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Federal Public Law and the Future of Oil and Gas Drilling on the Outer Continental Shelf

David Pettit* and David Newman‡

I. INTRODUCTION

Transocean's Deepwater Horizon offshore drilling rig, on lease to BP, exploded and caught fire on April 20, 2010. This event caused the deaths of eleven workers and resulted in an oil geyser that spewed millions of gallons of oil into the Gulf of Mexico.¹ The Deepwater Horizon sank two days after the explosion. Nearly three months later, on July 15, 2010, BP was finally able to cap the well.² The Flow Rate Technical Group, a group of scientists from federal agencies and academic institutions, estimated that

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^{1.} NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL & OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING vi (2011), available at http://www.oilspillcommission.gov/ sites/default/files/documents/FinalReportIntro.pdf [hereinafter COMM'N REPORT].

^{2.} As this article is being written, crude oil has been reported on the surface of the Gulf above the site of the wreckage of the Deepwater Horizon drilling rig. This may be leakage from the rig or its components, or in the worst case may be leakage from the seafloor around the capped well.

BP's well dumped 4.9 million barrels of oil into the Gulf of Mexico.³ This is roughly nine times the size of the Exxon Valdez spill in 1989.

This toxic disaster resulted in "roughly 580 miles of oiled shoreline"⁴ and massive oil plumes beneath the sea's surface.⁵ Some scientists have found these plumes to be as big as ten miles long, three miles wide, and 300 feet thick.⁶ Others have documented a plume twenty-two miles long and 650 feet high.⁷ Many, including President Barack Obama, have called this oil spill the worst environmental disaster in U.S. history:

Already, this oil spill is the worst environmental disaster America has ever faced. And unlike an earthquake or a hurricane, it's not a single event that does its damage in a matter of minutes or days. The millions of gallons of oil that have spilled into the Gulf of Mexico are more like an epidemic, one that we will be fighting for months and even years.⁸

This spill has had heart-wrenching implications for the people, animals, and ecosystems of the Gulf. In human costs, there has been death, physical injuries, damages to health, and economic devastation to industries dependent upon a clean Gulf, such as tourism, hospitality and fishing.

The Gulf of Mexico is a vibrant, albeit fragile, ecosystem. It is home to several endangered and threatened species, including at least five species of whale, five types of sea turtles, four kinds of beach mice, four species of marine birds, and West Indian

^{3.} Campbell Robertson & Clifford Krauss, Gulf Spill Is the Largest of Its Kind, Scientists Say, N.Y. TIMES, Aug. 3, 2010, at A14.

^{4.} Campbell Robertson & John Collins Rudolf, Cleanup and Questions Continue, N.Y. TIMES, Nov. 3, 2010, at A16.

^{5.} See, e.g., David Biello, Massive Oil Plume Confirmed in Gulf of Mexico, SCIENTIFIC AM. (Aug. 19, 2010), http://www.scientificamerican.com/article.cfm?id=masive-oil-plume-confirmed-in-gulf-of-mexico.

^{6.} Justin Gillis, Giant Plumes of Oil Forming Under the Gulf, N.Y. TIMES, May 16, 2010, at A1.

^{7.} WHOI Scientists Map and Confirm Origin of Large, Underwater Hydrocarbon Plume in Gulf, WOODS HOLE OCEANOGRAPHIC INST. (Aug. 19, 2010, 2:00 PM), http://www.whoi.edu/page.do?pid=51334&tid=282&cid= 79926&ct=162.

^{8.} Remarks by the President to the Nation on the BP Oil Spill, WHITE HOUSE OFFICE PRESS SEC'Y (June 15, 2010, 8:01 PM), http://www.white house.gov/the-press-office/remarks-president-nation-bp-oil-spill.

manatees. Critical habitat has been designated for three of these species.⁹ In addition, the United States Fish and Wildlife Service, under the Department of the Interior, has identified at least thirty-eight endangered or threatened species that it believes could potentially be impacted by an oil spill in the Gulf.¹⁰

As President Obama noted, the ramifications of the Deepwater Horizon oil spill will persist well into the future. Over a year after the spill, significant impacts on endangered and threatened species are still being uncovered. Injured or dead animals attributable to the spill are continually being found.¹¹ Moreover, recent studies suggest that the casualties of affected animals are vastly undercounted, particularly regarding deceased whales and dolphins that perished as a result of the spill.¹²

In response to the Deepwater Horizon spill, the current Administration has taken several steps towards gathering information and shoring up regulatory weaknesses. These include the "dissolution" of Minerals Management Service (MMS) and the creation of Bureau of Ocean Energy Management and Regulation (BOEMRE), and the Council on Environmental Quality's review of agency policies under the National Environmental Policy Act. A major contribution has been President Obama's establishment of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling (Commission). The Commission is an independent, nonpartisan entity charged with providing a thorough analysis of the causes of the Deepwater Horizon disaster, an assessment of the oil industry's ability to respond to spills, and recommended reforms for making offshore drilling safer.¹³ The Commission issued its final report on January 11,

^{9.} See Endangered and Threatened Species and Critical Habitats under the Jurisdiction of the NOAA Fisheries Service: Gulf of Mexico, NAT'L OCEANIC & ATMOSPHERIC ADMIN., http://sero.nmfs.noaa.gov/pr/endangered %20species/specieslist/PDF2010/Gulf%20of%20Mexico.pdf (last visited Oct. 30, 2011).

^{10.} Wildlife Threatened on the Gulf Coast, U.S. FISH & WILDLIFE SERV. (June 2010), http://www.fws.gov/home/dhoilspill/pdfs/NewWildlifeOfGulf.pdf.

^{11.} See, e.g., Sea Turtle Deaths Up, Joining Dolphin Trend, MSNBC (Mar. 30, 2011, 10:43 AM), http://www.msnbc.msn.com/id/42322119/ns/ us_news-environment/.

^{12.} See, e.g., Jennifer Viegas, Whale, Dolphin Deaths in Gulf Spill Underestimated, DISCOVERY NEWS (Mar. 30, 2011, 9:50 AM), http://news.discovery.com/animals/gulf-deaths-underestimated-110330.html.

^{13.} Weekly Address: President Obama Establishes Bipartisan National

2011, in which it reached numerous conclusions and offered several recommendations regarding offshore oil activities in the Gulf of Mexico.¹⁴ As of this writing, none of the Commission's recommendations has been acted on.

The Deepwater Horizon spill raises many deep and important questions about our values as a nation, the kind of tradeoffs between these values we are willing to accept,¹⁵ and our vision for the future of our nation's energy supply. Given our nation's current and unsustainable trajectory of oil consumption, it is unlikely that drilling operations in the outer continental shelf (OCS) will cease. Indeed, many have suggested that drilling in these areas will only *increase* over time.¹⁶ Oil companies are pushing, and will continue to push into deeper and deeper waters, seemingly constrained only by technological and economic limitations.

An article about regulating oil and gas drilling on the OCS^{17} could approach this topic from any number of orientations – for example, focusing on employee safety or corporate liability. This article's focus, however, will be on environmental regulations at the front end of oil and gas drilling. A constellation of federal laws and a complicated nexus of federal agencies are responsible for regulating the oil and gas permitting process on the OCS. This collection of laws and agencies is something of a morass. Consequently, this article will first attempt to map out in a coherent way those laws and agencies charged with regulating oil and gas drilling on the OCS. It will then turn to the efforts the Administration has made in the wake of the spill and discuss the

Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, WHITE HOUSE OFFICE PRESS SEC'Y (May 22, 2010), http://www.whitehouse.gov/the-press-office/weekly-address-president-obamaestablishes-bipartisan-national-commission-bp-deepwa; see also COMM'N REPORT, supra note 1.

^{14.} See COMM'N REPORT, supra note 1, at vii.

^{15.} Drilling in the outer continental shelf implicates considerations of national security, natural resource development, present and future public and environmental health, and federalism—just to name a few.

^{16.} See e.g. COMM'N REPORT, supra note 1, at 294.

^{17.} The outer continental shelf "consists of the submerged lands, subsoil, and seabed, lying between the seaward extent of the States' jurisdiction and the seaward extent of Federal jurisdiction." The Outer Continental Shelf, OCS ALTERNATIVE ENERGY & ALTERNATE USE PROGRAMMATIC EIS, http://ocsenergy.anl.gov/guide/ocs/index.cfm (last visited Oct. 30, 2011).

hopes of the authors for the safety of future oil and gas drilling on the OCS.

