Crude Injustice in the Gulf: Why Categorical Exclusions for Deepwater Drilling in the Gulf of Mexico Are Inconsistent with U.S. and International Ocean Law and Policy

"*Those who cannot remember the past are condemned to repeat it.*"[1]

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1. George Santayana, *Reason in Common Sense*, *in* THE LIFE OF REASON 34, 284 (1905).

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I.
INTRODUCTION

In an instant, oil and gas fumes raced from the well to the surface through the drill collar, exploding on contact with the semi-submersible oil rig's motors. Equipment designed to prevent such well blowouts failed, and oil flowed freely to the surface to fuel a massive fire that consumed the rig and caused it to collapse into the Gulf of Mexico. As the rig fell to the sea floor, the underlying well structure broke apart and allowed oil from the well to spew unimpeded into the ocean. Month after month the world watched in horror as tens of thousands of gallons of oil flowed into the Gulf's prime fishing grounds each day. Every effort to contain the oil failed. As some workers drilled relief wells to lower the pressure at the site of the blowout, others sprayed dispersants onto the growing oil slick to break down the oil before it reached the coast. Workers raced to implement measures to mitigate the environmental impact of the oil on beaches, inlets and estuaries. Politicians impatiently demanded accountability and financial commitments from responsible parties. Within days of the spill, the Gulf ecosystem revealed its fragility and vulnerabil-

ity to human activity. White sand beaches turned black, seabirds lost their ability to fly, and marine organisms washed ashore dead—all victims of oil exposure. Technology proved inadequate to remove most of the oil from the water column. After millions of gallons of oil had been released into the Gulf, workers finally found a way to cap the well and stop the flow of oil, leaving the Gulf with a toxic legacy and an uncertain future.

The account above bears a remarkably close resemblance to the April 20, 2010 Deepwater Horizon (DWH) oil well blowout that occurred off the coast of Louisiana, killed eleven people, and led to the largest oil spill in U.S. history.[2] Sadly, it is not. It is actually an account of the 1979 Ixtoc I oil well blowout in Mexico's Bay of Campeche that caused the release of approximately 147 million gallons of oil into the Gulf of Mexico (Gulf).[3] The oil contaminated 162 miles of Gulf shoreline, including large sections of the Texas coast.[4] The migration of oil from Mexican to U.S. waters caused a wide variety of damages to natural resources in the Gulf and caused economic hardship for many people who relied on the ocean to earn a living. Within months of the spill most of the oil that reached the U.S. coastline evaporated or was removed from the beaches by natural wave action and re-deposited offshore.[5] The bulk of the oil from the spill, however, remained in the water column and continued to impact the Gulf ecosystem for decades.[6]

Today, the Gulf oil drilling industry poses many of the same environmental risks that were present prior to the Ixtoc spill

2. NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, REPORT TO THE PRESIDENT, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING vi–vii (2011), *available at* http://www.gpoaccess.gov/deepwater/deepwater.pdf.

3. *Id.* at 6; *see also* Office of Response and Restoration, Nat'l Oceanic & Atmospheric Admin., *USCG Case History: Bahia De Campeche, Mexico*, INCIDENT NEWS, June 3, 1979, http://www.incidentnews.gov/entry/508786; BUREAU OF LAND MGMT., ACCESS NO. 29103, IXTOC OIL SPILL DAMAGE ASSESSMENT STUDY 1-3 (1982) [hereinafter IXTOC I ASSESSMENT], *available at* http://www.gomr.boemre.gov/PI/PDFImages/ESPIS/3/3973.pdf.

4. *See* IXTOC I ASSESSMENT, *supra* note 3 (noting that an unknown oil dispersed in the waters of the northwest Gulf of Mexico over the biologically productive continental shelf); *see also* BUREAU OF LAND MGMT., IXTOC OIL SPILL ASSESSMENT FINAL REPORT EXECUTIVE SUMMARY 1 (1982) [hereinafter IXTOC I FINAL REPORT], *available at* http://invertebrates.si.edu/mms/reports/IXTOC_exec.pdf (noting that 1-3 million gallons of oil from the Ixtoc I oil spill impacted U.S. beaches).

5. IXTOC I FINAL REPORT, *supra* note 4, at 1.

6. *See id.* at 1, 3, 27.

thirty years ago.[7] However, those risks have increased with the industry's movement of oil exploration activities into remote, deep ocean sites in the Gulf.[8] The deep, offshore waters of the Gulf contain some of the largest deposits of oil in the United States, but finding and recovering that oil safely presents unique challenges.[9] Controlling and managing breaches at deep sea wells is considerably more difficult than at shallow wells due to the high pressure and low temperature of the deepwater environment, the force of the flowing oil, and the need to rely on unmanned, remotely operated vehicles to respond to accidents.[10] Indeed, the DWH accident resulted in the release of more than 170 million gallons of oil into the Gulf because almost every procedure used to stop the blowout failed.[11]

Despite the substantial risk associated with deep sea oil drilling in the Gulf, the Mineral Management Service (MMS) has routinely elected to categorically exclude certain offshore oil exploration and development activities in the Gulf from environmental review otherwise required under the National Environmental Policy Act (NEPA).[12] MMS categorically excluded British Petroleum's (BP) exploration plan covering the DWH well from environmental review without ever considering the potential impacts from a well blowout like the one that actually occurred.

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7. *See generally id.*

8. In 2008, of 7,310 active oil leases in the Gulf, approximately 58% covered deepwater water sites (= 1,000 ft.). Approximately 27% of the leases covered ultra-deepwater sites (= 5,000 ft.). LESLEY D. NIXON ET AL., MINERAL MGMT. SERV., MS 2009-016, DEEPWATER GULF OF MEXICO 2009: INTERIM REPORT OF 2008 HIGHLIGHTS 10 (2009), *available at* http://www.gomr.boemre.gov/PDFs/2009/2009-016.pdf.

9. *See id.* at 13, 31, 50, 58.

10. V.C. Kelessidis, *Challenges for Very Deep Oil and Gas Drilling–Will There Ever Be a Depth Limit?, in* 3RD AMIREG INTERNATIONAL CONFERENCE: ASSESSING THE FOOTPRINT OF RESOURCE UTILIZATION AND HAZARDOUS WASTE MANAGEMENT 222 (2009), *available at* http://drillinglab.mred.tuc.gr/Publications/56.pdf.

11. CHUCK HOPKINSON, GEORGIA SEA GRANT, OUTCOME/GUIDANCE FROM GEORGIA SEA GRANT PROGRAM: CURRENT STATUS OF BP OIL SPILL 1–5 (2010), *available at* http://uga.edu/aboutUGA/joye_pkit/GeorgiaSeaGrant_OilSpillReport8-16.pdf.

