

ASSESSING PROGRESS

Three Years Later

April 17, 2013



safety frontier areas and environmental protection ensuring adequate impacts and restoration resources spill containment and response



FEMA workers attempt to rescue an oiled pelican for rehabilitation. Source: USCG.



Introduction

This is the second report card prepared by the Oil Spill Commission **Action** project. Oil Spill Commission **Action** is an outgrowth of the National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling, which President Obama established in response to the explosion of the Macondo well in the Gulf of Mexico on April 20, 2010. At the President's

direction, the Commission undertook an extensive investigation to determine the root causes of the disaster and evaluate the responses to the oil spill. The President also asked the Commission to recommend reforms to minimize the risk that such a disaster would ever again occur.

The Commission issued its final report, *Deep Water*, in January, 2011 (see back cover for a link to the Commission's report and background materials). The report contained many recommendations focused on making offshore energy production safer, improving the country's ability to respond to spills, and addressing the extensive impacts on the Gulf's people, economy, and environment.



We are not, however, satisfied with merely issuing a report. Too many task forces and commissions, after devoting significant time and effort to their assignments, watch the value of their contribution diminish as other issues and priorities command public attention. As a group, we vowed not to let the spotlight fade from our work and elected

to do what we can to advance the implementation of our recommendations so that the nation can move forward to secure the oil off our shores in a safer, more environmentally responsible manner.

To this end, with support from the Walton Family Foundation and The Curtis and Edith Munson Foundation, we continue to monitor progress in making offshore drilling safer and more environmentally protective, and to meet with many of the actors responsible for implementing the recommendations in order to assess their progress. This is the second report card summarizing our assessment of what progress has been achieved. A copy of our first report card and additional information on the topics addressed here are available on our web site, OSC*Action*.org.

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Conclusions

We believe there is one undisputable conclusion to draw on the basis of many improvements that the responsible government agencies and the oil industry have made during the past three years: because of more stringent regulations and lessons learned by industry, offshore drilling is much safer than it was then, and the ability to respond effectively if a spill were to occur has been substantially improved.

However, this does not mean the job is done. The risks will only increase as drilling moves into deeper waters with harsher, less familiar conditions. Delays in taking the necessary precautions threaten new disasters, and their occurrence could, in turn, seriously threaten the nation's energy security. All Americans will benefit if the needed improvements are made properly and expeditiously. As the following analysis indicates, much more still needs to be done.

Assigning Grades to the Categories

We have clustered the Commission's recommendations into five categories. In some, we have seen significant progress. In others, much less. In every category, more needs to be done. Recognizing the progress that has been made and reflecting optimism that the activities currently underway will be completed successfully, we have assigned the following grades to each of these categories:



Impacts and Restoration

Over the past year, there has been significant progress in assessing the impacts of the *Deepwater Horizon* spill and preparing the way for the extensive restoration of the Gulf's degraded ecosystems. The challenge ahead is to ensure that the restoration is undertaken expeditiously, efficiently, and effectively with proper oversight and transparency, and with appropriate scientific advice.



Safety and Environmental Protection

Although in some cases the pace of improvement has diminished, industry and most federal agencies continue to make improvements in the way offshore oil operations are developed, carried out, and overseen. Nevertheless, there is much still to be done, and Congress has so far failed to codify the improvements that have been made administratively.



Spill Response and Containment

There continue to be improvements in the ability to contain and respond to offshore oil spills, although many of the improvements were already in place a year ago. Here again, the job is not finished, particularly as it relates to safeguards in the harsh Arctic conditions.





Ensuring Adequate Resources

Very little has been accomplished in this category during the past year. Indeed, the government's budget problems have reduced the resources available to the responsible agencies. Congress did provide a funding framework for restoration, but has taken no action to ensure that more resources would be available for expeditious response if another spill were to occur.



