massachusetts, New York, Oregon, and Tennessee, as well as international offices in Belize City, Belize; Brussels, Belgium; Madrid, Spain; and Santiago, Chile. We have 300,000 members and supporters from all 50 states and from countries around the globe. Our mission is to protect our oceans and the fish and wildlife that depend on them.

Today, I will present testimony regarding the need to protect our oceans from the increasingly visible threats posed by offshore oil and gas exploration and development in the United States. The ongoing Deepwater Horizon drilling disaster is a clear testament that offshore drilling is a dirty and dangerous business, one that threatens jobs, both in the fishery and tourism industry, and also one that threatens public health and the health of marine ecosystems.

Oceana testified in front of the House Natural Resources committee twice last year on this very issue. Our board member, Ted Danson, testified before the full Committee, and our Pacific Science Director, Dr. Jeffrey Short, testified at a joint hearing of the Subcommittee on Energy and Mineral Resources and Subcommittee on Insular Affairs, Oceans and Wildlife. In both instances, Oceana stated clearly and for the record that we oppose the expansion of offshore oil and gas drilling. (*Testimonies of Ted Danson and Dr. Jeffrey Short attached hereafter as Appendix A and Appendix B*).

Today, we echo that call and take it a step further: we must suspend all pending approvals and ban all new drilling in the Outer Continental Shelf indefinitely. In place of expanded offshore oil and gas activities, the United States should begin the transition to a clean energy economy. By pursuing carbon-free alternatives, such as offshore wind and solar energy, combined with conservation and fuel efficiency improvements such as those contemplated by President Obama's announcement last week, the US can step away from the frenzied pursuit of offshore drilling, which has demonstrably put our vital ocean ecosystems at risk. The United States should promote clean energy industries that will allow us to finally break our fossil fuel addiction, stimulate our economy and become an

exporter of energy technology. And by doing so, we can stop placing the profit interests of the oil industry above those of the fishing industry, the tourism industry, human health and well being, and marine ecosystems.

### **Lessons from the Deepwater Horizon Drilling Disaster**

The Deepwater Drilling Disaster in the Gulf of Mexico is a tragedy for the families of the workers killed, the ocean ecosystem, and coastal economies. It clearly illustrates to us that the business of offshore drilling is dirty and dangerous.

As Congresswoman Donna Edwards, from my home state of Maryland, said so eloquently, “You can’t stop the spilling, until you stop the drilling.” Now more than ever, it is time for the U.S. to recognize that the risks of offshore drilling far outweigh the benefits it may provide. Despite the oil industry’s statements, disasters like this will happen again unless we act to prevent them.

Our oceans give essential protein to nearly half the world’s population. United States recreational and commercial fisheries combined supply over 2 million jobs. Coastal tourism provides 28.3 million jobs and annually generates \$54 billion in goods and services. More drilling means more oil spills, more lost jobs, more contaminated beaches, and more ecosystem destruction. Our marine ecosystems and the communities that depend on them are threatened by the short and long term toxic effects of oil.

Oil spills happen. These spills range from small, steady leaks to large catastrophic blowouts and they occur at every stage in oil production from the exploration platform to the oil tanker to the pipeline and storage tanks. The impacts to fish and wildlife and coastal communities are numerous and well documented. To date, the Deepwater Drilling Disaster has pumped millions of gallons of toxic oil in to the Gulf of Mexico.

The spill resulting from the Deepwater Drilling Disaster threatens Gulf coastlines from the Louisiana Bayou to the Florida Keys. The resulting oil slick now covers almost 16,000 sq miles of ocean. Fisheries have been closed in state waters of Louisiana, and over 48,000 square miles of federal waters have been closed to commercial fishing. The damage has only begun, and we may not know the true cost of this catastrophe for many years or possibly decades.

For the past month, millions of gallons of oil have gushed into the Gulf of Mexico, overwhelming all available response capability. More than 800,000 gallons of toxic dispersants have been applied at the surface and below it. Federal officials are still struggling to obtain accurate information about the spill’s impacts. What is certain is that there will be impacts. More than one month in, responding agencies still have more questions than answers.