12. On May 19, 2010, the Secretary of the Department of Interior reorganized the Minerals Management Service and renamed it the Bureau of Ocean Energy Management, Regulation and Enforcement. DEP'T OF THE INTERIOR, ORDER NO. 3299, ESTABLISHMENT OF THE BUREAU OF OCEAN ENERGY MANAGEMENT, THE BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, AND THE OFFICE OF NATURAL RESOURCES REVENUE (May 19, 2010) [hereinafter INTERIOR ORDER], *available at* http://www.boemre.gov/ooc/pdfs/DOI_pressrelease/SecretaryOrder3299.pdf.

This article examines the current practice of categorically excluding oil exploration and development/production activities in the Gulf from environmental review, and argues that the practice violates NEPA and the Outer Continental Shelf Lands Act (OCSLA), and is inconsistent with U.S. and international ocean law and policy. Section I provides a brief overview of the status of the world's imperiled oceans, with particular emphasis on the Gulf ecosystem. Section II addresses America's dependence on crude oil and the increasing role played by the Gulf in meeting the nation's energy needs, and examines the projected environmental impacts of the DWH accident that led to the worst oil spill in U.S. history. Section III provides a brief overview of U.S. ocean law and policy. Section IV discusses the NEPA review process with particular emphasis on the use of categorical exclusions, and examines some of the key decisions made during the environmental review process for the BP lease covering the site of the DWH well. Section V provides analysis of the interaction of laws governing oil exploration and development in the Gulf and concludes that categorically excluding exploration plans in the Gulf from environmental review violates national and international law.

II.
HIGHSTAKES PROSPECTING IN A FRAGILE OCEAN

For centuries, humans have exploited the resources of the world's oceans with little concern for, or understanding of, how their collective activities caused harm. Nineteenth century Poet Lord Byron once wrote, "[m]an marks the earth with ruin, but his control stops with the shore."[13] His words reveal a commonly held, but incorrect assumption that humans are incapable of causing any lasting harm to the vast oceans. The current imperiled state of the world's oceans and the particular sensitivity and ecological importance of the Gulf ecosystem make imperative changes to the current environmental review practices. Despite exhibiting remarkable resiliency to anthropogenic insult for centuries, the world's oceans are increasingly showing signs of vulnerability to human influences. Research has unequivocally demonstrated that the synergistic effects of habitat destruction, overfishing, ocean warming, increased acidification and massive nutrient runoff are fundamentally altering once complex, vibrant

13. LORD BYRON, CHILDE HAROLD'S PILGRIMAGE 125 (2009) (1812–18).

marine ecosystems.[14] As marine biodiversity declines, ecosystems with intricate marine food webs are being degraded to primordial seas dominated by microbes, toxic algal blooms, jellyfish and disease.[15] Absent fundamental changes in the use and management of ocean resources, human activities may lead to a massive extinction in the ocean.[16] The Gulf's once pristine waters and productive ecosystems have been significantly altered as the result of anthropogenic insults. The primary drivers of ocean degradation are overexploitation, pollution, climate change, and ocean acidification.

A. *Overexploitation*

Fish provide a source of protein for almost half of the world's population, but that resource is at risk.[17] Technological advancements have dramatically and perhaps irreversibly altered fishing practices by allowing humans to span the globe to find fish in remote areas.[18] As a result, today, approximately 80% of all major marine fish stocks are listed as either fully exploited, overexploited, or recovering from depletion.[19]

Despite the worldwide decline in fish stocks, demand for fish in the U.S remains high.[20] The Gulf plays a vital role in meeting that demand, but increasing fishing activity in the Gulf poses a significant threat to the future sustainability of the Gulf.[21] To-

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14. *See, e.g.*, Jeremy B. C. Jackson, *Ecological Extinction and Evolution in the Brave New Ocean*, 105 PROC. OF THE NAT'L ACAD. OF SCI. 1148, 1148 (2008).

15. *Id.*

16. *Id.*

17. FOOD & AGRIC. ORG. OF THE U.N., STATE OF WORLD'S FISHERIES AND AQUACULTURE 2008 3 (2009) [hereinafter FAO WORLD FISHERIES], *available at* ftp://ftp.fao.org/docrep/fao/011/i0250e/i0250e.pdf (noting that fish provide approximately 2.9 billion people with at least 15% of their animal protein intake).

18. Kenneth R. Weiss, *ALTERED OCEANS: A Primeval Tide of Toxins (pt. 1)*, L.A. TIMES, July 30, 2006, http://www.latimes.com/news/local/la-me-ocean30jul30,0,7764272.story [hereinafter *Altered Oceans I*].

19. FAO WORLD FISHERIES, *supra* note 17, at 34.

20. In 2009, the average American ate 15.8 pounds of fish and shellfish, ranking the U.S. third behind China and Japan as the world's largest consumers. *See U.S. Seafood Consumption Declines Slightly in 2009*, NAT'l Oceanic & Atmospheric Admin. (Sept. 9, 2010), http://www.noaanews.noaa.gov/stories2010/20100909_consumption.html [hereinafter *NOAA Seafood*].

21. In 2008, fishermen harvested approximately 1.27 billion pounds of finfish and shellfish from the Gulf and earned approximately $659 million. Recreational fishermen took twenty-four million trips in the Gulf in 2008. *See Fish Stocks in the Gulf of Mexico, Fact Sheet*, NAT'L OCEANIC & ATMOSPHERIC ADMIN. (Apr. 2010), http://sero.nmfs.noaa.gov/sf/deepwater_horizon/Fish_economics_FACT_SHEET.pdf [hereinafter *NOAA Stocks*].

day, four of the top seven fishing ports in the nation are located in the Gulf.[22] The increasing fishing effort has the potential to significantly impair critical habitat in the Gulf that many endangered or threatened species rely on to survive.[23] It also has global implications for highly migratory species and other straddling fish stocks that migrate through Gulf waters and are managed to some degree by more than one coastal nation.[24]

B. *Pollution*

Despite the emergence of national and international laws that prohibit the direct discharge of pollutants into the marine environment, the world's oceans continue to serve as a depository for remnants of human activity. An incalculable amount of nutrients, oil, synthetic material, solid waste, sewage and toxic chemicals enter the sea each year as a result of human activity. The accumulation of these pollutants, coupled with climate-induced ocean acidification, has altered the basic chemistry of the seas, impaired critical marine habitats, and caused physiological changes that have reduced species resilience to environmental variability.[25] These impacts and others threaten to fundamentally alter the Gulf environment.