Frontier Areas—The Arctic

Federal agencies have made some important improvements in understanding the Arctic environment, and planning and managing prospective oil development in this region. Nevertheless, this is definitely a work in progress, and troubles this past year in the Chukchi Sea demonstrated how easy it is to underestimate the difficulties associated with energy development in the harsh Arctic environment.



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Assigning Grades to the Actors

The Commission's report identified three primary actors responsible for implementing its recommendations: 1) the federal government administrative agencies, 2) oil companies and their industry associations, and 3) Congress. Many other important actors, of course, also play important roles—state and local governments, non-governmental groups, and research institutions. These other organizations will become more important as the focus shifts from preventing future events to the restoration of the natural resources and economies damaged by the *Deepwater Horizon* oil spill. As we did last year, though, we have focused on the three primary actors and how they have progressed over the past year in implementing the Commission's recommendations.

The Administration

The Department of the Interior (DOI) agencies responsible for offshore drilling continues to implement many of the Commission's recommendations, albeit at a slower rate than the department demonstrated during the first year after the spill. The Bureau of Safety and Environmental Enforcement (BSEE) did finalize of one of the interim rules issued during this first period of activity. Although BSEE had planned to issue three new proposed rules during 2012, only the revision to the safety and environmental management rule has been released. On the positive side, they are improving the quality of their offshore safety inspections and increased the number of inspections in the Gulf by about 15 percent. The Bureau also assigned a full-time inspector to monitor the Shell drilling rig in the Arctic.

The Bureau of Ocean Energy Management, the other half of the DOI offshore management program, has improved the quality of the environmental impact statements it conducts before opening new areas to release, but has not formally incorporated these procedures into its National Environmental Policy Act procedures.

In the Arctic, all the responsible agencies are working effectively together to conduct important research, develop an integrated planning process for determining where new leases should be considered, and coordinate their regulatory activities. Across the board, the interagency cooperation and coordination has markedly improved. Unfortunately, the Executive Office of the President seems to be paying less attention. As a result, proposed regulations are getting hung up and decisions postponed.

Considering the progress that is being made and the challenges yet to be addressed, we assign the Administration the same grade as we did last year.

Industry

Industry and the industry associations have continued to advance in their efforts to improve the safety of offshore drilling and the industry's ability to respond to any spills that do occur. Individual companies are adopting internal operating procedures that should significantly increase safety, and industry associations are developing numerous improved standards that govern the operations of their members.

In addition, industry has significantly expanded the quality and quantity of the equipment to respond to a spill. This includes, for instance, having three well capping systems available in the Gulf available to all companies (BP has a fourth system for its own use), as well as beginning the process of locating four more in other regions of the word where offshore drilling occurs. At the time of the *Deepwater Horizon* spill, none of this existed. Similarly, the spill response organizations have substantially increased the amount and quality of available equipment, from response ships to collection booms. Although many of these improvements were underway last year, we gave industry a low grade because there had been three additional spills during the previous 12 months. This past year, there have been no major spills. We do remain concerned, however, about the long-term viability and independence of the industry's Center for Offshore Safety. Taking all these factors into account, we raise Industry's grade.



Congress

During the past year, Congress did enact the RESTORE Act which implements one of the Commission's high priority recommendations. However, it did nothing about the many other critical issues the Commission identified to improve safety and environmental protection. Further, we are concerned that the process established by the RESTORE Act may result in substantial delays and the diversion of large amounts of resources into purposes other than ecosystem restoration. However, giving Congress credit for at least implementing one recommendation, we have improved the grade from last year's D.







Impacts and Restoration

Last year, our primary emphasis was for Congress to enact legislation dedicating 80 percent of Clean Water Act penalties for long-term restoration of the Gulf's ecosystems.

In June 2012, Congress did approve the RESTORE Act allocating 80 percent of Clean Water Act fines to ecosystem restoration and economic development in the Gulf. Our concern now becomes how the new law is going to be implemented and how its activities fit with other Gulf restoration efforts. This focus will be our priority in the coming year.