II. THE CURRENT FEDERAL ENVIRONMENTAL REGULATORY REGIME

There are a number of sometimes-overlapping federal statutes that govern oil and gas drilling on the OCS. We will discuss these below.

A. Outer Continental Shelf Lands Act (OCSLA)

Pursuant to OCSLA, 43 U.S.C. §§ 1331-1356A, the Secretary of the Interior puts out to bid leases to develop oil and gas deposits in the OCS. Oil and gas exploration in the OCS is governed by a five-step process: (1) the Secretary's promulgation of a five-year leasing program,¹⁸ (2) lease sales,¹⁹ (3) exploration,²⁰ (4) development and production,²¹ and (5) sale of recovered oil and gas.²²

Before a leaseholder may commence exploratory drilling, it must submit an exploration plan (EP) to BOEMRE for approval.²³ The Secretary may allow exploration to proceed only if he or she finds that the lessee's plan "will not be unduly harmful to aquatic life in the area, result in pollution, create hazardous or unsafe conditions, unreasonably interfere with other uses of the area, or disturb any site, structure, or object of historical or architectural significance."²⁴ BOEMRE reviews the EP, and the application is deemed "submitted" when it "fulfills requirements and is sufficiently accurate," and the applicant has "provided all needed additional information."²⁵ BOEMRE then must approve, disapprove, or require the lessee to modify an EP within thirty days of when it was deemed submitted to the agency.²⁶

24. Id. 1340(g)(3); see also id. 1340(g)(1)-(2).

26. Id. § 250.233.

^{18. 43} U.S.C. § 1344(a) (2006).

^{19.} Id. § 1337(a)(1).

^{20.} Id. § 1340(a)(1).

^{21.} Id. § 1351(a)(1).

^{22.} Id. § 1353(a)(1).

^{23.} See id. § 1340(c)(1).

^{25. 30} C.F.R. § 250.231(a) (2011).

B. Oil Pollution Act of 1990

The Oil Pollution Act of 1990 (OPA) was passed in response to the Exxon Valdez accident. Among other things, it requires companies to address procurement, logistical, and deployment challenges related to spill response.²⁷ It requires plans for "ensur[ing] that containment and recovery equipment as well as response personnel are mobilized and deployed at the spill site."²⁸ The OPA also provides for a no-fault liability scheme and gives the federal government the right to direct and, if necessary, take over cleanup efforts from the "responsible party" who is, under OPA, obligated to clean up an oil spill.

C. Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) was enacted in 1972 and is found in 16 U.S.C. §§ 1451 to 1466. Among the purposes of the CZMA is "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations."²⁹ The CZMA, with which compliance is voluntary, is designed to encourage the coastal states to develop and implement coastal zone management plans that are then reviewed and approved by the federal government. When an offshore oil spill occurs, conflicts can occur between a federally-approved coastal zone management plan and the spill cleanup and restoration actions taken under other federal laws.

D. National Environmental Policy Act

Congress enacted the National Environmental Policy Act

2012]

^{27.} See id § 254.23 (operator must describe emergency response action plan procedures it expects to follow in the event of a spill or a substantial threat of a spill); id. § 254.24(a) (requiring an "inventory of spill-response materials and supplies, services, equipment, and response vessels available locally and regionally").

^{28.} Id. § 254.23(g)(5); see also id. § 254.26 (requiring detailed discussion of worst case discharge scenario, including a discussion of the response in "adverse weather conditions" that must include a "description of the response equipment that [the operator] will use," with "the types, location(s) and owner, quantity, and capabilities of the equipment," and estimates of the time needed for procurement and deployment of equipment and personnel).

^{29. 16} U.S.C. § 1452(1) (2006).

(NEPA) to "promote efforts which will prevent or eliminate damage to the environment...."³⁰ To achieve this goal, NEPA requires federal agencies to fully consider and disclose the environmental consequences of an agency action before proceeding with that action.³¹ Agencies' evaluation of environmental consequences must be based on scientific information that is both "[a]ccurate" and of "high quality."³² In addition, federal agencies must notify the public of proposed projects and allow the public the chance to comment on the environmental impacts of their actions.³³ General regulations for implementing NEPA are promulgated by the Council on Environmental Quality (CEQ), an executive branch office.³⁴

The cornerstone of NEPA is the Environmental Impact Statement (EIS). An EIS is required for all "major Federal actions significantly affecting the quality of the human environment."³⁵ The EIS must "provide [a] full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."³⁶

Under NEPA, an agency or project proponent may in certain limited circumstances produce a lesser form of environmental review, called an Environmental Assessment (EA). NEPA also allows for what are called "categorical exemptions" for projects that are not likely to have any significant effects on the environment. As we will discuss below, prior to the Deepwater Horizon disaster, the federal government regularly gave categorical exemptions to OCS drilling projects.

An agency must prepare a supplemental EIS (SEIS) when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or

^{30. 42} U.S.C. § 4321 (2006).

^{31.} See id. § 4332(2)(C); see also 40 C.F.R. §§ 1501.2, 1502.5 (2011).

^{32. 40} C.F.R. § 1500.1(b).

^{33.} See id. § 1506.6.

^{34.} See The Council on Environmental Quality – About, WHITE HOUSE, http://www.whitehouse.gov/administration/eop/ceq/about (last visited Nov. 4, 2011).

^{35. 42} U.S.C. § 4332(2)(C); see also, 40 C.F.R. § 1501.4 (explaining under what circumstances an EIS must be prepared).

^{36. 40} C.F.R. § 1502.1.

its impacts."37 "The standard for determining when an SEIS is required is essentially the same as the standard for determining when an EIS is required."³⁸ A SEIS is necessary if there have been changes in the project since the original EIS that "will have a 'significant' impact on the environment that has not previously been covered by the [original] EIS."39 The agency must "take a 'hard look' at the new information to assess whether necessary."40 supplementation might be Whether new circumstances are significant depends on a number of factors. including "[t]he degree to which the proposed action affects public health or safety," "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks," and "[t]he degree to which the action ... may cause loss or destruction of significant scientific, cultural, or historical resources."41

NEPA regulations do not allow an agency to "commit resources prejudicing selection of alternatives before making a final decision \dots "⁴² As a result, while an agency is in the process of preparing a SEIS to evaluate the impacts of a proposed action, it may not take any "action concerning the proposal ... which would ... [h]ave an adverse environmental impact; or ... [l]imit the choice of reasonable alternatives."⁴³

E. Endangered Species Act

Congress enacted the Endangered Species Act (ESA), in part, "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species."⁴⁴ Principal responsibilities for implementing the requirements of the ESA have been delegated to the Fish and Wildlife Service (FWS), an

^{37.} Id. § 1502.9(c)(1)(ii).

^{38.} Sierra Club v. U.S. Army Corps of Eng'rs, 295 F.3d 1209, 1215-16 (11th Cir. 2002) (citation omitted) (internal quotation marks omitted).

^{39.} Id. at 1216 (alteration in original) (citation omitted) (internal quotation marks omitted).

^{40.} Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 72-73 (2004).

^{41. 40} C.F.R. § 1508.27(b)(2), (5), (8).

^{42.} Id. § 1502.2(f).

^{43.} Id. § 1506.1(a).

^{44. 16} U.S.C. § 1531(b) (2006).

agency within the Department of the Interior, and to the National Marine Fisheries Service (NMFS), an agency within the Department of Commerce. FWS is primarily responsible for implementing the ESA for terrestrial species and a limited number of marine mammals, and NMFS is primarily responsible for implementing the ESA for most other marine species.⁴⁵

Section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), provides that "[e]ach Federal agency shall, in consultation with and with the assistance of [NMFS and FWS], insure that any action authorized, funded, or carried out by such agency... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of those species' designated "critical habitat."⁴⁶ Agency actions subject to this requirement include licenses, contracts, and leases.⁴⁷

Action agencies must engage in formal consultation with NMFS or FWS whenever their actions may affect a listed species.⁴⁸ Formal consultation is required if an agency action may result in "[a]ny possible effect [to listed species or critical habitat], whether beneficial, benign, adverse, or of an undetermined character \ldots .⁹⁴⁹ If, on the other hand, the action agency concludes that the action is not likely to have an adverse effect *and* NMFS and FWS concur in writing with that determination, then consultation may proceed informally.⁵⁰

Formal consultation concludes with the issuance of a NMFS/FWS biological opinion (BiOp), which includes an assessment of the effects of the action on listed species and critical habitat and a conclusion as to whether the agency action is likely to jeopardize a listed species or destroy or adversely modify a critical habitat for that species.⁵¹ If jeopardy or adverse modification is not likely to occur, the BiOp must include an "incidental take statement" (ITS) covering any potential take of

^{45.} See 16 U.S.C. § 1532(15); 50 C.F.R. § 402.01 (2010).