1. Nutrient Loading

Nutrient loading causes massive blooms of algae that produce and release potent neurotoxins into the surrounding environment.[26] These toxins alter food web-dynamics, cause illness or mortality to humans, mammals, birds, and fish, harm commercial fisheries, and negatively impact coastal communities.[27] Recent

22. *General Facts about the Gulf of Mexico,* U.S. ENVTL. PROT. AGENCY: GULF OF MEXICO PROGRAM, http://www.epa.gov/gmpo/about/facts.html#resources (last updated May 17, 2010).

23. *See generally* U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., MMS 2004-054, GEOLOGICAL AND GEOPHYSICAL EXPLORATION FOR MINERAL RESOURCES ON THE GULF OF MEXICO OUTER CONTINENTAL SHELF: FINAL PROGRAMMATIC ENVIRONMENTAL ASSESSMENT (2004), *available at* http://www.gomr.boemre.gov/PDFs/2004/2004-054.pdf.

24. *Straddling Stocks*, FOOD AND AGRIC. ORG. OF THE U.N.: FISHERIES & AQUACULTURE DEP'T, http://www.fao.org/fishery/topic/14769/en (last visited Jan. 24, 2011).

25. *See, e.g.*, Scott C. Doney, *The Growing Human Footprint on Coastal and Open-Ocean Biogeochemistry*, 328 SCI. 1512, 1512–16 (2010).

26. *Altered Oceans* I, *supra* note 18.

27. For example, more than 14,000 seals, sea lions, and dolphins that were either sick or dead have washed ashore on California's coast in the last decade alone. An additional 650 gray whales have washed up along the west coast over that period. In

evidence suggests that the problem may be getting worse.[28] The Gulf is particularly susceptible to nutrient loading. Each spring, nutrients from the Mississippi River enter the Gulf and spark a massive algae bloom.[29] The algae utilize oxygen in the water column for respiration and decomposition, and quickly reduce oxygen levels to concentrations below which life cannot survive.[30] This so called "Dead Zone" used to form every other year.[31] Now, the bloom occurs annually and stretches along the Gulf coast for more than 7,000 square miles between the mouth of the Mississippi River and Texas.[32] That area cannot support most marine life, and now resembles a primordial sea where bacteria and simple organisms thrive.[33]

2. Synthetic Pollutants

Since the 1950's, there has been a ten-fold increase every decade in the amount of plastics discarded into the sea.[34] The United Nations Environment Programme (UNEP) estimates that approximately 46,000 pieces of plastic litter are floating on every square mile of the oceans.[35] Most of the plastic will eventually

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2004, 800 adult harbor seals with no apparent injuries washed up dead on the Maine Coastline. In Florida, hundreds of dead manatees have washed ashore with no apparent injuries. *See* Kenneth R. Weiss, *Altered Oceans: Sentinels under Attack (pt. 2)*, L.A. TIMES, July 31, 2006, http://www.latimes.com/news/local/la-me-ocean31jul31,0,223033.story [hereinafter *Altered Oceans* II]; *see also* Leanne J. et al., *Brevetoxicosis: Red Tides and Marine Mammal Mortalities,* NATURE, June 9, 2005, at 755–56 (attributing sickness and death in marine organisms to exposure to toxins released from algae blooms brought about by excess nutrient loading in the sea).

28. Kenneth R. Weiss, *Altered Oceans: Dark Tides, Ill Winds (pt. 3)*, L.A. TIMES, Aug. 1, 2006, http://www.latimes.com/news/local/la-me-ocean1aug01,0,60488 24.story [hereinafter *Altered Oceans III*]. On Florida's Gulf Coast, residents complain that harmful algae blooms have become bigger, more frequent and longer-lasting. Toxins from these red tides have killed hundreds of sea mammals and caused emergency rooms to fill up with coastal residents suffering respiratory distress noting. One study that examined water samples dating to 1954 and found that toxic algae outbreaks off Florida's Gulf Coast are getting stronger, lasting longer and spreading farther. *Id.*; *see also Altered Oceans I*, *supra* note 18.

29. Elizabeth Carlisle, *The Gulf of Mexico Dead Zone and Red Tides*, LA. ENV'T, http://www.tulane.edu/~bfleury/envirobio/enviroweb/DeadZone.htm (last updated Jan. 5, 2000).

30. *Id.*

31. *Id.*

32. *Id.*

33. *Id.*

34. Kenneth R. Weiss, *Altered Oceans: Plague of Plastic Chokes the Seas (pt. 4)*, L.A. TIMES, Aug. 2, 2006, http://www.latimes.com/news/local/la-me-ocean2aug02,0,6507578.story [hereinafter *Altered Oceans IV*].

35. *Id.*

sink to impact benthic communities. Fishing vessels also frequently lose or purposely discard fishing gear.[36] The gear often entangles marine species before it sinks to cause harm to benthic communities. The Gulf, as part of the Wider Caribbean region, faces significant threats from synthetic pollutants. Indeed, UNEP has opined that marine litter "poses one of the most severe threats to the sustainability of the natural resources of sensitive habitats and wildlife and people of the Wider Caribbean region . . . ."[37]

3. Oil Pollution

Once introduced into the marine environment, oil respects no political boundary. As oil migrates through the marine environment, it may contaminate the sea water, damage estuaries, and cause a variety of lethal and sub-lethal effects to marine organisms.[38] Exposure to oil can result in reduced reproduction, altered development, impaired feeding, and decreased defense to disease.[39] Developing organisms (fish eggs and larvae), marine mammals, sea birds, intertidal and bottom dwelling organisms are uniquely vulnerable to oil exposure.[40] As the oil decays it sinks and interferes with marine habitats that depend on organisms to survive, such as coral reefs, mangrove swamps and salt marshes.[41]

C. *Climate Change and Ocean Acidification*

Oceans cover more than 70% of the earth's surface, and play an integral role in human survival by absorbing, storing, and redistributing solar energy to keep temperature within a range that supports life.[42] Climate change threatens to fundamentally alter

36. GRAME MACFADYEN ET AL., U.N. ENV'T PROGRAMME, ABANDONED, LOST OR OTHERWISE DISCARDED FISHING GEAR 47–48 (2009), *available at* http://www.unep.org/regionalseas/marinelitter/publications/docs/Marine_Litter_Abandoned_Lost_Fishing_Gear.pdf.

37. LJUBOMIR JEFTIC ET AL., U.N. ENV'T PROGRAMME, MARINE LITTER, A GLOBAL CHALLENGE 176 (2009), *available at* http://www.unep.org/regionalseas/marinelitter/publications/docs/Marine_Litter_A_Global_Challenge.pdf.

38. JONATHON L. RAMSEUR, CONG. RESEARCH SERV., RL 33705, OIL SPILLS IN U.S. COASTAL WATERS: BACKGROUND, GOVERNANCE, AND ISSUES FOR CONGRESS 4 (2010), *available at* http://fpc.state.gov/documents/organization/142741.pdf.