There are four major restoration efforts underway or under development in the Gulf as a result of the *Deepwater Horizon* spill:

- 1. An "early NRDA" (natural resource damage assessment) process funded by a one billion dollar contribution from BP to support the early initiation of Gulf restoration projects;
- 2. A National Fish and Wildlife Foundation (NFWF) program funded by criminal penalties paid by BP and Transocean (the owner and operator of the *Deepwater Horizon* drilling rig). Under these agreements, NFWF will receive payments totaling \$2.55 billion over a 5 year period;
- 3. The comprehensive NRDA process: here the government is still conducting studies to determine the extent of the damages resulting from the spill—a process which could continue for some time, although it could be short circuited if these damages are included in a settlement of the litigation currently underway to determine the extent of the fines to be imposed pursuant to the Clean Water Act; and,
- 4. The RESTORE Act programs that will be funded by fines administered pursuant to the Clean Water Act. Here too, the amount available for this program will be determined by the ongoing civil litigation.

Though the civil litigation underway in federal court will determine how much will be available for the full NRDA and the RESTORE Act programs, it is expected to be in the billions—and some anticipate tens of billions—of dollars.

Our primary concerns about these efforts are:

• Will they be coordinated and how?

With separate organizations attempting to disburse such large sums of money for the same purpose, there could be substantial overlap or duplication or divergent interests that need to be reconciled.

• Will the programs have clear goals and will there be robust monitoring of how well they are achieving those goals?

Before beginning such massive expenditures, it is essential that all parties agree on what they are trying to accomplish and that there is a robust monitoring program with clear metrics and milestones to measure and guide progress toward these goals.

• Will the projects selected under the programs be based on the best available science?

None of the programs requires the establishment of a scientific advisory committee although the RESTORE Act does provide for establishing such a committee if desired. Sustainable restoration in the Gulf is complicated scientifically and technically and the programs would benefit from having a standing committee of scientists to review proposed projects and ensure the rigor of their design. Having an overarching review committee could substantially help coordinate the various efforts and ensure they remained focused on the restoration goals.

• To what degree will the funds be used to achieve restoration of the resilience of Gulf of Mexico ecosystems degraded over the long term as a result of national policies?

From the Commission's perspective, this was the compelling rationale for allocating Clean Water Act fines to a Gulf Coast restoration trust fund. While the RESTORE Act allows use of these funds for economic development and infrastructure improvements as well as ecosystem restoration, it would be tragically short-sighted if the primary emphasis was not on rebuilding resilience in the natural systems that are critical to the regional economy and well-being. Furthermore, there should be diligence against using these funds for unrelated purposes such as to balance budgets or replace revenue sources for ongoing expenditures.

• Will there be adequate financial controls and auditing of expenditures to ensure the funds are well spent in reporting to Congress and the American people and to minimize the potential for waste or fraud?

There have already been several cases of fraud tied to payments made pursuant to the spill. The RESTORE Act tasks the U.S. Department of the Treasury with developing rules to ensure that funds are spent appropriately, but the Department has already missed the legislative deadline by several months. The National Fish and Wildlife Foundation has assured us that it has a robust protocol for auditing the use of its funds. But none of the existing programs, much less those newly established, have been responsible for overseeing the legitimate expenditure of such large amounts. Avoiding waste, fraud, and abuse is likely to be a major challenge.

• Will the projects be selected and implemented expeditiously?

The degradation of the Gulf's ecosystems is an ongoing process. Every year, for instance, the Gulf coast loses, on average, 100 square miles of coastal wetlands—more than all

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the rest of the United States. These wetlands are critical to supporting the Gulf's fisheries and helping protect coastal areas from flooding and storm surges. Their protection and restoration requires urgent attention, yet two years after the early NRDA process began, only 7 percent of the funds had been allocated. One problem seems to be arguments among the Gulf states as to which states will receive how much of the funding for which purposes. These differences also threaten to bedevil the NRDA and RESTORE Act processes.