Staff of the National Marine Fisheries Service, the National Ocean Service, and the U.S. Fish and Wildlife Service have all publically expressed concerns about the movement of oil and oil dispersal contaminants to upland habitats and their effect on estuarine and freshwater habitats.

The timing of the spill coincides with the loggerhead sea turtles' migration from foraging grounds to nesting grounds. The historic average of sea turtle strandings for the month of May is 47. The current turtle stranding rate is significantly higher than past rates. The cause of mortality is still unknown for many of the turtles, but the corpses have been taken for necropsy. Since April 20<sup>th</sup>, there have been 162 sea turtle strandings in the Gulf of Mexico in which 156 sea turtles have died. Most of the stranded sea turtles were juvenile Kemp's Ridley.

This spill will impact the drifting pelagic community and near shore species such as snapper, grouper, Spanish and King mackerel, and shrimp. Since April 20<sup>th</sup>, there have been 12 bottlenose dolphin strandings, all 12 of which died.

Both onshore and open ocean species of birds are vulnerable to the impacts of oil. Depending on where the oil reaches shore, beach nesters, such as terns and plovers and marsh dwellers are vulnerable. Even if oil doesn't end up in nesting habitat, other indirect impacts could result, such as effects on food supply.

Much of the wildlife impact will remain unseen. Oil can have long term effects on feeding, reproduction and overall health of the animal. Also, put simply, many of the carcasses simply will not wash ashore. Nevertheless, we are now beginning to see the first images of seabirds, sea turtles, and other species affected by oil. Unfortunately, these images, and the harm to ocean life that they portray, will be continuing for the foreseeable future.

The economic impacts on the Gulf Region's commercial and recreational fisheries could be staggering. Gulf fisheries are some of the most productive in the world. In 2008, according to the National Marine Fisheries Service, the commercial fish and shellfish harvest from the five U.S. Gulf states was estimated to be 1.3 billion pounds valued at \$661 million. The Gulf also contains four of the top seven fishing ports in the nation by weight and eight of the top twenty fishing ports in the nation by dollar value. Commercially-important species and species groups in the Gulf of Mexico include: blue crab, stone crab, crawfish, groupers, menhaden, mullets, oyster, shrimp, red snapper, and tunas.

Gulf landings of shrimp led the nation in 2008, with 188.8 million pounds valued at \$367 million dockside, accounting for about 73% of U.S. total. Louisiana led all Gulf states with 89.3 million pounds. State waters in Louisiana are now closed to fishing and 48,005 sq mi of federal waters, which is just under 20% of the Gulf of Mexico exclusive economic zone, are closed to fishing. The Gulf also led in production of oysters in 2008 with 20.6 million pounds of meats valued at \$60.2 million and representing 59% of the national total.

### **The Benefits of Offshore Drilling are not Worth the Risks**

While the oil industry clearly stands to benefit from offshore drilling, we all bear the risk. In this case, BP has transferred a tremendous amount of risk to residents of the Gulf coast in exchange for no clear benefits. Although offshore oil and gas production can have tremendous impacts on marine life, it will not contribute significantly to lower prices at the pump or energy independence.

### Offshore Drilling Provides No Relief from High Gasoline Prices and Will Not Create Energy Independence.

Additional offshore oil drilling will not lower gas. In 2009, the United States Department of Energy (DOE) estimated that by 2030, gasoline prices would be only three pennies less than if previously protected ocean areas remained closed.

The U.S. Department of Energy predicts has found that at peak production in 2030 drilling in the Atlantic, Pacific and Eastern Gulf of Mexico would produce 540,000 barrels a day, which would account for 2.5 percent of daily energy demand in the United States. Thus, regardless of the oil produced offshore, the United States will still import the vast majority of its oil from other countries. The increased production will not diminish this dependence or prices at the pump significantly. The United States Department of Energy (DOE) estimates that even if we opened all offshore areas to drilling, the U.S. would still import about 58% of its oil supply. Currently, about 62% of the crude oil supplied to the United States comes from foreign sources, with the top two suppliers being Canada and Mexico. The United States simply does not have enough domestic oil to reduce its dependence on imports, much less to fulfill its demand.

The only way to become truly energy independent is to end our addiction to oil. The best way to eliminate foreign oil dependence is to eliminate dependence on all oil by developing alternative sources, rapidly switching to plug-in and electric vehicles and phasing out oil consumption in other portions of our economy like home heating and electricity generation.