39. *Id.*

40. *Id.*

41. *Id.*

42. *How Much Water is There on, in, and above the Earth?*, USGS: SCIENCE FOR A CHANGING WORLD, WATER SCIENCE FOR SCHOOLS, http://ga.water.usgs.gov/edu/

this balance. As the global average ocean temperature increases, changes in sea level are expected to alter marine habitats, interfere with animal migratory patterns, and impair ecosystem structure and function.[43] Climate change has already fundamentally altered the chemistry of the ocean.

Approximately one quarter of all carbon dioxide emissions are absorbed by the earth's oceans.[44] When absorbed, atmospheric carbon dioxide dissolves and modifies the chemistry of sea water to make it more acidic.[45] Ocean acidity has increased by 30% since the industrial revolution, and in some areas the rate of change is so rapid that water may turn corrosive by 2050.[46] Left unchecked, ocean acidification is expected to cause wide scale species disruption, interfere with complex trophic dynamics, and cause fishing and tourism to decline.[47] Preliminary studies have revealed increasing acidification in some northern Gulf waters.[48]

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earthhowmuch.html (last modified Dec. 14, 2010); *see also Oceanic Heat Budget*, OCEAN WORLD, http://oceanworld.tamu.edu/educators/heat_budget/background/sys_struc/HB_sys_concepts.htm (last visited Mar. 14, 2011) (noting that oceans effectively capture a major portion of the sun's radiated energy and transfer much of it to the atmosphere).

43. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT (2007), *available at* http://www.ipcc.ch/publications_and_data/ar4/syr/en/mains1.html#11-1.

44. Christopher L. Sabine et al., *The Oceanic Sink for Anthropogenic CO_2*, 305 SCI. 367, 367–71 (2004) (reporting that since the industrial revolution, the ocean has absorbed roughly one-quarter of the carbon dioxide produced by burning fuels).

45. *Id.*

46. Ken Caldeira & Michael E. Wickett, *Anthropogenic Carbon and Ocean pH*, 425 NATURE 365, 365 (2003); *see also* Richard A. Feely et al., *Evidence for Upwelling of Corrosive "Acidified" Water onto the Continental Shelf*, 320 SCI. 1490, 1490–92 (2008) (noting that water showing up off the coast of northern California was acidic enough to dissolve seashells); James C. Orr et al., *Anthropogenic Ocean Acidification over the Twenty-First Century and Its Impact on Calcifying Organisms*, 437 NATURE 681, 681–86 (2005).

47. KRISTINA M. GJERDE, U.N. ENV'T PROGRAMME, UNEP REGIONAL SEAS REPORT AND STUDIES NO. 178, ECOSYSTEMS AND BIODIVERSITY IN DEEP WATERS AND HIGH SEAS (2006) [hereinafter UNEP ECOSYSTEMS], *available at* http://www.unep.org/pdf/EcosystemBiodiversity_DeepWaters_20060616.pdf; *see also* Elizabeth M. Griffith et al., *A Dynamic Marine Calcium Cycle during the Past 28 Million Years*, 322 SCI. 1671, 1671–74 (2008). As one author notes, "[c]oral reefs will go the way of the dodo unless we quickly cut carbon-dioxide emissions."

48. W. Cai et al., *Enhanced Ocean Acidification in the Northern Gulf of Mexico Hypoxic Bottom Waters* 1 (Am. Geophysical Union, Abstract No. OS22A-07, 2010), *available at* http://adsabs.harvard.edu/abs/2010AGUFMOS22A.07C (reporting increased ocean acidification in northern Gulf waters that could eventually make the waters unfit for carbonate shell bearing organisms).

D. *Deepwater Environments–The Last Frontier*

Deepwater environments are critically important to the healthy functioning of the world's oceans. Historically, however, environmental concern over marine resources has focused on the coastal waters—near shore areas less than 200 meters deep—where most commercially important marine species are found.[49] This area comprises less than 5% of the world's oceans, and its health and productivity depend on the remaining 95% of the deepwater ocean.[50] In fact, a large fraction of biodiversity and biomass production in coastal areas is directly linked to and dependent upon deep sea ecosystems.[51]

Although relatively little is known about inhabitants of deep sea environment, those organisms studied to date show common traits of slow growth, late maturity, slow reproduction, long life (200 years in some cases), and low productivity.[52] These traits have important implications for the sustainable management and use of deep-sea resources.[53] Absent effective management strategies, deepwater species and their associated ecosystems can quickly be depleted below sustainable levels.[54] UNEP recommended that governments incorporate precautionary approaches to manage deepwater environments that take into account the full range and cumulative effects of potential human activities and impacts, and added, "[t]he conservation and sustainable use of the vulnerable ecosystems and biodiversity in deep waters and high seas are among the most critical ocean issues and environmental challenges today."[55]

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49. *See, e.g., Coastal Watershed Factsheets–Nearshore Waters and Your Coastal Watershed*, U.S. ENVTL. PROT. AGENCY, http://water.epa.gov/type/oceb/fact3.cfm (last updated Jan. 22, 2010) (noting that nearshore waters provide habitat for 80% of the fish species in the United States).

50. SYBILLE VAN DEN HOVE & VINCENT MOREAU, U.N. ENVT'L PROGRAMME, DEEP-SEA BIODIVERSITY AND ECOSYSTEMS: A SCOPING REPORT ON THEIR SOCIO-ECONOMY, MANAGEMENT AND GOVERNANCE 3 (2007) [hereinafter UNEP BIODIVERSITY], *available at* http://www.unep.org/regionalseas/publications/reports/RSRS/pdfs/rsrs184.pdf.

51. *Id.* at 26. These ecosystems are important contributors to ocean primary production, nutrient cycling, gas and climate regulation, waste absorption and detoxification, biological control of invasive species, and other processes important to humans. *Id.* at 26–27.

52. *Id.* at 34. These traits explain why deepwater demersal trawling is so devastating to deepwater communities. *Id.*

53. *Id.* at 34.

54. UNEP ECOSYSTEMS, *supra* note 47, at 7.

55. *Id.*

As the oil industry moves its activities into deeper water to find oil reserve, the risk of harm increases. As UNEP noted:

> As human activities, such as fishing and oil, gas and mineral exploration and exploitation, move into deeper waters both within and beyond national jurisdiction, the relative lack of data on deep seabed ecosystems and biodiversity makes it difficult to predict and control their impacts.[56]

The increasing demand for oil continues to push drilling activities into deeper water, and threatens to fundamentally alter the deep sea environment in the Gulf. Given the industry's attempts to expand the oil depletion window and sustain profits from a non-renewable resource, the outlook for protecting the Gulf environment under the current status quo is not promising. The industry must make fundamental changes to ensure that its actions do not impair the future sustainability of renewable resources in the Gulf.