^{46. 16} U.S.C. § 1536(a)(2).

^{47. 50} C.F.R. § 402.02(c).

^{48.} See 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).

^{49.} Interagency Cooperation – Endangered Species Act of 1973, as Amended; Final Rule, 51 Fed. Reg. 19,926, 19,949 (June 3, 1986) (codified at 50 C.F.R. pt. 402).

^{50.} See 50 C.F.R. § 402.12(k)(1).

^{51.} See 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(3).

listed species likely to occur as a consequence of the action.⁵² Take of any endangered or threatened species in the absence of an ITS is prohibited under ESA section 9 and its implementing regulations.⁵³

An agency's duty to ensure against jeopardy or adverse modification continues after the completion of section 7 consultations. The action agency must provide periodic progress reports to NMFS and FWS covering impacts on and take of listed species as specified in the ITS.⁵⁴ Moreover, this duty to ensure against jeopardy is ongoing: the action agency must immediately reinitiate consultation with NMFS or FWS "[i]f the amount or extent of taking specified in the incidental take statement is exceeded" or "[i]f new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered."⁵⁵

While formal consultation is underway, both the federal agency and the applicant are barred from making any "irretrievable commitment of resources with respect to the agency action" at issue.⁵⁶ More specifically, after initiation of section 7(a)(2) consultation, the Federal agency and the permit or license applicant "shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2)."⁵⁷

F. Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) was adopted more than thirty years ago to ameliorate the consequences of human impacts on marine mammals. Its goal is to protect and promote the growth of marine mammal populations "to the greatest extent feasible commensurate with sound policies of resource management" and "to maintain the health and stability

^{52.} See 16 U.S.C. § 1536(b)(4), (o); 50 C.F.R. § 402.14(i)(1).

^{53.} See 16 U.S.C. § 1538(a)(1)(C), (g).

^{54.} See 50 C.F.R. § 402.14(i)(3).

^{55.} *Id.* § 402.16(a)-(b).

^{56.} See 16 U.S.C. § 1536(d).

^{57.} Id.

of the marine ecosystem."⁵⁸ A careful approach to management was necessary given the vulnerable status of many of these populations (a substantial percentage of which remain endangered or depleted) as well as the difficulty of measuring the impacts of human activities on marine mammals in the wild.⁵⁹ "[I]t seems elementary common sense," the House Committee on Merchant Marine and Fisheries observed in sending the bill to the floor,

that legislation should be adopted to require that we act conservatively – that no steps should be taken regarding these animals that might prove to be adverse or even irreversible in their effects until more is known. As far as could be done, we have endeavored to build such a conservative bias into the [MMPA].⁶⁰

The heart of the MMPA is its so-called "take" prohibition, a moratorium on the harassing, hunting, and killing of marine mammals by any private or public party.⁶¹ Under the law, the NMFS (or the FWS) may grant exceptions to the take prohibition, on application from a government agency or third party, for small numbers of marine mammals, provided it determines, using the best available scientific evidence, that such take would have only a negligible impact on marine mammal populations and stocks. There are two types of general exemptions available through the MMPA for activities that incidentally take marine mammals: fiveyear permits and one-year incidental harassment authorizations. Regardless of which process is used, NMFS must prescribe "methods" and "means of effecting the least practicable adverse impact" on protected species as well as "requirements pertaining to the monitoring and reporting of such taking."⁶²

The MMPA prohibits, in most circumstances, the "take" of a marine mammal without a permit from the Secretary of Commerce.⁶³ The term "take" is defined broadly to include acts of harassment, which are in turn defined to include acts of "torment"

^{58.} *Id.* § 1361(6).

^{59.} Id. § 1361(1), (3).

^{60.} H.R. Rep. No. 92-707 (1972), reprinted in 1972 U.S.C.C.A.N. 4144, 4148.

^{61.} See 16 U.S.C. § 1371 (take prohibition); see also id. § 1362(13) (defining "take").

^{62.} Id. § 1371(a)(5)(A)(i).

^{63.} See id. § 1371(a); 50 C.F.R. § 216.107.

or "annoyance" that "ha[ve] the potential to injure a marine mammal or marine mammal stock in the wild" or have the potential to "disturb" them "by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."⁶⁴

G. National Marine Sanctuaries Act

When amending the National Marine Sanctuaries Act (NMSA) in 1996, Congress noted that "[o]ne of the greatest longterm threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats. Habitat considerations should receive increased attention for the conservation and management of fishery resources of the United States."⁶⁵ Thus, one of the purposes of the NMSA is "to promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat."⁶⁶

To fulfill the substantive purposes of the NMSA's protections for essential fish habitat, federal agencies are required to engage in consultation with NMFS "with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat⁶⁷ Likewise, NMFS has a mandatory duty to recommend "measures that can be taken by [an] agency to conserve" essential fish habitat whenever NMFS receives information "that an action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, or Federal agency would adversely affect any essential fish habitat^{*68}

The essential fish habitat (EFH) regulations⁶⁹ outline the process for federal agencies, NMFS, and the fishery management councils to satisfy the EFH consultation requirement under section 305(b) of the NMSA. As part of the EFH consultation

^{64.} Id. § 1362(18).

^{65.} *Id.* § 1801(a)(9).

^{66.} Id. § 1801(b)(7).

^{67.} Id. § 1855(b)(2).

^{68.} Id. § 1855(b)(4)(A).

^{69. 50} C.F.R. §§ 600.905-600.930 (2011).

process, when an agency action may adversely impact EFH, the regulations require federal action agencies to prepare a written EFH assessment describing the effects of that action on EFH.⁷⁰ All EFH assessments must include the contents stated in 50 C.F.R. § 600.920(e)(3); however they may be incorporated into documents prepared for other purposes (such as NEPA documents).⁷¹

III. THE FUTURE OF DRILLING ON THE OUTER CONTINENTAL SHELF: THE ADMINISTRATION'S EFFORTS IN THE AFTERMATH OF DEEPWATER HORIZON

A. CEQ Review of NEPA Policies

In response to the oil spill, the CEQ issued a report in August of 2010, reviewing MMS's NEPA policies.⁷² In the report, the CEQ stated that NEPA requires a thorough and meaningful consideration of environmental impacts and mandates public participation in this process:

NEPA was designed to ensure the consideration of of Federal environmental impacts as part the Government's decisionmaking. As President Obama proclaimed upon NEPA's 40th Anniversary on January 1, 2010, "NEPA elevated the role of environmental considerations in proposed Federal agency actions, and it remains the cornerstone of our Nation's modern NEPA was designed to environmental protections." impart transparency and accountability in Federal decisionmaking....

As explained below, MMS conducted numerous levels of extensive environmental reviews, relying upon the "tiering" process—a process generally sanctioned in the governing regulations for NEPA, in which prior reviews

^{70.} See 50 C.F.R. § 600.920(e)(1).

^{71.} Id. § 600.920(f).

^{72.} See COUNCIL ON ENVTL. QUALITY, REPORT REGARDING THE MINERALS MANAGEMENT SERVICE'S NATIONAL ENVIRONMENTAL POLICY ACT POLICIES, PRACTICES, AND PROCEDURES AS THEY RELATE TO OUTER CONTINENTAL SHELF OIL AND GAS EXPLORATION AND DEVELOPMENT (2010), available at http://www.whitehouse.gov/ sites/default/files/microsites/ceq/20100816-ceqmms-ocs-nepa.pdf [hereinafter CEQ REPORT].

are incorporated into subsequent, site-specific analysesto consider the environmental impacts of its OCSLA permitting decisions. This process was not transparent, however, and has led to confusion and concern about environmental impacts were sufficiently whether evaluated and disclosed. It is essential to ensure that information from one level of review is effectively carried forward to-and reflected in-subsequent reviews, that the agencies independently tests [sic] assumptions, and that there is appropriate evaluation of site-specific environmental impacts. As a result of this transparent integration and incorporation bv reference. decisionmakers and the public will fully understand the environmental consequences of the agency's decisions.⁷³

CEQ criticized MMS for freely using categorical exemptions for OCS drilling permits, and noted that BOEMRE "ha[d] committed to using the following CEQ recommendations as guideposts as it continues its reform and reorganization activities":

Perform careful and comprehensive NEPA review of individual deepwater exploration, operation, development, production, and decommissioning activities, including site-specific information where appropriate....