Additionally, the development of offshore wind energy off of the East Coast and Great Lakes could create thousands of jobs. Europe already has 19,000 people employed in the offshore wind industry and the European Wind Energy Association expects nearly 300,000 to be employed by the offshore wind industry by 2030. We should be demanding, and our energy policy should be promoting, similar job growth here in the United States. It has been estimated that a \$1 million investment in energy efficiency and renewables creates three times the number of jobs created if that same \$1 million was invested in the oil industry.

The plain facts speak for themselves--expanded drilling will not lower gas prices or make us energy independent. The Deepwater Drilling Disaster illustrates that the harm posed by oil and gas activities in the Outer Continental Shelf dramatically outweighs any perceived benefits that can be gained by expanding drilling.

### **Oil and Gas Activities have Tremendous Impacts on Marine Life**

Accidents inevitably accompany all stages of offshore production, and these accidents can be catastrophic. We are now seeing in the Gulf of Mexico that there is no available technology or capability to respond to a spill, particularly a gusher of the magnitude we are witnessing in the Gulf.

We should not be surprised by the Deepwater Drilling Disaster. Well blowouts are certainly not uncommon, and even the latest advances in drilling technology have not prevented them.

On 21 August, 2009, the Montara oil rig suffered a blowout and began spilling oil. The well was located in 250 ft of water, between East Timor and Australia. It took four attempts over ten weeks to block the leak and it was eventually stopped when mud was pumped into a relief well. The Australian Department of Resources, Energy and Tourism estimated up to 2,000 barrels per day (or up to 85,000 gallons) were spilled over that time, five times the estimate given by the responsible party, the PTT Exploration & Production Public Company Limited. In the end, the Wilderness Society estimated the oil slick to have affected 19,000 square miles of ocean.

The Deepwater Drilling Disaster is not an isolated incident and offshore oil drilling remains extremely dangerous. Since 2006, the United States Minerals Management Service (MMS) has reported at least 21 offshore rig blowouts, 513 fires or explosions offshore and 30 fatalities from offshore oil and gas activities in the Gulf of Mexico. Additionally, in 2007 the MMS reported that from 1992 to 2006 there were 5,671 wells drilled, and 39 blowouts. It is important to note that these blowouts occurred at a variety of depths and in a variety of environments. A blowout is not a rare occurrence, and it can happen anywhere, not just in the deep waters of the Gulf of Mexico.

Once a spill occurs, little can be done to clean it up. According to the National Academy of Sciences, “No current cleanup methods remove more than a small fraction of oil spilled in marine waters, especially in the presence of broken ice.” We have been drilling in the Gulf of Mexico for more than 60 years. Although we are using the latest advances in drilling technology, pushing the limits of the physical environment, the Deepwater Drilling Disaster shows that we still lack the technology and planning to effectively respond to large oil spills. As Robert Bea, a professor at U.C. Berkeley and former Shell employee stated, “we are still chasing it around with Scott towels.”

Industry would have us believe that the process of offshore oil and gas extraction is completely benign. Consider this statement made by the American Petroleum Institute in a 2009 letter to the Committee on Natural Resources:

“Over the past 40 years, improved practices and equipment have enabled the industry to significantly strengthen its offshore environmental performance and meet or exceed federal regulatory requirements.”

Or these by David Rainey, Vice President, Gulf of Mexico Exploration BP America Inc., in his testimony to the Senate Energy and Natural Resources Committee on November 19, 2009.

“Advances in drilling technologies and production systems have been significant. They include extended reach drilling, drilling in deeper waters, and to greater depths. These advances enable more production while reducing environmental impacts and allowing for efficient use of existing facilities and infrastructure.”

“Many of the technology examples discussed ... have enabled a robust track record of environmental stewardship and can reduce or even eliminate the visual ``footprint`` of offshore energy operations.”

But offshore drilling isn't safe just because the industry says it is. We can all see with our own eyes that there are limits to the oil industry's accident prevention capability – whether they are technological or managerial limits, the industry simply can not guarantee safe operation.