III.
THE SEARCH FOR LIQUID GOLD: HIGH STAKES PROSPECTING IN THE GULF

Despite increasing interest in renewable energy, oil is projected to remain a primary source of energy for the nation for several decades.[57] Today, oil accounts for approximately 40% of U.S. energy needs.[58] In 2009, the United States extracted more than nine million barrels of crude oil per day—third worldwide behind Russia and Saudi Arabia.[59] Although it has less than 3% of the world's oil resources, the United States is the world's largest consumer of oil, using more than 19 million barrels (798 million gallons) or 25% of the world's oil consumption, each day.[60]

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56. *Id.*

57. U.S. ENERGY INFO. ADMIN., DOE/EIA-0383, ANNUAL ENERGY OUTLOOK 2010 WITH PROJECTIONS TO 2035 2–3 (2010), *available at* http://www.eia.doe.gov/oiaf/archive/aeo10/pdf/0383(2010).pdf.

58. RAMSEUR, *supra* note 38, at 1.

59. *World Factbook: Country Comparison: Oil Production*, CENT. INTELLIGENCE AGENCY, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2173rank.html?countryCode=# (last visited Jan. 20, 2011).

60. *World Factbook: Country Comparison: Oil Consumption*, CENT. INTELLIGENCE AGENCY, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2174rank.html?countryCode=# (last visited Jan. 20, 2011).

A. *Gulf of Mexico: The Nation's Testing Ground*

Since 1947, the emergence of new technologies has allowed the oil industry to extend exploration efforts into deeper waters and to produce more oil at lower costs.[61] The Gulf region comprises one of the most important areas in the United States for oil exploration, development and production.[62] Today, approximately 30% of all crude oil extracted from U.S. territories is obtained from the offshore Gulf environment and that amount is rising.[63] More than 40% of the total U.S. petroleum refining capacity is located along the Gulf Coast.[64] Between 1981 and 2010, monthly crude oil production in the Gulf more than doubled.[65] Further, more than half of all crude oil imported into the U.S. arrives via the Gulf Coast.[66]

The oil industry continues to invest huge sums to locate and retrieve remaining oil reserves.[67] As a result, the percentage of oil produced from water depths greater than 200 meters in the Gulf has steadily increased from 17.2% in 1992 to 76% in 2007.[68] That trend is likely to continue.[69] Between 1992 and 2009 the number of active leases in the Gulf increased from 5,600 to 7,310 but the number of those leases that cover deepwater sites has increased from 27% to 58%.[70] That increased activity poses sub-

61. *About NOIA*, NAT'L OCEAN INDUST. ASS'N, http://www.noia.org/website/article.asp?id=123 (last visited Apr. 18, 2011).

62. *Gulf of Mexico Fact Sheet*, U.S. ENERGY INFO. ADMIN.: INDEP. STAT. & ANALYSIS, http://www.eia.gov/special/Gulf_of_mexico/index.cfm (last updated Dec. 30, 2010).

63. *Id.*

64. *Id.*

65. *See, e.g., Monthly Federal Offshore—Gulf of Mexico Field Production of Crude Oil*, U.S. ENERGY INFO. ADMIN.: INDEP. STAT. & ANALYSIS, http://www.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfp3fm1&f=m (last updated Dec. 30, 2010)

66. *See, e.g., Imports by Area of Entry*, U.S. ENERGY INFO. ADMIN.: INDEP. STAT. & ANALYSIS, http://tonto.eia.doe.gov/dnav/pet/pet_move_imp_a_EP00_IM0_mbbl_m.htm (last updated Dec. 30, 2010).

67. *See B.P. Discovers Vast Oil Reserve in Gulf of Mexico,* ASSOCIATED PRESS, Sept. 6, 2009, http://www.foxnews.com/scitech/2009/09/03/bp-discovers-vast-oil-reserve-gulf-mexico/ (reporting that a production platform costs more than $1 billion to build. Drilling a deep-water well can add another $100 million, and if crude is located, it could cost another $50 million to bring the oil to the surface).

68. *See, e.g., Annual Gulf of Mexico Federal Offshore Percentage of Crude Oil Production from Greater than 200 Meters Deep*, U.S. ENERGY INFO. ADMIN.: INDEP. STAT. & ANALYSIS, http://tonto.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RCRR73R3FM_4&f=A (last updated Dec. 30, 2010).

69. *Id.*

70. NIXON, *supra* note 8, at 10.

stantial threats to the Gulf environment. Sadly, it took the DWH spill to remind the nation of just how risky deep sea drilling is.

B. *Deepwater Horizon: Leaving a Legacy of Environmental Harms*

Even prior to the DWH accident, scientists recognized that the Gulf ecosystem was "under significant human-caused and environmental stress."[71] The DWH accident further impaired the system in a myriad of ways. Over the course of eighty-seven days, approximately 170 million gallons of crude oil escaped into the Gulf environment.[72] Despite a massive clean-up effort, most of the oil released from the well remained in the environment.[73]

Faced with an inability to stop the flow of oil, the U.S. Environmental Protection Agency (EPA) authorized British Petroleum (BP) to use a highly controversial chemical dispersant on the surface of the water and at the well head.[74] By design, dispersants break oil apart into smaller molecules that sink or evaporate over time.[75] Approximately 1.84 million gallons of dispersants was used to treat the spill, 771,000 of which were applied at the well-head 5,000 feet below the surface.[76] By breaking down the oil, dispersants actually increase the exposure of

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71. KIM B. RITCHE & BRIAN D. KELLER, NAT'L OCEANIC & ATMOSPHERIC ADMIN., NMSP-08-04, A SCIENTIFIC FORUM ON THE GULF OF MEXICO: THE ISLANDS IN THE STREAM CONCEPT, MARINE SANCTUARIES CONSERVATION SERIES 8 (2008), *available at* http://sanctuaries.noaa.gov/science/conservation/pdfs/gom.pdf.

72. Campbell Robertson & Clifford Kraus, *Gulf Spill Is the Largest of Its Kind, Scientists Say,* N.Y. TIMES, Aug. 3, 2010, http://www.nytimes.com/2010/08/03/us/03spill.html; Maureen Hoch, *New Estimate Puts Gulf Oil Leak at 205 Million Gallons*, PBS NEWSHOUR, Aug. 2, 2010, http://www.pbs.org/newshour/rundown/2010/08/new-estimate-puts-oil-leak-at-49-million-barrels.html# (noting that of the 4.9 million barrels of oil released from the oil well during the eighty-seven day release, 800,000 barrels were captured by containment devices).

73. HOPKINSON, *supra* note 11 (stating that independent scientific evaluations of the data released by the National Incident Command on Aug. 2, 2010 revealed that as much as 90% of the oil remains either at or below the surface of the Gulf).