• Will there be adequate opportunity for public review and comment?

The procedures under these different programs for public review and comment are, at best, uneven. Here again it would make sense for the different programs to coordinate their work in such a way that the public could obtain a full and clear view of all the efforts and how they fit together.

The existence of a coherent, well-crafted comprehensive planning process for the Gulf (termed marine spatial planning), as recommended by the Commission, would substantially advance the development of sustainable management and coordinated restoration. Unfortunately, the Gulf states continue to resist this approach. We urge them to reconsider.

The issues outlined above are what we intend to focus on during the coming year.



Safety and Environmental Protection

During the past year, the Department of the Interior (DOI) and industry have continued to implement many of the Commission's recommendations to improve safety and environmental protection.

In August, the Bureau of Safety and Environmental Enforcement (BSEE) issued the final version of its Offshore Drilling Safety rule. The interim rule was issued in 2010. The final rule included some additional requirements about barriers that must be in place within the wells and extended some of the requirements pertaining to blowout preventers (BOPs).

In December, BSEE issued a draft Safety Culture Policy Statement consistent with the Commission's emphasis on changing the safety culture in the industry and the regulatory agencies.

In April 2013, the Bureau released its proposed revisions to its Safety and Environmental Management Systems (SEMS) Rule. One important change is that the proposed revision requires companies to use independent third party experts to conduct periodic audits of their operations. Under the original SEMS rule, these audits could be conducted by employees of the company being audited.

The Bureau had also expected to release a proposed rule that would substantially stiffen the requirements regarding the design and operation of BOPs, and another that would expand requirements regarding process safety systems and the use of lifetime analyses to evaluate critical equipment. The Bureau is still working on these rules and their release dates are uncertain.

We continue to strongly recommend the development of a proactive, risked-based approach similar to the United Kingdom's "safety case", while recognizing that the approach should be adapted for United States conditions by inclusion of strong prescriptive standards for safety and environmental protection. These requirements should be at least as rigorous as the leasing terms and regulatory requirements of peer oil-producing nations.

Industry, too, continues to make progress. The industry-sponsored Center for Offshore Safety, which has focused on developing criteria for certifying safety and environmental auditors, holds promise of helping to ensure that the firms involved in offshore drilling perform at the top of their game, but more needs to be done. We continue to believe, however, that if it is to establish widespread credibility the Center when fully operational should become independent of the American Petroleum Institute (API).

Some major oil companies, including BP, also have undertaken important initiatives within their companies and with contractors to improve their safety and environmental protection practices.

They are also supporting significant improvements through various domestic and international industry associations.

Although the environmental impact statements (EIS) accompanying proposed leases have improved, we remain concerned that the Bureau of Energy Management (BOEM) has as yet to propose any regulations strengthening practices and procedures for preparing these statements and improving the quality of the reviews during the planning, leasing, exploration, and development stages. We also continue to encourage BOEM to pursue a robust interagency research program to better define and monitor environmental conditions in new lease areas.

It is unfortunate that three years after the worst oil spill in U.S. history, Congress has yet to take action to bolster the government's program for managing offshore activities. Indeed, during the past year, neither the House nor the Senate exhibited any interest in addressing the many outstanding issues.

Thus, although the past year has seen some important improvements, our priorities for the coming year remain:

- DOI should continue to improve its regulatory programs with particular priority on the expeditious issuance of the new rule on improving blowout prevention systems;
- CEQ and DOI should formally revise the NEPA processes and procedures to make them more transparent and inclusive;
- The Center for Offshore Safety needs to become operational and independent of API;
- Congress needs to codify the changes to the regulatory structure that the Department of the Interior has implemented administratively; and,
- Congress needs to pass legislation incorporating the Commission's other recommendations for improving safety and environmental protection.