As Oceana's Jeff Short, one of the world's experts on the chemistry of oil and its impacts, stated in his testimony at that same Senate Committee hearing in November, 2009:

Oil development proposals in the marine environment are often presented and discussed as engineering challenges, without sufficient regard for the complexity of the environment in which they would occur, or the often dubious assumptions implicit in assessments of environmental risks and cleanup and mitigation technologies. Oil spill contingency plans are treated as exercises in damage control, taking for granted that not all damage can be controlled, and based on the faulty assumption all potential outcomes are adequately understood, predictable, and manageable. The truth of the matter is that our understanding of how oil behaves in the environment, the ways it affects organisms, and how well response and mitigation measures actually work in the field is still largely unknown.

The Deepwater Drilling Disaster shows us that current technology and regulation cannot prevent what we now know is inevitable--a major spill of oil into the marine environment, and one which is to date beyond our ability to control.

### **The Arctic is Particularly Vulnerable—and Response Capability is Nonexistent**

The risks from these activities are particularly acute in the Arctic, where the oceans play a critical role in the culture of Native peoples, there is little available response, rescue, or clean-up capability, and little information about the environment or impacts from oil development is available (*see* Appendix B)

Because there is a significant lack of information, both from western science and documented local and traditional knowledge of Arctic peoples, it is impossible to ensure that exploration drilling will not harm the health of Arctic marine ecosystems or

opportunities for the subsistence way of life. Managers do not have the baseline information needed to conduct quantitative risk assessments of activities or, if a spill were to occur, assess impacts to hold companies accountable for damages. This lack of information is evident in the cursory and general environmental reviews that have been conducted and the errant generalizations that the Minerals Management Service (MMS) has made.

Further, response, rescue, and clean-up capabilities are virtually nonexistent for the challenging conditions in Arctic waters, which can include sea ice, stormy seas, extreme cold temperatures and long periods of darkness. There is no demonstrated capability to clean up spilled oil in icy waters. The nearest Coast Guard response and rescue vessels would be nearly 1,000 miles away, and the Coast Guard has stated publicly that it could not respond to a spill. Particularly given the fact that we must dedicate all available resources to limiting damage in the Gulf of Mexico, it would be irresponsible to allow parallel risky activities in Arctic waters.

It would be impossible to quickly mobilize additional emergency spill response vessels into the Arctic Ocean due to the area's remoteness and difficult operating conditions. As Commandant Thad W. Allen, National Incident Commander for the coordinated response to the *Deepwater Horizon* blowout, testified before a Senate committee last August, the Coast Guard has "limited response resources and capabilities" in the event of a major spill in the Arctic Ocean. In comparison, BP reported that it had mobilized response vessels, including 32 spill response vessels with a skimming capacity of more than 170,000 barrels per day and an offshore storage capacity of 122,000 barrels within forty-eight hours of the *Deepwater Horizon* blowout. On the morning of May 16, Unified Command reported that "650 response vessels were responding on site, including skimmers, tugs, barges and recovery vessels...in addition to dozens of aircraft, remotely operated vehicles and multiple mobile offshore drilling units." It would be impossible to deploy the same resources that quickly in the Arctic. Yet, despite this massive mobilization of resources, the oil gushing from the *Deepwater Horizon* blowout remains unchecked to date.

The events surrounding the Deepwater Drilling Disaster provide significant new information that requires the Minerals Management Service (MMS) to reanalyze Shell's drilling plans. The new information goes to the heart of the decision to approve Shell's plans, and accordingly the approval of any drilling should be suspended pending reconsideration of the environmental analysis in light of the *Deepwater Horizon* spill.

Shell has made efforts to distinguish its proposals from the Gulf tragedy. It is clear, however, that the same technologies and standards that failed so tragically in the Gulf have been or will be applied in the Arctic. (See Appendix C, Final Response to Shell, May 19, 2010) Given the obvious deficiencies and commitment to wholesale reevaluation of our oil and gas program, there is no reason to allow Shell to take these risks with our Arctic resources. The *Deepwater Horizon* was an exploration well, just like those proposed by Shell for this summer. Moreover, MMS's approvals were made using the same standards and processes that allowed the *Deepwater Horizon* tragedy and under the same cloud of collusion that has been revealed by the GAO, New York Times,

and other media outlets. (See Appendix D, Offshore Oil and Gas Development: Additional Guidance Would Help Strengthen the Minerals Management Service's Assessment of Environmental Impacts in the North Aleutian Basin, Government Accounting Office, March 2010, attached hereafter; see also Appendix E, William Yardley, Arctic Drilling Proposal Advanced Amid Concern, New York Times, May 19, 2010, attached hereafter; see also Appendix F, Juliet Eilperin, U.S. agency overseeing oil drilling ignored warnings of risks, Washington Post, May 24, 2010.)