Ensure that NEPA analyses fully inform and align with substantive decisions at all relevant decision points; that subsequent analyses accurately reflect and carry forward relevant underlying data; and that those analyses will be fully available to the public.

Ensure that NEPA documents provide decisionmakers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities on the Outer Continental Shelf....

Consider supplementing existing NEPA practices, procedures, and analyses to reflect changed assumptions and environmental conditions, due to circumstances

^{73.} Id. at 3 (footnotes omitted).

surrounding the BP Oil Spill.⁷⁴

B. New Safety Rules

After the BP incident, BOEMRE adopted a number of new safety rules.⁷⁵ These rules include the requirement for "independent third party verification that the blind-shear rams [in subsea blowout preventers] are capable of cutting any drill pipe in the hole under maximum anticipated pressure."⁷⁶ This is particularly important given BOEMRE's finding that the blowout preventer on the Deepwater Horizon rig failed.⁷⁷

BOEMRE also issued a new rule requiring realistic worst-case scenarios for OCS well blowouts.⁷⁸ This has led to some horrifically high estimates⁷⁹ that have led to litigation over what is perceived to be inadequate assessment of the risk of blowouts and of the oil companies' ability to contain them.⁸⁰

C. Supplemental EIS for the Western Planning Area

On November 10, 2010, BOEMRE issued a notice of intent to prepare a supplemental environmental impact statement (SEIS) for Western Planning Area Lease Sales 218 and 222 in the 2007-2012 5-Year OCS Program.⁸¹ Among other things, this SEIS was

78. BUREAU OF OCEAN ENERTY MGMT., REGULATION, & ENFORCEMENT, NATIONAL NOTICE TO LESSEES & OPERATORS OF FEDERAL OIL & GAS LEASES, OUTER CONTINENTAL SHELF (OCS) 1-2 (June 18, 2010), available at http://www.gomr.boemre.gov/homepg/regulate/regs/ntls/2010NTLs/10-n06.pdf

^{74.} Id. at 4-5.

^{75.} BUREAU OF OCEAN ENTERGY MGMT., REGULATION, & ENFORCEMENT, THE DRILLING SAFETY RULE: A INTERIM FINAL RULE TO ENHANCE SAFETY MEASURES FOR ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF 1, available at http://www.doi.gov/news/pressreleases/loader.cfm?csModule= security/getfile&PageID=45792 (last visited on Dec. 22, 2011).

^{76.} Id.

^{77.} BUREAU OF OCEAN ENTERGY MGMT., REGULATION, & ENFORCEMENT, REPORT REGARDING THE CAUSES OF THE APRIL 20, 2010 MACONDO WELL BLOWOUT 198 (Sept. 14, 2011), available at http://www.boemre.gov/ pdfs/maps/dwhfinal.pdf.

^{79.} See David Pettit, Feds Issue First New Deepwater Drilling Permit In the Gulf of Mex., SWITCHBOARD: NAT'L RES. DEF. COUNCIL STAFF BLOG (Mar. 21, 2011), http://switchboard.nrdc.org/blogs/dpettit/feds_issue_first_new_ deepwater.html.

^{80.} Enviros Challenge Shell's Gulf Deepwater Drilling Permit, ENV'T NEWS SERV. (June 13, 2011), http://www.ens-newswire.com/ens/jun2011/2011-06-13-092.html [hereinafter Enviros Challenge].

^{81.} See Outer Continental Shelf (OCS), Western and Central Plannning

designed to supplement the multi-sale EIS for the area where the Deepwater Horizon oil spill occurred. The notice of intent stated the following rationale for supplementing the current EIS:

A SEIS is deemed appropriate to supplement the NEPA documents cited above for these lease sales in order to consider new circumstances and information arising, among other things, from the Deepwater Horizon blowout and spill. The SEIS analysis will focus on updating the baseline conditions and potential environmental effects of oil and natural gas leasing, exploration, development, and production in the [Western Planning Area] and [Central Planning Area].⁸²

BOEMRE's supplemental EIS was circulated in August 2011.⁸³ It contains several of the flaws of the prior EIS, including an understatement of the risk of another BP-sized blowout and an unjustified reliance on unproven subsea capping methodologies championed by industry.

D. New EAs

On October 12, 2010, BOEMRE issued an Environmental Assessment analyzing the potential impact of lifting a suspension of drilling operations in the Gulf that involved the use of a subsea blowout preventer or a blowout preventer on a floating drilling facility (Suspension EA). In this document, BOEMRE admitted that "[b]aseline environmental conditions in the Gulf of Mexico have been substantially affected from the impacts of the Deepwater Horizon oil spill" and that it was unsure about the extent of that harm.⁸⁴ In particular, BOEMRE noted that

Areas, Gulf of Mexico (GOM) Oil and Gas Lease Sales for the 2007–2012 5year OCS Program, 75 Fed. Reg. 69,122, 69,122 (Nov. 10, 2010).

^{82.} Id.

^{83.} BUREAU OF OCEAN ENERGY MGMT., REGULATION & ENFORCEMENT, SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR PROPOSED WESTERN PLANNING AREA OCS OIL & GAS LEASE SALE 218 (Aug. 2011), available at http://www.gomr.boemre.gov/PDFs/2011/2011-034-v1.pdf.

^{84.} BUREAU OF OCEAN ENERGY MGMT., REGULATION & ENFORCEMENT, MODIFICATIONS TO SUSPENSION OF DEEPWATER DRILLING OPERATIONS: ENVIRONMENTAL. ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT 10 (Oct. 12, 2010), available at http://www.boemre.gov/eppd/PDF/EAModifications Suspension10122010.pdf [hereinafter SUSPENSION EA].

Consensus information on the magnitudes of these impacts, the length of time needed for baseline conditions to be restored to conditions existing prior to the Deepwater Horizon spill, and the magnitude of impacts that would be expected if another catastrophic spill occurred while baseline conditions are still recovering from the Deepwater Horizon is largely unavailable at this time although progress is underway toward answering these questions.⁸⁵

BOEMRE also noted that "[a] catastrophic spill has the potential to cause significant impacts to marine and coastal biological habitats and resources in the Gulf of Mexico, as well as direct impacts to individual organisms."⁸⁶ It described how the Deepwater Horizon spill had both identified a number of risks from offshore drilling and called into question some of BOEMRE's prior assumptions about the potential risks:

[T]he Deepwater Horizon spill has demonstrated that a high-volume, extended-duration spill resulting from a blowout has the potential to result in impacts that could affect the long-term population status of biological resources over extended areas

... Marine mammals have been observed swimming in oil after spills. Therefore, it cannot be assumed they would avoid the impacted area. The oil could harm marine mammals through several ways, including, but not limited to, the breathing of fumes from the oil (and possibly dispersants), persistence on their skin, and the consumption of oiled food sources....

Sea Turtles: The majority of sea turtles impacted by the Deepwater Horizon event have been Kemp's ridleys, listed as endangered under the Endangered Species Act (ESA). Shoreline oiling and efforts may affect future population levels and reproduction....

Coastal Habitats: During the spill, over 500 miles of shoreline were impacted, varying from light to moderate to heaving oiling. The majority of the Gulf coast is

^{85.} Id.

^{86.} Id. at 20.

sensitive shoreline types (i.e., sheltered tidal flats; vegetated low banks; salt/brackish-water marshes; freshwater marshes/swamps; scrub-shrub wetlands) that tend to accumulate oil and are difficult to clean, causing oil to persist in coastal and estuarine areas. Loss of vegetation could lead to erosion and permanent land loss.

Coastal and Marine Birds: The Gulf coastal habitats are essential to the annual cycles of many species of breeding, wintering and migrating waterfowl, wading birds, shorebirds, and songbirds. The spill and response activities could interfere with migration. The worst impacts to oiled birds, or those which have ingested oil with their prey, would be if the oil spill occurs during the nesting season. An oil spill could result in the loss of entire colonies of breeding birds on barrier islands surrounded by oil, along with the loss of all eggs and nestlings.

Fisheries: A catastrophic spill has the potential to cause the loss of a year class (fish in a stock born in the same year), affecting future stock populations....