Spill Response and Containment

The Macondo well explosion revealed a number of weaknesses in the ability of industry and government to contain and respond to major oil spills. Over the past 3 years, this capability has significantly improved as a result of investments by industry, new rules, and tests and demonstrations of the effectiveness of the new equipment.

Last year, we identified the following actions as most important:

- 1. Completing a rule that will significantly upgrade the requirements for blowout preventers (BOPs);
- 2. Adequately testing the capability of new containment systems to deal effectively and quickly with large, deep, high pressure spills;
- 3. Modifying dispersant testing protocols;
- 4. Modifying the National Contingency Plan, which defines the processes to be followed in responding to oil spills;
- 5. Funding the comprehensive federal oil pollution research and development programs; and,
- 6. Formalizing the role of the Coast Guard, NOAA, and EPA in the review and approval of oil response plans.

In August, the Bureau of Safety and Environmental Enforcement (BSEE) issued a final rule that requires increased defenses against spills:

- First is stronger requirements for the number and quality of barriers inside the well to reduce the risk that oil can escape even under very high pressure.
- If these internal barriers were to fail, the next defense against a massive spill is the BOP. The August rule included some elements to ensure better BOP performance, and a new rule is in preparation to require more extensive improvements.
- A well containment system provides a third line of defense again a major spill if the internal barriers and the BOP fail. Containment systems that could be used under high pressures in deep water did not exist when the Macondo spill occurred. Industry now has containment systems available in the Gulf and others distributed around the world. During the past year, one of the Gulf devices was tested and found to perform effectively and expeditiously.
- Should these containment systems nonetheless fail, the final line of defense is an effective spill response capability. BSEE issued a notice to companies leasing tracts for exploration and development requiring them to prepare and periodically review and update far more rigorous response plans. The agency's action has been reinforced by the private, industry-

created Marine Well Containment Corporation that requires all of its members to prepare detailed plans and verify they have agreements with the contractors they would use if a spill were to occur.

Another of the Commission's concerns was the possible risks to public and environmental health that might be associated with extensive use of dispersants such as occurred after the *Deepwater Horizon* spill. EPA informs us that a proposed rule has been drafted, but the Office of Management and Budget has not yet approved its release.

The Commission recommended that the National Contingency Plan implemented by the Coast Guard and EPA be amended to provide for increased involvement of state and local officials in oil spill contingency planning, new guidance for "spills of national significance," expanded expertise within the government on source control, a better process for estimating spill volumes and flow rates, and guidance on the use of barrier berms as a response measure. Although the agencies have begun taking action on some of these recommendations administratively, the plan itself has not been formally modified to incorporate the improvements.

Through the Interagency Coordinating Committee on Oil Pollution Research, chaired by the Coast Guard, has begun the process of developing a comprehensive research program, this effort is proceeding slowly.

The Commission recommended that the Department of the Interior conduct a far more thorough review of an applicant's spill response plan, which would include review and approval by other federal agencies such as NOAA, the U.S. Coast Guard (USCG), and EPA. The Department reports that it is reviewing response plans more carefully, and it has signed memorandums of understanding with NOAA and the Coast Guard establishing those agencies' authority to participate in these reviews. These agencies did choose to participate in the review of Shell's response plan for the Arctic, but they elected not to review response plans in the Gulf. However, DOI is still not providing an opportunity for public review and comment on spill response plans, which the Commission had recommended.

Considering the progress that has occurred, we consider the priorities for the coming year to be:

- EPA issuing the improved testing protocols for dispersants;
- BSEE successfully testing all other containment systems proposed for use in U.S. waters;
- DOI provision of opportunity for public review and comment on spill response plans, including in the Arctic;
- Revision of the National Contingency Plan; and,
- The Interagency Coordinating Committee on Oil Pollution Research developing a coherent research agenda with clear goals and funding the highest priority projects in that program.