74. Dispersants are blends of surfactants and solvents designed to prevent oil slicks by breaking up the oil. *See* Rebecca Renner, *US Oil Spill Testing Ground for Dispersants*, CHEMISTRY WORLD, June 2010, *available at* http://www.rsc.org/chemistryworld/Issues/2010/June/USOilSpillTestingGroundForDispersants.asp.

75. INT'L TANKER OWNERS POLLUTION FED'N LTD. (ITOPF), THE USE OF CHEMICAL DISPERSANTS TO TREAT OIL SPILLS 1-2 (2005), *available at* http://www.itopf.com/_assets/documents/tip4.pdf.

76. *Operations and Ongoing Response July 22, 2010*, RESTORETHEGULF.GOV (July 22, 2010, 5:01 AM), http://www.restoretheGulf.gov/release/2010/07/22/operations-and-ongoing-response-july-22-2010.

fish to hydrocarbons in crude oil.[77] Dispersants alone can also be toxic to fish.[78]

The use of dispersants also trades coastal impacts for impacts to the marine environment, and represents a tradeoff of harms that favors the protection of near shore environments over deepwater environments.[79] By spraying massive quantities of dispersants on the sea surface and at the well head, BP ensured that a majority of the oil remained below the surface of the water. It did this with approval from the EPA, even though there are significant currents in the Gulf that are capable of swiftly transporting oil and dispersants throughout the marine environment.[80]

The impact of the DWH oil spill to the Gulf could be staggering. The National Oceanic and Atmospheric Administration (NOAA) expects the impact of oil on larval fish to result in declines in recruitment in future age classes that impact the ability of already overfished fisheries to rebound.[81] Bluefin tuna are particularly vulnerable to the spill, because the Gulf serves as one of only two known nursery grounds for the critically overfished species.[82] The tuna were spawning in the Gulf at the time of the accident.[83] The impact from exposure is expected to be so great that NOAA launched a study to determine whether exposure to the oil has significantly decreased Bluefin tuna numbers to warrant listing the species as endangered.[84] NOAA also noted that if the oil from the DWH spill settled to the bottom of near shore/inshore areas, most of the forty-two reef fish species managed in the Gulf would be impacted.[85] BP's use of dispersants ensured that a large portion of the oil broke up and settled

77. Shahunthala D. Ramachandran et al., *Oil Dispersant Increases PAH Uptake by Fish Exposed to Crude Oil*, 59 ECOTOXICOLOGY & ENVTL. SAFETY 300, 300 (2004).

78. Anita George-Aires & James R. Clark, *Acute Aquatic Toxicity of Two Corexit Dispersants,* 40 CHEMOSPHERE 897, 901 (2000).

79. COASTAL RESPONSE RESEARCH CTR., DEEPWATER HORIZON DISPERSANT USE MEETING REPORT MAY 26-27, 2010 15 (2010) [hereinafter DEEPWATER REPORT], *available at* http://www.crrc.unh.edu/dwg/dwh_dispersants_use_meeting_report.pdf.

80. NIXON, *supra* note 8, at 28.

81. *NOAA Stocks*, *supra* note 21.

82. *Spawning Habitat of Bluefin Tuna in Gulf of Mexico: Critical Area Intersects Deepwater Horizon Oil Spill*, SCIENCEDAILY (May 31, 2010), http://www.sciencedaily.com/releases/2010/05/100528210726.htm.

83. *Id.*

84. *Id.*

85. *NOAA Stocks*, *supra* note 21.

on the bottom.[86] One recent study revealed that a large quantity of oil settled to the ocean floor and is "effecting the ecosystem from the bottom up."[87] As a result, scientists have downgraded the overall health of the Gulf system.[88]

Three commercially important crab species, blue crab, Gulf stone crab, and stone crab, all forage along the sea floor in the near shore environment.[89] Oil on the sea floor may contaminate the food these crabs feed upon, and negatively impact each species.[90] The impact on the shrimp industry could also be extensive. Several shrimp species migrate offshore during late development and are expected to be impacted by the spill in the future.[91]

The impact from oil exposure on cetaceans, sea birds, sea turtles and other marine and coastal organisms varies, and may manifest in external or internal injuries. By swimming through the oil and/or dispersants, the external body parts of organisms, including skin and eyes, may become covered by the toxic chemicals.[92] By eating, swallowing or breathing in oil or dispersants, the organism may be impacted internally.[93] The timeline between exposure and injury is unclear, and in many cases it may be impossible to immediately determine the extent of the damage caused to a particular species.[94] Responders have compiled a list of animals impacted by the spill.

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86. *Id.*

87. Seth Borenstein & Cain Burdeau, *AP Enterprise: Scientists Lower Gulf Health Grade*, ASSOCIATED PRESS, Oct. 18, 2010, http://www.journalgazette.net/article/20101018/APA/1010180877 (quoting Ernest Pebbles of University of South Florida) (reporting that results from seventy-eight core samples of sea floor sediment contained oil and no living organisms).

88. *Id.*

89. *NOAA Stocks*, *supra* note 21.

90. *Id.*

91. *Id.*

92. *Sea Turtles, Dolphins, and Whales and the Gulf of Mexico Oil Spill*, NOAA FISHERIES: OFF. OF PROTECTED RES., http://www.nmfs.noaa.gov/pr/health/oilspill/ (last visited Mar. 14, 2011).

93. *Id.*

94. *Impacts of Oil on Marine Mammals and Sea Turtles*, NOAA FISHERIES SERV., http://www.nmfs.noaa.gov/pr/pdfs/health/oil_impacts.pdf (last visited Apr. 18, 2011) (noting that long term chronic effects such as decreased survival and lowered reproductive success may occur to wildlife after an oil spill). *See also EPA Response to BP Spill in Gulf of Mexico—Questions and Answers on Dispersants*, ENVTL. PROT. AGENCY, http://www.epa.gov/bpspill/dispersants-qanda.html#q7 (last updated Jan. 10, 2011) (noting that the long term effects of dispersants on aquatic life are unknown).

As of October of 2010, a total of 2,080 birds, 456 sea turtles, and 2 marine mammals have been captured alive with visible exposure to the oil.[95] Animals found dead with visible evidence of oil exposure include 2,263 birds, 17 sea turtles, and 4 marine mammals.[96] However, it is the number of animals found dead with no visible exposure to oil that is most troubling. As of October of 2010, a total of 3,827 birds, 308 sea turtles, and 91 marine mammals have been recovered dead with no outward sign of exposure to oil.[97] These numbers reflect the number of animals actually recovered, and likely represents only a small fraction of the total number of organisms impacted by the spill.