... With the oiling over 500 miles of shoreline, it is foreseeable that an entire critical habitat for a species with a relatively small critical habitat could have been completely oiled. For example, the endangered Alabama beach mouse (*Peromyscus polionotus ammobates*) only has 1,211 acres of frontal dunes covering just ten miles of shoreline designated as critical habitat.⁸⁷

In addition, BOEMRE acknowledged that exploratory drilling, regardless of the depth, poses a greater risk of a catastrophic oil spill than does development drilling since it involves "drill[ing] into formations for which there is limited knowledge of the wellbore parameters."⁸⁸

This sense of uncertainty about the potential risks to the Gulf from exploratory drilling was echoed in another EA, which BOEMRE issued in September 2010 in conjunction with its publication the following month of an Interim Final Rule

^{87.} Id. at 11-12 (footnotes omitted).

^{88.} Id. at 34.

implementing increased drilling safety measures for the Gulf (Safety EA). The Safety EA noted that the measures would be likely to improve well control reliability but that it could not determine the degree of improvement.⁸⁹ In the Safety EA, BOEMRE described the same risks from an oil spill that it detailed in the Suspension EA.⁹⁰ Disappointingly, despite this lack of certainty about the benefits from the Interim Final Rule and other safety measures, BOEMRE concluded in the Suspension EA that "the occurrence of potential effects from oil spills has been effectively reduced by these improvements"⁹¹

Despite the Administration's pervasive uncertainty about the environmental impacts that have arisen in light of the Deepwater Horizon oil spill, BOEMRE continues to accept and approve exploration plans (EPs), development and production plans (DOCDs), and applications for permission to drill (APDs) in the Gulf of Mexico. Even several weeks after the oil spill began, MMS had approved over twenty exploration plans for drilling in the Gulf, apparently without initiating consultation regarding possible effects on endangered species.⁹² Not only were the plans approved, but MMS exempted all of these exploration plans from having to conduct a more stringent environmental review, opting instead to grant them categorical exclusions.⁹³

The Deepwater Horizon oil spill not only altered the baseline conditions for the Gulf of Mexico offshore marine and coastal environments, it also dramatically altered assumptions regarding both the risk and the likely environmental consequences of a major blowout and oil spill:

In the past five years, the share of the Gulf's production

^{89.} See BUREAU OF OCEAN ENERGY MGMT. REGULATION & ENFORCEMENT, INCREASED SAFETY MEASURES FOR ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF, FOR 30 CFR PART 250: ENVIRONMENTAL. ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT 7 (Sept. 2010), available at http://www.boemre.gov/eppd/ PDF/EAInterimSafetyRule.pdf [hereinafter SAFETY EA].

^{90.} See id. at 14-16.

^{91.} SUSPENSION EA, supra note 84, at 23.

^{92.} See Marian Wang, After Spill, More Gulf Drilling Plans Got Environmental Exemptions, PROPUBLICA (May 11, 2010), http://www.propublica.org/blog/item/oil-gulf-mexico-offshore-drilling-plansregulators-categorical-exemption.

^{93.} See id.

from ultra-deep wells, wells deep[er] than 500 feet, climbed from 1% to 32%. But ultra-deep water drilling creates special risks, including that which appears to have been the primary cause of the Deepwater Horizon tragedy, [an] uncontrolled blowout. These risks were there to be seen but were largely unprepared for or ignored by both government and industry.... It is clear that the move to [d]eepwater represents an enormous change in US energy exploration. Unfortunately, our government and industry did not undergo a similar transformation in its regulatory, safety, and response focus. We need such a shift now and today we will be hearing information to guide our thinking about what it should be.⁹⁴

Similar concerns over deepwater drilling⁹⁵ are also expressed in the CEQ Report:

As oil exploration and production moves further offshore, with an increasing number of [wells] drilled in deeper waters with more complex technologies and concomitant risk, BOEM recognizes that the basis for a categorical exclusion for these deepwater activities needs to be reexamined in light of the increasing number of deepwater wells drilled over time.⁹⁶

Despite these well-founded concerns, BOEMRE has recently approved a number of exploration permits in the Gulf through EAs that downplay the risk and consequences of another large oil spill.⁹⁷ BOEMRE is also taking steps to allow new exploratory

^{94.} Regulatory Oversight of Offshore Drilling: Hearing Before Nat'l Comm'n on the BP Deepwater Horizon Oil Spill & Offshore Drilling (Meeting 2),(Aug. 25, 2010) (statement of Former Sen. Bob Graham), available at http://www.oilspillcommission.gov/sites/default/files/documents/Transcript-%20Meeting%202.pdf [hereinafter Statement of Former Sen. Graham].

^{95.} The significant individual and cumulative risks of offshore exploration and development are not limited to deepwater drilling. The Santa Barbara blowout in 1969, the 1979 Ixtoc I blowout in Mexico and the 2009 Montara blowout in Australia all took place in shallow water.

^{96.} CEQ REPORT, supra note 72, at 30 (citation omitted).

^{97.} BOEMRE has a notoriously difficult website to navigate, but information on recent EPs can be found at: http://www.bsee.gov/Regulations-and-Guidance/Permits/Status-of-Gulf-of-Mexico-Well-Permits.aspx.

drilling off the coast of Alaska.⁹⁸

E. Reinitiation Letters

On July 30, 2010, in response to the Deepwater Horizon disaster, BOEMRE requested that NMFS and FWS reinitiate consultation under section 7(a) of the ESA on the effects of the Five Year Outer Continental Shelf Oil and Gas Leasing Program (2007-2012) in the Central and Western Planning Areas of the Gulf of Mexico.⁹⁹ BOEMRE explicitly stated that:

[T]he [Deepwater Horizon] incident and the resulting oil spill necessitate this reinitiation action.... [W]e acknowledge that the spill volumes and scenarios used in the analysis for the existing NMFS [BiOp] need to be readdressed given the "rare event" of a spill exceeding 420,000 gallons as referenced in the current NMFS [BiOp] has occurred and that affects [sic] to and the status of some listed species or designated critical habitats may have been altered as a result of the [Deepwater Horizon] incident and therefore require further consideration.¹⁰⁰

NMFS responded to this letter on September 24, 2010, agreeing that reinitiation was warranted. In this response, NMFS explicitly noted that:

As our response and impact analysis [regarding the spill] continues, it is a good time for BOEM to evaluate the impacts to endangered and threatened species, and designated critical habitat from the oil, as well as for any potential future spills. We have begun synthesizing data

^{98.} See Press Release, Bureau of Ocean Energy Mgmt., Regulation & Enforcement, BOEMRE Issues Conditional Approval for Shell Exploration Plan for Beaufort Sea (Aug. 4, 2011), available at http://www.boemre.gov/ooc/press/2011/press0818a.htm; Press Release, Bureau of Ocean Energy Mgmt., Regulation & Enforcement, BOEMRE Releases Final Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (Aug. 18, 2011), available at http://www.boemre.gov/ooc/press/2011/press0804a.htm.

^{99.} See Letter from Joseph A. Christopher, Reg'l Supervisor, BOEMRE, to Roy E. Crabtree, Reg'l Adm'r Se. Region, Nat'l Marine Fisheries Serv. (July 30, 2010), available at http://sero.nmfs.noaa.gov/sf/deepwater_ horizon/BOEMRE_Request_June_30_2010.pdf. 100. Id.

from the spill, and it is clear that we have underestimated the size, frequency, and impacts associated with a catastrophic spill under the 2007-2012 lease sale program. The size and duration of the MC 252 spill were greater than anticipated, and the effects on listed species have exceeded our projections. Due to the takes of sea turtles from the oil, a new effects analysis and jeopardy analysis for listed species will need to be completed.

... The previous environmental impact statement did not estimate the size of a catastrophic spill and NMFS relied on historical data and other assumptions to estimate the potential size and impacts of such a spill on listed species. In light of the ongoing investigations surrounding the MC 252, we believe these assumptions did not sufficiently address the potential risks of a spill of this magnitude occurring and the risks posed to listed species and their habitats.

The risk of oil spills, oil and gas industry response activities, and the potential impacts on protected resources should be comprehensively analyzed and the potential effects to listed species and critical habitat re-evaluated.¹⁰¹

F. National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

As noted above, the Commission published a lengthy report¹⁰² on the BP oil spill. Here are its conclusions:

• The explosive loss of the Macondo well could have been prevented.

• The immediate causes of the Macondo well blowout can be traced to a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic

^{101.} See Letter from Roy E. Crabtree, Reg'l Adm'r, Se. Region, Nat'l Marine Fisheries Serv. to Joseph A. Christopher, Reg'l Supervisor, Minerals Mgmt. Serv. (Sept. 24, 2010), available at http://sero.nmfs.noaa.gov/sf/deepwater_horizon/NMFS_Response_September_24_2010.pdf.