Ensuring Adequate Resources

The BP *Deepwater Horizon* incident dramatically demonstrated the need for adequate resources to plan for and oversee offshore drilling and to respond when spills occur. Last year, we reported that while the Department of the Interior's new Bureau of Safety and Environmental Enforcement had received a

significant (36 percent) budget increase for fiscal year 2012, allocations for the other responsible agencies remained essentially unchanged. Nor had Congress adopted any of the Commission's recommendations to increase liability limits and boost the resources available to respond to spills. Therefore, we concluded the most important actions for 2012 were for Congress to:

- Make the program self-funding by creating a dedicated fee program adequate to support effective regulation and oversight;
- Increase the liability cap and financial responsibility requirements for offshore facilities; and,
- Raise the Oil Spill Liability Trust Fund's limitation on funds available for federal agencies to respond to a spill.

During this past year Congress has taken no action to implement any of these recommendations.

Indeed, because of the federal government's woes in adopting budgets, which have resulted in across-the-board cuts in budget authority, the resources available to the relevant agencies to oversee offshore oil and gas production are slated to be reduced during the coming year. This could well be expensive to both the companies, which may well have to wait longer to obtain needed permits, and to the nation if reduced resources diminish the quality and care of the government's oversight activities.

The government's ongoing budgetary problems argue, as the Commission recommended, for the offshore drilling industry bearing the costs associated with leasing and permitting review. BSEE does currently cover about two-thirds of its costs through inspection fees and cost reimbursement, but none of the other agencies involved have similar dedicated income streams. Extending this approach, which is used to fund the Federal Communications Commission and oil and gas regulation in many states, for example, would have many benefits: agencies would have sufficient resources to run an effective program; industry in turn could be more confident of timely action on permit requests; and, the cost of an adequate regulatory program would no longer require yearly allocations from Congress tapping overcommitted general revenues.

Similarly, there is an obvious need to increase the liability that companies face should a spill occur. This liability has been capped at \$75 million for more than two decades. The Gulf states and the country at large were fortunate that BP, the well's owner, ignored the cap and had both the resources and the willingness to bear the full costs of responding to the spill. The Commission

recommended that the liability cap be significantly increased, which requires congressional legislation. But Congress took no action to even consider such an amendment during the past year.

Another unrealistic constraint imposed under existing law is a limit on the funds available from the Oil Spill Liability Trust Fund to support the government's response to an oil spill. The Commission recommended the amount available for an incident be raised. Here, again, Congress has not acted.

Thus, our highest priorities remain unchanged from last year. We encourage the companies undertaking the development of offshore oil and gas resources to join with us in urging Congress to adopt these recommendations during the coming year. The nation will be better off and better prepared as a result.



Frontier Areas—The Arctic

Along with encouraging the resumption of oil and gas exploration and production in the Gulf, the pace of which accelerated over the past year, the Commission recognized that there would be continued pressure to move into frontier areas. As the United States and other nations search for additional supplies of oil and

gas, industry is exploring in deeper waters in the Gulf of Mexico and new areas—particularly in the Arctic. This was illustrated during the past year, as Royal Dutch Shell undertook exploratory drilling in the Chukchi and Beaufort Seas off the coast of Alaska, and as Cuba and Mexico sought to expand their offshore drilling operations in the Gulf.

To support such expansions in a responsible and environmentally safe manner, last year we identified the most important actions to be undertaken during 2012:

- Expand and fund the research necessary to adequately characterize environmental conditions in the Arctic areas where new drilling is anticipated;
- Conduct additional research on and industry demonstrations of the ability to prevent, respond to, contain, and clean-up an oil spill under Arctic conditions;
- Promote the international adoption of standards and procedures for oil and gas activities in the Arctic, including spill prevention and response;
- Establish a regional citizens council to inform Arctic and Subarctic offshore planning decisions; and,
- Remove the barriers that could prevent U.S. companies and government agencies from responding to spills that occur in Mexican or Cuban waters that otherwise might impair our country's land and waters.

While progress was made on the first three of these recommendations, nothing was accomplished on the last two and questions remain about the adequacy of existing regulatory requirements in Arctic conditions.