There is no way to know how many other organisms were exposed to the oil and/or dispersants, and no way to predict how such exposure will impact different species in the future. For example, all species of sea turtles inhabiting the Gulf are either endangered or threatened.[98] One species, the critically endangered Kemp's Ridley, nests only in the western Gulf of Mexico and forages offshore in the area where the spill occurred.[99] The Brown Pelican is another Gulf species of special concern. Listed as endangered since the early 1970's as a result of DDT exposure, the Brown Pelican made a dramatic comeback after DDT was banned.[100] The bird was formally removed from the list of endangered or threatened species only five months before the DWH spill.[101] Only time will reveal how these animal populations will respond to the spill.

Given its resources, refining activity, and increasing vessel traffic, the Gulf region is uniquely vulnerable to oil spills. Not surprisingly, more oils spills have occurred in the Gulf of Mexico than in any other area of the U.S.[102] Although the total number

95. U.S. FISH & WILDLIFE SERV. ET AL., DEEPWATER HORIZON RESPONSE CONSOLIDATED FISH AND WILDLIFE COLLECTION REPORT 1 (2010), *available at* http://www.restoretheGulf.gov/sites/default/files/documents/pdf/Consolidated%20Wildlife%20Table%20101410.pdf.

96. *Id.*

97. *Id.*

98. NAT'L OCEANIC & ATMOSPERHIC ADMIN., NOAA'S OIL SPILL RESPONSE: FISHING INDUSTRY IN THE GULF OF MEXICO 2 (2010), *available at* http://www.noaa.gov/factsheets/new%20version/fishstocks_gulf.pdf.

99. *Id.*

100. *Brown Pelican Removed from Endangered Species List*, U.S. DEP'T OF INTERIOR (Nov. 11, 2009), http://www.doi.gov/news/Brown-Pelican-Off-Endangered-Species-List.cfm.

101. *Id.*

102. RAMSEUR, *supra* note 38, at 33.

of oil spills has declined over the last several decades, the risk of offshore spills remains high.[103] Between 1981 and 2001, no oil spill over 1,000 barrels occurred from federally regulated offshore facilities.[104] Since 2002, there have been at least seven oil spills over 1,000 barrels from offshore facilities in federal waters.[105] This is problematic from an environmental perspective, but it is also troubling because the overall decline in spills has also led to a dangerous shortage of personnel knowledgeable in managing spill clean-up operations, particularly large spills.[106] The decline in oil spills has also served as disincentive to invest in response technology sufficient to address a catastrophic oil spill like the one that actually occurred. As the DWH response revealed, the industry simply did not have the technology or knowledge base to immediately regain control of the well. Attempt after attempt failed, and in the process millions of gallons of oil flowed into the Gulf environment. Another accident like DWH could happen again. Today, more than 27,000 oil wells and over 1,000 oil rigs sit abandoned in the Gulf without proper checks to discover and control leaks.[107]

IV.
NEPA AND OFFSHORE OIL PRODUCTION

Deepwater drilling is subject to environmental review under the National Environmental Policy Act of 1969 (NEPA). However, current regulatory practices allow agencies to categorically

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103. *Id.* at i.

104. *Id.* at 32.

105. *Id.* The report notes that there have been six spills. Since the report was published, the Deepwater Horizon spill occurred. Additionally, an oil well platform caught fire in the Gulf. The Coast Guard initially reported that oil sheen a mile long and 100 feet wide had begun to spread from the site, but retracted this statement later when it could not find the sheen. It is unclear whether the oil was actually released or not. *Id.*

106. *See* U.S. DEP'T HOMELAND SEC., U.S. COAST GUARD, CALIFORNIA SONS 04: AFTER ACTION REPORT 46 (2004), *available at* http://www.documentcloud.org/documents/2614sons_2004_aar_10sep2004.html.

> Oil spill response personnel did not appear to have even a basic knowledge of the equipment required to support salvage or spill cleanup operations .... There was a shortage of personnel with experience to fill key positions. Many middle-level spill management staff had never worked a large spill and some had never been involved in an exercise. As a result, some issues and complex processes unique to spill response were not effectively addressed.

Id. at 52.

107. *U.S.: 3,500 Unused Gulf Wells Must Be Plugged,* MSNBC (Sep. 15, 2010, 5:45 PM), http://www.msnbc.msn.com/id/39195347/ns/us_news-environment/.

exclude certain aspects of proposed activities, such as BP's exploration plan, from environmental review.[108] As a result, such plans never receive the meaningful environmental review necessary to protect the ocean environment from harm associated with the activities.

NEPA is considered the cornerstone of U.S. environmental law.[109] Its provisions reflect a national environmental policy that requires federal agencies to integrate environmental values into the decision making processes before taking action.[110] Substantively, NEPA requires federal agencies to "use all practical means" consistent with national policy to allow Americans to "attain the widest range of beneficial use of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."[111] Procedurally, NEPA requires federal agencies to take a "hard look" at proposals before acting to reduce, mitigate or eliminate harm to the environment whenever possible and to disclose publicly the details of proposed agency projects or actions and their likely environmental impacts.[112] Categorical exclusions circumvent this valuable process by denying the public the opportunity to provide meaningful comment on certain activities that may have a detrimental impact to the environment. Moreover, in a tiered review process like the one used for offshore oil leases, categorical exclusions elevate expediency over meaningful environmental review.

A. *Council on Environmental Quality*

To ensure that NEPA worked, Congress established, in the Executive Office of the President, the Council on Environmental Quality (CEQ).[113] Among its duties, the CEQ is charged with evaluating federal programs and activities to ensure their compliance with the national environmental policy set forth in

108. 40 C.F.R. § 1508.4 (2010).

109. JAY E. AUSTIN ET AL., ENVTL. LAW INST., JUDGING NEPA: A "HARD LOOK" AT JUDICIAL DECISION MAKING UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 2 (n.d.), *available at* http://www.endangeredlaws.org/downloads/JudgingNEPA.pdf; *see also* Nat'l Envtl. Pol'y Act of 1969, 42 U.S.C. §§ 4321–4347 (2006); CONG. REC. S4141 (daily ed. Mar. 24, 1992) (statement of Sen. John Chafee).

110. 42 U.S.C. § 4321 (2006).

111. 42 U.S.C. § 4331(b)(3) (2006).

112. *See* Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976) (noting that an agency is required to take a "hard look" at the potential environmental impacts of a proposed action before proceeding).

113. 42 U.S.C. § 4342 (2006).