^{102.} COMM'N REPORT, supra note 1.

failures in risk management that they place in doubt the safety culture of the entire industry.

• Deepwater energy exploration and production, particularly at the frontiers of experience, involve risks for which neither industry nor government has been adequately prepared, but for which they can and must be prepared in the future.

• To assure human safety and environmental protection, regulatory oversight of leasing, energy exploration, and production require reforms even beyond those significant reforms already initiated since the Deepwater Horizon disaster. Fundamental reform will be needed in both the structure of those in charge of regulatory oversight and their internal decisionmaking process to ensure their political autonomy, technical expertise, and their full consideration of environmental protection concerns.

• Because regulatory oversight alone will not be sufficient to ensure adequate safety, the oil and gas industry will need to take its own, unilateral steps to increase dramatically safety throughout the industry, including self-policing mechanisms that supplement governmental enforcement.

• The technology, laws and regulations, and practices for containing, responding to, and cleaning up spills lag behind the real risks associated with deepwater drilling into large, high-pressure reservoirs of oil and gas located far offshore and thousands of feet below the ocean's surface. Government must close the existing gap and industry must support rather than resist that effort.

• Scientific understanding of environmental conditions in sensitive environments in deep Gulf waters, along the region's coastal habitats, and in areas proposed for more drilling, such as the Arctic, is inadequate. The same is true of the human and natural impacts of oil spills.¹⁰³

The Commission also published 60 pages of recommendations, including these:

^{103.} Id. at vii.

• Engage a competent, independent engineering consultant to review existing regulations for adequacy and "fit for purpose" as a first step toward benchmarking U.S. regulations against the highest international standards. Following this review, develop and implement regulations for safety and environmental protection that are at least as rigorous as the regulations in peer-oilproducing nations. A new regulatory entity for safety and environment (as described below) should ensure that while engaged in petroleum activities all drilling and production platforms are certified and operating at the highest level of international regulatory practice.

• Require operators to develop a comprehensive "safety case" as part of their exploration and production plans initially for ultra-deepwater (more than 5,000 feet) areas, areas with complex geology, and any other frontier or high-risk areas—such as the Arctic. In addition, for lease sales in those and other areas, prospective lessees should be required to demonstrate competence, based on experience, financial capacity, and expertise, as a prequalification for bidding.

• Expand Safety Environmental Management System requirements to include regular third-party audits at three- to five-year intervals and certification. These plans should be expanded for frontier areas to encompass the full range of risk assessment and management.

• For both new and transferred leases, require the operator to participate in a new safety institute or agree to expert audits, and to contribute to safety and environmental research and development. Approval to transfer leases sold prior to this requirement should be conditioned on the new requirements based on risk factors related to the specific requirements of the lease. The lease stipulation should also include the requirement that the operator possess adequate capability to contain and respond to an oil spill, and sufficient financial capacity to compensate for damages caused by a spill.

• To cultivate and maintain government expertise on

offshore drilling safety:

(1) Establish a process under the auspices of the National Academy of Engineering to identify criteria for high-risk wells and develop methodology to assess those risks. This process should include, to the extent that the National Academy deems appropriate, input from experts in the U.S. Geological Survey, the Department of Energy, the National Oceanic and Atmospheric Administration, and academia. Furthermore, the Department of the Interior should develop in-house competence to perform such sophisticated risk assessments. Such evaluations could guide the transition to a system where all operators and contractors are required to demonstrate an integrated. proactive, risk management approach prior to leases being granted or receiving permits for exploration wells and major development projects. As noted above, these efforts should initially focus on areas with complex geology, ultra-deep water, and any other frontier or highrisk areas-such as the Arctic.

(2) Establish a coordinated, interagency research effort to develop safer systems, equipment, and practices to prevent failures of both design and equipment in the future. The federal government has relevant expertise in areas such as the application of remote sensing and diagnostics, sensors and instrumentation, and command electronics that could and should be transferred to the offshore industry....

• Develop more detailed requirements for incident reporting and data concerning offshore incidents and "near misses." Such data collection would allow for better tracking of incidents and stronger risk assessments and analysis. In particular, such reporting should be publicly available and should apply to all offshore activities, including incidents relating to helicopters and supply vessels, regardless of whether these incidents occur on or at actual drilling rigs or production facilities. In addition, Interior, in cooperation with the International Regulators Forum, should take the lead in developing international standards for incident reporting in order to develop a consistent, global set of data regarding fatalities, injuries, hydrocarbon releases, and other accidents. Sharing information as to what went wrong in offshore operations, regardless of location, is key to avoiding such mistakes.

• Lead in the development and adoption of shared international standards, particularly in the Gulf of Mexico and the Arctic. Transparent information and data sharing within the offshore industry and among international regulators is critical to continuous improvement in standards and risk management The United States shares the waters of the practices. Gulf of Mexico and its sub-surface resources with Cuba and the Republic of Mexico. After many decades of declining investment and production in the Mexican part of the Gulf by PEMEX, the national oil company, a recent Mexican Supreme Court ruling has created the opportunity for U.S. and other foreign oil and gas companies to enter Mexican waters. PEMEX has indicated its intention to auction deepwater contracts beginning in 2012. Separately, Cuba has already leased blocks 50 miles off the coast of Florida with reported plans for seven exploration wells by 2014. Agreement on standards for operations should be part of any negotiation to define the maritime boundary between the United States, Mexico, and Cuba in the eastern Gulf of Mexico. The need for international standards for activities in the Arctic is also unquestioned: the United States having already awarded leases in the region and now it is incumbent on the United States to push for such standards.

• Provide protection for "whistleblowers" who notify authorities about lapses in safety. All offshore workers have a duty to ensure safe operating practices to prevent accidents. To ensure all workers, regardless of employer, will take appropriate action whenever necessary, Congress should amend the Outer Continental Shelf Lands Act or specific safety statutes to provide the same whistleblower protection that workers are guaranteed in other comparable settings.¹⁰⁴

IV. LOOKING FORWARD: HOPES FOR THE FUTURE OF OIL AND GAS DRILLING ON THE OUTER CONTINENTAL SHELF

In a world more perfect than ours, citizens of the United States would, in light of significant environmental concerns such as climate change and toxic oil spills, dramatically reduce their oil consumption. In such a world politicians would fight for renewables and clean technology not only because their engaged constituents demand nothing less, but because the costs of maintaining the status quo are unacceptable. President Obama's recent fuel efficiency deal suggests that our world might be beginning to take first steps towards approximating these ideals.¹⁰⁵

Yet, as noted above, BOEMRE has issued many new permits for drilling in the Gulf, and two for drilling exploratory wells in the Arctic Ocean.¹⁰⁶ For the immediate future, America's dependence on oil provides a strong economic and political incentive for continued oil and gas drilling on the OCS. As the President's Commission has observed:

Offshore oil and gas will continue to be an important part of the nation's domestic energy supply for many decades. Offshore wells yield one-third of current U.S. oil production, and in recent decades helped offset declines in production elsewhere in the United States (U.S. production peaked in 1970). That already-crucial role is likely to increase. The area of federal jurisdiction, the outer continental shelf, contains an estimated 85 billion barrels of oil in technically recoverable resources—more than all onshore resources and those in the shallower state waters combined. The future of domestic oil production will rely to a substantial extent on current outer continental shelf sources and further development of deposits there—in progressively deeper, more distant

^{104.} Id. at 5-6.

^{105.} See Bill Vlasic, Carmakers Back Strict New Rules for Gas Mileage, N.Y. TIMES, July 29, 2011, at A1.

^{106.} John M. Broder & Clifford Krauss, U.S. Taking Step To Open Drilling In Arctic Ocean, N.Y.TIMES, Aug. 5, 2011, at A1.

waters, and perhaps in such challenging environs as the Alaskan $\operatorname{Arctic}^{107}$

Consequently, against this background, the authors hope that oil and gas drilling on the OCS will be required to be as safe as That "[i]t can be done safely"¹⁰⁸ is reasonably possible. insufficient. To that end, our hopes for regulatory reform echo those demands for change issued by the President's Commission, the Council on Environmental Quality, and numerous commentators. Specifically, we ask that: (1) those charged with the important task of permitting drilling operations on the OCS faithfully adhere to the law; (2) that NEPA be interpreted, reformed and implemented in a way that lives up to its mandate;¹⁰⁹ and (3) that the permitting process for oil and gas will, going forward, involve more robust interagency collaboration and oversight.