### **It is Time to Kick the Habit and Move to a Clean Energy Economy**

It is clearly time for a bold Congressional effort to transition America into its much needed clean energy future. In doing so, Congress should focus in part on clean sources of ocean energy such as wind, solar, and geothermal power. The Deepwater Drilling Disaster shows us that now, more than ever, our oceans and the communities that rely on them on a daily basis need a clean energy future. Future generations of Americans deserve oil free beaches and oceans that are an abundant source of food, wildlife and clean energy.

The Deepwater Drilling Disaster presents us with a glimpse of what our oil addiction is doing to our country. It is costing us jobs, valuable destroying natural resources and distracting us from developing innovative new technologies that can empower us both by lighting our homes and stimulating our economies.

The United States Department of Energy has projected that we can generate 20% of electricity demand from renewables by 2030. Offshore wind could provide 20% of this amount. Supplying even 5 percent of the country's electricity with wind power by 2020 would add \$60 billion in capital investment in rural America, provide \$1.2 billion in new income for farmers and rural landowners, and create 80,000 new jobs. This effort has started, as the United States added enough wind power in 2007 alone to provide electricity to more than a million homes.

Let's stop pretending that offshore drilling lowers the price of gasoline. A more effective way to bring down the price of gasoline – without the risks of catastrophic environmental and economic damage – is to raise fuel economy standards for new cars and trucks sold in the United States, as called for last week by President Obama. Making cars that get 35.5 miles per gallon of gas, as federal regulations will require, will save a dollar per gallon by 2030. Compare this with the 3 cents a gallons savings the EIA says drilling all our offshore oil reserves will bring over that same period. We should be working as rapidly as possible to electrify our transportation and home-heating systems, using electricity provided by carbon-free sources like wind and solar.

Congress could make tremendous progress in creating a new energy economy right now by passing legislation that would stimulate this process. For example, setting a Renewable Electricity Standard (RES) would cut harmful carbon emissions while creating jobs and saving consumers' money, reducing costs for utilities and consumers. A

strong RES, such as mandating that 25% of electricity should be generated from renewable sources by 2025, can stimulate domestic investment in new renewable energy throughout the nation, creating jobs and income in rural areas, as well as in the high tech and manufacturing sectors. An RES would reduce the need to drill for onshore and offshore natural gas or to build new supporting infrastructure for these activities such as drilling rigs, pipelines, terminals and refineries.

It is critical that Congress continue to promote legislation that provides direct and substantial investment in clean energy component manufacturing to ensure that an adequate supply chain for goods essential to the renewable energy industry is created in the U.S. This legislation must direct federal funding for clean energy manufacturers to retool their facilities and retrain their workers to develop, produce, and commercialize clean energy technologies.

### **Recommendations**

And so, today, on behalf of Oceana, I ask you to take three important steps that will steer our country in the right direction toward energy independence based on renewable, carbon-free energy sources and lasting protections for our coastal and marine environments.

The tragic events unfolding in the Gulf of Mexico have focused the nation's attention on the consequences of our addiction to oil. We need to understand what led to the BP blowout and spill and to prevent it from happening again. We need to understand not only the engineering problems of blowout preventers and potentially criminal behavior on the part of one or more corporations, but also the systemic regulatory failures of MMS to provide needed environmental impact analysis, appropriate industry oversight, and meaningful enforcement.

President Obama has appropriately pledged to task a special commission to undertake a thorough investigation and analysis of the failures that resulted to the *Deepwater Horizon* disaster. Damage from the ongoing oil spill in the Gulf of Mexico may last for generations, and a quick 30-day review is clearly not sufficient to credibly address the many technical and regulatory concerns that have been brought to light by this spill.