The Commission recommended that the federal government undertake the research necessary to provide a comprehensive base of information about the environmental characteristics of the frontier areas where new drilling might be permitted. In the Gulf of Mexico, outer continental shelf research is being conducted under the auspices of the Bureau of Ocean Energy Management (BOEM), and the consortia of universities funded by BP. In the Arctic, this research is being conducted by many agencies, including BOEM, NOAA, the National Science Foundation, universities, and industry. The amount the federal government has budgeted for these research efforts has increased. Several efforts are underway or were completed to bring additional interagency coordination and investments to address information needs. The National Science and Technology Program the Interagency Arctic Research and Policy Committee released a

comprehensive 5-year Arctic Research plan, involving dozens of federal agencies. The National Academy of Sciences has established a committee to identify emerging research questions in the Arctic. The North Pacific Research Board, in partnership with the National Science Foundation, is progressing well in its synthesis of many individual research products into a more comprehensive analysis. NOAA negotiated and signed an innovative data sharing agreement with the oil industry to share Arctic science information and make that publicly available.

According to DOI, approximately half of the BOEM environmental studies program budget is now being spent on the Chukchi and Beaufort Seas, establishing baseline data in the region. However, many unanswered questions remain about how the Arctic marine ecosystem functions. More research is necessary to understand how species are responding to increased industrialization, and to help people make better decisions about how to balance environmental health and development decisions. Some examples include the need for analysis of cumulative impacts, impacts of noise from oil and gas activity on marine mammals, the distribution and abundance of Arctic Cod, peer reviewed science on seabird colonies, and synthesis of subsistence studies.

The Commission also recommended a comprehensive research effort on oil spill containment and response in the Arctic, which is especially challenging in ice-covered waters and in areas with limited response and support infrastructure. The U.S. Arctic Research Commission released the report, *"Oil Spills in Arctic Waters"*, compiling relevant research projects being undertaken by governmental, non-governmental, industrial, and private organizations. Several industry organizations and government agencies are sponsoring a National Academy of Sciences study on this topic, which began in 2012. The American Petroleum Institute and the International Association of Oil and Gas Producers have expanded their Joint Industry Program to improve Arctic oil spill response. NOAA has appointed an Arctic Joint Assessment Team and is assisting the Arctic Council, Canada, and Norway in developing response planning and techniques for spills in Arctic waters.

All of this represents progress. However, in order to make informed decisions on exploratory drilling in the Arctic Ocean, both the government and industry need to do more testing of the effectiveness of key spill response and remediation technologies in the region and under challenging weather conditions. Relatively little is known about the fate and movement of oil in icy waters, especially under the severe storm conditions that often occur, and during formation and break up of pack ice. Similarly, not much research has been conducted about the Arctic-specific ecological impacts of planned spill response methods, including the use of dispersants and burning. We encourage additional investment in these important areas, as highlighted in the recommendations from the U.S. Arctic Research Commission's paper "Oil in Ice" (October 2012).

During the past year, federal agencies made some important advances in coordinating their activities to plan and manage energy development in the Arctic. The President created and appointed members to the Interagency Working Group on Alaska Energy (IWG) (EO 13580). The IWG conducted regular meetings to 1) improve interagency coordination, 2) make planning and

permitting more efficient, and 3) identify potential improvements to both science coordination and science-based decision-making. On April 4, 2013, the IWG released a report calling for an integrated management strategy for the Arctic *"Managing for the Future in a Rapidly Changing Arctic"*. It makes the case for a more comprehensive approach that is based on science and the improved cooperation of decision-makers in both the public and private sectors. It is an important first step towards employing an ecosystem-based management approach for making informed decisions about the management, conservation, and development of Alaska's valuable and vulnerable resources.