A. Litigation

Litigation has been filed challenging BOEMRE's approval of a Shell deepwater exploration permit off the coast of Alabama.¹¹⁰ The claims include: violation of NEPA for failing to perform an EIS before approving the permit; violation of OPA for not properly considering potential environmental damage; violation of ESA for failure to consult with NMFS and failure to obtain a "take" permit; and violation of MMPA for failing to properly assess potential damage to whales and other marine mammals. There is also pending litigation, on many of the same theories, challenging BOEMRE's approval of sonic exploration in the Gulf – a process in which arrays of air cannons are towed over sites of interest and enormous blasts of sound, which are known to injure marine mammals, are directed downwards to the seafloor. These cases suggest that notwithstanding any need for reform BOEMRE would do well to follow existing law in issuing exploration permits.

^{107.} COMM'N REPORT, supra note 1, at 294 (footnotes omitted).

^{108.} Id. at 293 (emphasis added).

^{109.} CEQ REPORT, *supra* note 72, at 8 ("NEPA is a fundamental decisionmaking tool used to harmonize our economic, environmental, and social aspirations and is a cornerstone of our Nation's efforts to protect the environment.").

^{110.} See Enviros Challenge, supra note 80.

B. NEPA Reform

In evaluating the regulatory failures that contributed to the Deepwater Horizon spill, the Administration and commentators have in particular focused on the reform of agency policies surrounding NEPA.¹¹¹ We agree with many of these proposals, including: (1) a reevaluation, and we would argue elimination, of the use of Categorical Exclusions for drilling on the OCS, (2) reform of the OCSLA thirty-day turnaround period for exploration plans, and (3) more rigorous NEPA analysis at various stages of the leasing process. In particular, we believe that BOEMRE's use of EAs instead of the more rigorous EIS to be problematic so long as the EAs are based on unrealistic assumptions regarding the probability of another large oil spill and on untested well-containment systems.

1. Categorical Exclusions

Earnest calls for reform and information gathering followed in the wake of the Deepwater Horizon disaster.¹¹² As a result of these calls to action, BOEMRE itself conducted a variety of inquiries into the environmental impact of deepwater drilling in the Gulf. The result of this research was an acknowledgment of pervasive uncertainty with respect to the complete environmental impact of the Deepwater Horizon oil spill and how future

^{111.} See e.g. COMM'N REPORT, supra note 1, at 260 ("The Commission has reviewed the leasing and permitting processes that MMS followed in the Gulf of Mexico before the Deepwater Horizon incident. The results lead the Commission to conclude that the breakdown of the environmental review process for OCS activities was systemic and that Interior's approach to the application of NEPA requirements in the offshore oil and gas context needs significant revision.").

^{112.} See e.g. Statement of Former Sen. Graham, supra note 94 ("In the past five years, the share of the Gulf's production from ultra-deep wells, wells deep[er] than 500 feet, climbed from 1% to 32%. But ultra-deep water drilling creates special risks, including that which appears to have been the primary cause of the Deepwater Horizon tragedy, [an] uncontrolled blowout. These risks were there to be seen but were largely unprepared for or ignored by both government and industry.... It is clear that the move to [d]eepwater represents an enormous change in U.S. energy exploration. Unfortunately, our government and industry did not undergo a similar transformation in its regulatory, safety, and response focus. We need such a shift now and today we will be hearing information to guide our thinking about what it should be.").

accidents in the Gulf might impact the environment.

Baseline environmental conditions in the Gulf of Mexico have been substantially affected from the impacts of the Deepwater Horizon oil spill. Consensus information on the magnitudes of these impacts, the length of time needed for baseline conditions to be restored to conditions existing prior to the Deepwater Horizon spill, and the magnitude of impacts that would be expected if another catastrophic spill occurred while baseline conditions are still recovering from the Deepwater Horizon is largely unavailable at this time although progress is underway toward answering these questions.¹¹³

BOEMRE noted that in contrast to smaller spills, "the Deepwater Horizon spill has demonstrated that a high-volume, extended-duration spill resulting from a blowout has the potential to result in impacts that could affect the long-term population status of biological resources over extended areas.... In addition, multiple federally and state-listed, threatened and endangered species have been impacted."¹¹⁴ Moreover, BOEMRE findings also included marine mammals breathing in toxic oil fumes, endangered sea turtles facing reproductive failure, and the possible loss of entire colonies of breeding birds.¹¹⁵

Against this background, categorical exclusions (CEs) have been used in the central and western Gulf of Mexico to exempt exploration or development plans from environmental review.¹¹⁶ Indeed, CEs were still being used by MMS several weeks after the

^{113.} SUSPENSION EA, supra note 84, at 10.

^{114.} Id. at 11.

^{115.} Id.

^{116.} Holly Doremus, Through Another's Eyes: Getting the Benefit of Outside Perspectives in Environmental Review, 38 B.C. ENVTL. AFF. L. REV. 247, 266 (2011) ("No more NEPA analysis was undertaken. From 1986 until after the Deepwater Horizon disaster, approvals of exploration or development plans in the central and western Gulf of Mexico were covered by a categorical exclusion. That categorical exclusion was never defended in a public forum. On its web site, MMS offers a 'past performance' justification: 'hundreds of Environmental Assessments (EAs) were prepared for approval of certain types of oil and gas exploration and development and production plans in the central and western Gulf of Mexico. However, none of those EAs identified the need to prepare an Environmental Impact Statement (EIS)."').

Deepwater spill.¹¹⁷ A CE

refers to an activity that has been determined through an appropriate public process not to raise environmental issues or concerns which require analysis in an EA or EIS. Once a CE is established, it can be applied to a specific proposed action if there are no 'extraordinary circumstances' that raise the potential for significant impacts based on relevant site-specific analysis.¹¹⁸

CEQ is careful to note that when these circumstances are met, "a CE is an appropriate way to comply with NEPA."¹¹⁹ It also "does not review every application of a CE, every agency project, or the NEPA documents prepared for every agency decision. Rather, CEQ reviews agencies' NEPA implementing regulations and procedures, as well as agencies' overall program implementation."¹²⁰

In light of the Deepwater Horizon disaster, both the President's Commission and CEQ have suggested that the use of CEs for deepwater drilling projects be reassessed.¹²¹ Director Michael Bromwich is currently reviewing the use of CEs associated with offshore drilling activities, and has ordered the suspension of CEs for activities involving subsea blowout preventers (BOPs) and surface BOPs on floating facilities that require an APD.¹²² We, however, take a stronger position. The use of CEs for exploration and development plans in the Gulf is

^{117.} See Wang, supra note 92.

^{118.} CEQ REPORT, supra note 72, at 10.

^{119.} Id.

^{120.} Id.

^{121.} COMM'N REPORT, supra note 1, at 260-61; see also CEQ REPORT, supra note 72, at 30 ("As oil exploration and production moves further offshore, with an increasing number of [wells] drilled in deeper waters with more complex technologies and concomitant risk, BOEM recognizes that the basis for a categorical exclusion for these deepwater activities needs to be reexamined in light of the increasing number of deepwater wells drilled over time.").

^{122.} See Memorandum from Michael R. Bromwich, Dir., Bureau of Ocean Energy Mgmt., Enforcement & Regulation, to Walter Cruickshack, Deputy Dir., Bureau of Ocean Energy Mgmt., Enforcement & Regulation, & Robert LaBelle, Acting Assoc. Dir. for Offshore Entergy and Minerals Mgmt. (Aug. 16, 2010), available at http://www.doi.gov/news/pressreleases/loader.cfm? csModule=security/getfile&PageID=42011.

more than "questionable."¹²³ It is dangerous. To reiterate, CEs may be applied *only* for actions that "do not individually or cumulatively have a significant effect on the human environment" and for which no "extraordinary circumstances" apply.¹²⁴

Offshore drilling is an inherently risky business. It is difficult to identify *any* OCS exploration or sonic activities that are appropriate for a CE, given that even in the absence of a catastrophic oil spill there are significant impacts associated with normal drilling operations, including noise, air, water pollution, as well as seismic disturbance and increased vessel and air traffic.

2. Reform of OCSLA Thirty Day Turnaround for Exploration Plans

Under OCSLA, the Secretary of the Interior has thirty days to review exploration plans.¹²⁵ As some have noted, "[a]t this point [in the process], government discretion is sharply constrained."¹²⁶ The Secretary "cannot disapprove [the plan] unless it finds that the proposed activities would probably cause serious harm or damage to life, property, mineral resources, national security, or the environment. If it disapproves an exploration plan, [the

^{123.} COMM'N REPORT, supra note 1, at 261.