***1. Immediately and indefinitely suspend all approvals, activities, and processes—other than current production—related to offshore drilling.***

It is imperative to allow sufficient time for the President's commission and other investigative bodies to complete their investigations of the failures that led to the ongoing BP blowout and to apply the lessons learned from this disaster to prevent such a tragedy from ever happening again. For that reason, we must immediately suspend all approvals, activities, and processes—other than current production—related to offshore drilling. That suspension should remain in place while the independent review called for by the administration takes place and all changes recommended by it are implemented. All

approvals already granted must be re-evaluated based on the new information gathered by the commission and using any new processes recommended.

The most immediate and dramatic need is to suspend approval for drilling in the Arctic Ocean. The Minerals Management Service approved Shell's plans to drill exploration wells in the Chukchi and Beaufort Seas this summer. For the same reasons, proposals to open areas off the east coast of the United States must be put on hold indefinitely. We should not be considering opening new areas to leasing when it is clear that we cannot control companies that own leases on currently open areas.

To reiterate, Congress and President Obama must immediately and indefinitely suspend all approvals, activities, and processes—other than current production—related to offshore drilling. That process should begin with suspension of the approvals for Shell's exploratory drilling plans in the Chukchi and Beaufort Seas.

***II. Ban new offshore drilling in the Outer Continental Shelf (OCS) and permanently protect all areas currently closed to leasing.***

Since 1982, Congress and the President banned oil and gas leasing on much of our coasts. Those moratoria were allowed to lapse amidst the rancor of political campaigning in the last three years. Those protections should be restored and made permanent. This year's catastrophic disaster in the Gulf of Mexico illustrates that a ban on new drilling is essential to ensuring that a similar fate does not befall our other coasts, which, like the Gulf of Mexico, support important national assets in the form of valuable coastal economies and marine environments. As disturbing as this catastrophe has been for all of us, we need to make sure it never happens again. Congress should exercise its authority to permanently ban drilling offshore.

***III. Finally, Congress must continue to pursue legislation that provides for a more efficient, clean, carbon-free, energy future that emphasizes the development of renewable energy.***

By providing incentives for investments in clean energy such as offshore wind we could achieve the goals outlined above and possibly more. We could generate more energy, at a lower cost, from Atlantic offshore wind farms than from drilling all the oil in the Atlantic OCS areas. East Coast offshore wind electricity generating potential could supplant 70% of the East Coast's fossil-fuel generated electricity supply. Providing this quantity of clean energy could cut 335 million metric tons of carbon dioxide emissions annually - while limiting the risk of exposure to highly volatile energy expenses and creating three times as many jobs as offshore oil and gas development.

**Summary**

We must dramatically change course and move forward toward a future in which we rely upon affordable, carbon-free, renewable energy and end our dependence on oil. A “teachable moment” is upon us. What will we learn from the Deepwater Drilling Disaster? Ultimately, it is imperative for the United States to shift toward a future in which we rely upon affordable, carbon-free, renewable energy; one in which our oceans and the environment are healthy, and one that ensures our freedom from oil dependency. Part of this effort must include an emphasis on development of carbon-free technologies, including wind and solar power, in conjunction with improved energy efficiency.

Oceana urges the United States Congress to act swiftly to set up a rational policy to protect our oceans and the economies that depend on them from the impacts of offshore oil and gas drilling. Specifically, in light of Deepwater Drilling Disaster, Congress should take the following essential steps to set America on course toward a new energy economy:

- Immediately and indefinitely suspend all approvals, activities, and processes—other than current production—related to offshore drilling.
- Ban all new offshore drilling and provide permanent protection for the areas previously subject to congressional and presidential moratoria.
- Pass legislation that provides for a more efficient, clean, carbon-free, energy future that emphasizes the development of renewable sources of energy.

In the wake of the Deepwater Drilling Disaster, it is clear that none of the response options are good ones. What we have seen so far--burning the slick, use of toxic dispersants, booms and skimmers, a cofferdam, and a siphon--are all either lose-lose propositions or long shots that don't come close to stopping the spill, much less cleaning it up. Even stopping it at this point would be little solace to those depend on the oceans. We must avoid repeating this “no good option” predicament in the future, and we urge Congress to take the necessary steps outlined above to do so.