The need for better baseline information, field testing, realistic planning, interagency coordination, and transparency was underscored this past year by the problems that Shell Oil encountered in its attempt to drill exploratory wells in the Arctic. Even with extensive planning and preparation by Shell and the federal government, the challenges exceeded those anticipated, and increased public skepticism in the ability to operate safely under Arctic conditions. DOI is now requiring Shell to develop a comprehensive and integrated operational plan that describes its future drilling operations including oversight of contractor work, vessel and equipment configurations, preparation and staging of spill response assets, and plans for demobilization and maintenance. The agency is also requiring Shell to undergo a 3rd party audit of its safety and environmental management systems.

DOI needs to continue to explore the ways in which Shell's serious problems in transit, mobilization, and demobilization signaled operational vulnerabilities that could have serious consequences if they occurred during drilling or spill response, and review how DOI procedures should be modified in the future. Although DOI's 60-day review failed to identify needed improvements in the federal review process, the time is right for such analysis. Shell's decision to postpone further exploration for at least a year should provide an opportunity for industry and government to evaluate what can be done to reduce risk and improve safety in Arctic operations.

In January, the Department of the Interior's Offshore Energy Safety Committee made many recommendations to DOI. Among them was the need to adopt Arctic-specific regulations for all companies operating in the Arctic Ocean. The Department should now make plans and develop a rulemaking process for assessing new needed regulations in the Arctic.

In May, the Arctic Council is expected to adopt a new international agreement on marine oil pollution and response, as a result of work done by a special committee, co-chaired by the U.S. and Russia. It has been negotiated and provisionally approved by the eight Arctic nations, providing a platform of mutual understanding and assistance for any spills in the Arctic region. This represents progress on our recommendation for international adoption of agreements for spill response. However, it does not adequately address international standards for safe operation and prevention of spills, which is the next challenge that should be addressed by the Arctic Council.

Unfortunately, no action was taken on our recommendation to establish a regional citizens advisory council to participate in the planning process for exploration in the Arctic. Nor was there was there any movement on the need to allow U.S. oil spill response organizations to mobilize if the need existed for spills in Cuban and Mexican waters that might affect our country's land and water resources.

Considering the events of the past year, we consider the priorities for the coming year to be:

- *In situ* demonstration of the effectiveness and environmental effects under adverse conditions of all significant spill prevention and response technologies planned for use in the Arctic Ocean, sufficient to assess their reliability;
- DOI should conduct response gap analyses in order to better evaluate existing and proposed oil spill response plans to assure that they incorporate reasonable assumptions about spill response timelines, and most effective response, containment, and remediation strategies;
- The United States should engage in a rulemaking process for developing Arctic-specific standards and lead the effort in Arctic Council adoption of international standards for Arctic drilling, to promote best practices in reducing risks and preventing spills; and,
- Congress should provide for the Arctic regional citizens advisory council, in order to more effectively involve the people of the region in the decisions, preparations, and planning for the changes taking place in the Arctic.

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On April 20, 2010, the Macondo well blew out, costing the lives of 11 men, and beginning a catastrophe that sank the *Deepwater Horizon* drilling rig and spilled over 4 million barrels of crude oil into the Gulf of Mexico. The spill disrupted an entire region's economy, damaged fisheries and critical habitats, and brought vividly to light the risks of deepwater drilling for oil and gas—the latest frontier in the national energy supply. Soon after, President Barack Obama appointed a seven-member Commission to investigate the disaster, analyze its causes and effects, and recommend the actions necessary to minimize such risks in the future.

The Commission's report, Deep Water, offered the American public and policymakers a full account of what happened in the Gulf and why, and proposed actions—changes in company behavior, reform of government oversight, and investment in research and technology—required to make offshore energy production safer, improve the country's ability to respond to spills, and address the extensive impacts on the Gulf's people, economy, and environment.

- Further information about Oil Spill Commission *Action* is available at OSCAction.org.
- Further information about the operations and products of the original Commission is available at **oilspillcommission.gov**.
- Biographical information about the Commissioners is available at OSCAction.org/about-osca/ commissioners/.