^{124. 40} C.F.R. § 1508.4 (2011).

^{125.} 43 U.S.C. § 1340(c)(1) (2006) ("Except as otherwise provided in this subchapter, prior to commencing exploration pursuant to any oil and gas lease issued or maintained under this subchapter, the holder thereof shall submit an exploration plan to the Secretary for approval. Such plan may apply to more than one lease held by a lessee in any one region of the outer Continental Shelf, or by a group of lessees acting under a unitization, pooling, or drilling agreement, and shall be approved by the Secretary if he finds that such plan is consistent with the provisions of this subchapter, regulations prescribed under this subchapter, including regulations prescribed by the Secretary pursuant to paragraph (8) of section 1334(a) of this title, and the provisions of such lease. The Secretary shall require such modifications of such plan as are necessary to achieve such consistency. The Secretary shall approve such plan, as submitted or modified, within thirty days of its submission, except that the Secretary shall disapprove such plan if he determines that (A) any proposed activity under such plan would result in any condition described in section 1334(a)(2)(A)(i) of this title, and (B) such proposed activity cannot be modified to avoid such condition. If the Secretary disapproves a plan under the preceding sentence, he may, subject to section 1334(a)(2)(B) of this title, cancel such lease and the lessee shall be entitled to compensation in accordance with the regulations prescribed under section 1334(a)(2)(C)(i) or (ii) of this title.").

^{126.} Doremus, *supra* note 116, at 260.

Secretary] may choose to cancel the lease, provided it is willing to compensate the lessee."¹²⁷

Even so, the President's Commission, CEQ, and the Department of the Interior (DOI) have urged that Congress revisit this thirty-day deadline and extend it to sixty days.¹²⁸ CEQ has referred to the thirty-day deadline as a "very short timeframe."¹²⁹ Reviewing exploration plans is an important and time-consuming task; thirty days is an insufficient amount of time to review these plans with the level of detail and care that they require.¹³⁰ Agency approval of exploration plans should not be merely a rubber stamp. For these reasons, we agree that the thirty-day deadline ought to be extended.

3. Use of EIS Rather Than EA For Exploration Permits

In our view, BOEMRE should not approve new exploration or development plans in deep water without subjecting those plans to a thorough NEPA analysis. BOEMRE, for instance, should not rely on earlier Programmatic EIS, deepwater EA, or pre-Deepwater Horizon lease sale NEPA documents in reviewing new applications for EAs. The OCS drilling world completely changed on April 10, 2010, and BOEMRE needs to come to grips with this.

The President's Commission has called for mandatory EISs for "both the Five-Year Plan and for specific lease sales before plans for exploration, development, and production are approved in areas with complex geology, in ultra-deepwater, and in the Arctic and other frontier areas."¹³¹ It has also called for a reduction in the size of land leased when an area has not yet been

130. Id.

^{127.} Id. at 260-261 (footnote omitted).

^{128.} See COMM'N REPORT, supra note 1, at 262; CEQ REPORT, supra note 72, at 32.

^{129.} CEQ REPORT, *supra* note 72, at 32 ("Both CEQ and DOI recognize that the statutory requirement that the Secretary of Interior approve Exploration Plans within thirty days, as set forth in the Outer Continental Shelf Lands Act (OCSLA), may impose constraints on the agency's ability to undertake a more complete environmental review in every instance. That is why the Administration has requested that Congress amend the OCSLA to provide more time to conduct additional environmental reviews, when appropriate. While BOEM should continue its efforts to secure relief from this very short timeframe, even under current law rigorous NEPA analysis is needed.") (footnote omitted).

^{131.} COMM'N REPORT, supra note 1, at 262.

well explored, arguing that smaller leasing areas will provide a better opportunity for sound assessment of the impacts of oil and gas drilling.¹³² To the extent that these suggested reforms mandate a more rigorous environmental evaluation at each step of the planning, leasing and permitting processes, we support these proposals.

C. Interagency Oversight and Collaboration

Among its other recommendations, the President's Commission urges increased collaboration between agencies throughout the planning, leasing, exploration and development processes of oil and gas drilling on the OCS.¹³³ In particular it notes that NOAA, though possessing a wealth of expertise and information pertinent to the environmental impacts of deepwater drilling, is an untapped resource lacking, under OCSLA, an effective voice.

In making leasing decisions, the Secretary is required to solicit and consider suggestions from any interested agency, but he or she is not required to respond to the comments or accord them any particular weight. Similar issues arise at the individual lease sale stage and at the development and production plan stage. As a result, NOAA—the nation's ocean agency with the most expertise in marine science and the management of living marine resources—effectively has the same limited role as the general public in the decisions on selecting where and when to lease portions of the OCS.¹³⁴

We believe that this situation ought to change. Concentrating power in the Secretary of the Interior to the extent that he or she is not required by law to even *respond* to the comments and concerns of other agencies, let alone, incorporate them into the decision-making process, is seriously misguided.

As Professor Doremus has noted, many have called for the unification and concentration of environmental regulation.¹³⁵

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^{132.} Id.

^{133.} See id.

^{134.} Id.

^{135.} Doremus, *supra*, note 116, at 251.

Calls for unified environmental regulation and oversight are common today, for good reason. Fragmentation of authority and responsibility may mean that no one ever takes a comprehensive view of the system, or that agencies work at cross-purposes. It can bring unnecessary duplication, with attendant inefficiencies. More subtly, where multiple agencies share authority over the multiple causes of an environmental problem, each may be tempted to avoid taking politically difficult steps to address it."¹³⁶

Fragmentation of authority, importantly, also makes the system more difficult to understand and navigate.

Yet, "[t]he Deepwater Horizon saga [] reminds us that concentration of responsibility also has its downsides."¹³⁷ Doremus persuasively highlights three reasons why interagency oversight is important to the deepwater drilling regulatory process. Review by others will: (1) "help counter 'mission agency syndrome,' the tendency of agencies dedicated to a primary mission to ignore or underplay anything that might conflict with that mission"; (2) "reduce the impact of routinization ... [that is agencies] fall[ing] into 'rubber stamp syndrome,' recycling the same analysis over and over again as boiler plate without serious consideration"; and (3) "help ensure that environmental analysis keeps abreast of technological changes, countering 'past performance syndrome,' the tendency to assume that because there has not been a problem in the past one will not occur in the future."138

For these reasons not only should NOAA be granted a stronger footing for commenting on leasing and other permitting decisions, but NOAA should also be an active participant in these processes with oversight (if not veto) authority. Drilling on the Outer Continental Shelf raises unique environmental issues that NOAA, perhaps of all the agencies, is best equipped to evaluate.

Participating in decision-making and having oversight authority, however, is only part of the picture for effective oversight. NEPA, ESA, and CZMA, for instance, offer many

^{136.} Id. (footnotes omitted).

^{137.} Id.

^{138.} Id. at 253.

opportunities for consultation and oversight. Yet, these opportunities did not prevent the Deepwater Horizon disaster from occurring. Neither EPA, FWS, NMFS nor the State of Louisiana questioned MMS' analysis at their respective parts of the planning and leasing process.¹³⁹

It has been suggested that the convergence of a large amount of paperwork to review and a lack of resources results in ineffective oversight. Remedies for this problem, therefore, include making important information of relevance to the overseeing agency easier to find.

[T]he attention of the reviewer needs to be captured and focused on the salient issues. Agencies are chronically short of resources and face many demands on their time. Unless they understand the importance of their task in the specific context, they may treat the review as a matter of routine. Furthermore, reviewers should not face unnecessary barriers to identifying the most important or questionable elements of the analysis.¹⁴⁰

Access to technological expertise for evaluating salient information is also crucially important.¹⁴¹ One easy step in this direction would be for BOEMRE to clean up its nearly impenetrable website.

Comprehensive implementation of constructive interagency collaboration and oversight, therefore, will need to include not only reform of the underlying frameworks that convey or restrict outside agency authority (for example, under OCSLA), but also substantive regulatory requirements that have strong logistical effects. This will take Congressional action, which, so far, has been lacking.

V. CONCLUSION

At a recent conference, we heard an oil industry representative say that the way to honor the memories of the eleven workers killed on the Deepwater Horizon was to keep drilling for oil on the OCS. He could not have been more wrong.

^{139.} Id. at 265-70.

^{140.} Id. at 272 (footnotes omitted).

^{141.} Id.

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The way to honor their memories is to make sure that an event like the Deepwater Horizon fire and sinking never happens again. In this article, we have offered our suggestions to make it so.