NEPA.[114] The CEQ is also charged with developing and recommending national policies that foster and promote the improvement of environmental quality consistent with NEPA.[115] Because NEPA did not assure that agencies had access to environmental expertise to properly consider the environmental effects of a proposed action, Congress charged the EPA with reviewing an agency's environmental impact assessment for compliance with NEPA.[116] The EPA is required to review proposed agency actions for compliance with NEPA, and may refer the matter to the CEQ if the agency does not make sufficient revisions to make the project environmentally satisfactory.[117]

B. *NEPA Compliance*

Each federal agency is required to establish specific criteria that the agency will utilize in determining the level of environmental review that is required for a proposed action or class of actions under their jurisdiction.[118] For major federal actions that will significantly affect the quality of the human environment, the responsible agency is required to provide an Environmental Impact Statement (EIS) detailing the environmental impacts of the proposed action.[119] To determine whether an impact will be significant, the agency must consider the context of the action and the intensity of the action, with due consideration given for the cumulative nature of the activity, the short and long terms effects of the action, and the unique or endangered resources of the area impacted.[120]

In those instances where an agency does not know, at the time of submitting a proposal for federal action, whether the impacts will be significant, the agency may prepare an Environmental Assessment (EA).[121] The EA is a concise public document that provides sufficient evidence and analysis for determining whether the agency needs to prepare an EIS.[122] If the agency

114. 42 U.S.C. § 4344(3) (2006).
115. 42 U.S.C. § 4344(4) (2006).
116. *See* S. Rep. No. 91-1196, at 43 (1970).
117. Clean Air Act, 42 U.S.C. § 7609 (2006).
118. 40 C.F.R. § 1500.6 (2010).
119. 42 U.S.C. § 4332 (c)(i) (2006).
120. 40 C.F.R. § 1508.27 (2010).
121. 40 C.F.R. § 1508.9 (2010).
122. *Id.*

determines that it does need to prepare an EIS, it will issue a finding of no significant impact (FONSI).[123]

Under NEPA, agencies have discretion to find that certain actions or classes of actions do not individually or cumulatively have a significant effect on the human environment.[124] Once an agency categorically excludes an action or class of actions from the NEPA requirements, the agency is not required to provide any environmental analysis or documentation to support the decision for subsequent activities.[125] Agency officials, however, must ensure that the procedures under which a categorical exclusion has been made considers "extraordinary circumstances" in which a normally excluded action could have significant environmental effects.[126] This "extraordinary circumstances" restriction has been applied where endangered species or other important natural resources may be affected by the proposed action.[127]

C. *NEPA's "Hard Look" Requirement*

Although NEPA does not require that environmental impacts be avoided or even minimized, it does require agencies to take a "hard look" at proposed actions prior to proceeding to assess the potential environmental impacts of the action.[128] Agencies are required to consider in the EIS, inter alia, "impacts which have catastrophic consequences even if their probability of occurrence is low" so long as the potential impact is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.[129] The "rule of reason" ensures that "com-

123. *Id.* § 1508.9(a)(1) (noting that in the event the agency determines through its EA that an EIS is not necessary, the Agency must prepare a Finding of No Significant Impact (FONSI)).

124. 40 C.F.R. § 1508.4.

125. Nancy H. Sutley, *Memorandum for Heads of Federal Departments and Agencies: Establishing and Applying Categorical Exclusions under the National Environmental Policy Act*, COUNCIL ON ENVTL. QUALITY, 10 (Feb. 18, 2010), http://ceq.hss.doe.gov/nepa/regs/Categorical_Exclusion_Draft_NEPA_Guidance_FINAL_02182010.pdf (noting that the administrative record for establishing the categorical exclusion may be considered sufficient documentation for applying the categorical exclusion to future actions).

126. *Id.*

127. *See, e.g.*, Sw. Ctr. for Biological Diversity v. U.S. Forest Serv., 100 F.3d 1443, 1446 (9th Cir. 1996) (finding Forest Service did not violate NEPA by issuing a categorical exclusion where there were no extraordinary circumstances that would prohibit the issuance of a categorical exclusion).

128. Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976).

129. 40 C.F.R. § 1502.22(b)(1) (2010).

mon sense and reason are not lost in the rubric of regulation."[130] At a minimum, an EIS must enable the decision-maker to consider fully the environmental factors involved and to make a reasoned decision after balancing the risks of harm to the environment against the benefits to be derived from the proposal.[131]

Courts typically defer to the agency's decision in implementing a categorical exclusion pursuant to its own regulations.[132] However, in those instances where an otherwise excluded action may have a significant environmental effect, courts have not hesitated to invalidate an agency's decision where the facts show that the decision to categorically exclude the activity from review was arbitrary and capricious or otherwise unreasonable.[133]

In multi-stage projects, the environmental review process proceeds in measured steps with multiple stages of environmental review. In theory, as the proposed activity moves toward implementation, the level of environmental review becomes more focused. In this type of tiered environmental review process, the agency must determine at each stage whether to categorically exclude activities, perform an EA, or proceed to an EIS.[134] In a tiered review process, if the agency provides insufficient site-specific analysis in a prior EIS to allow the agency to rely upon the EIS in finding that the excluded activity will have no significant impact on the human environment, the court will typically find the exclusion invalid.[135]

D. *NEPA and Offshore Oil Drilling*

NEPA and the Outer Continental Shelf Lands Act (OCSLA) act in a complimentary manner to ensure that the environmental impacts from offshore oil exploration and development are considered before land is leased. The OCSLA established federal jurisdiction over submerged oil and natural gas resources on the Outer Continental Shelf (OCS) and created a procedural framework to allow for "expedited exploration and development" of

130. 51 Fed. Reg. 15,621 (Apr. 26, 1986) (amending 40 C.F.R. § 1502.22(b)) .

131. Suffolk County v. Sec'y of the Interior, 562 F.2d 1368, 1375 (2d Cir. 1977).

132. Bicycle Trails Council of Marin v. Babbitt, 82 F.3d 1445, 1456 (9th Cir. 1996).

133. Mississippi *ex rel.* Moore v. Marsh, 710 F. Supp. 1488, 1504 (S.D. Miss. 1989) (finding that Army Corp of Engineer's decision to categorically exclude a river maintenance from NEPA review was unreasonable).

134. Guidance Regarding NEPA Regulations, 48 Fed. Reg. 34263-01 (July 28, 1983).

135. *Id.* at 1506.

those resources to meet U.S. energy and security demands.[136] The Act also required the Department of Interior (DOI) to "balance orderly energy resource development with protection of the human, marine, and coastal environments."[137] The OCSLA requires the DOI to ensure that oil and gas are extracted from the outer continental shelf in a manner that minimizes damage to the local environment on the OCS.[138]

The DOI is responsible for creating a schedule of future leasing and exploration activities on the OCS, and typically produces a five-year program.[139] Each lease conveys certain rights for exploration, development and production of oil and gas resources from OCS areas under federal jurisdiction.[140] Those rights are delineated in either an exploration plan or a development and production plan.

In 1978, Congress amended the OCSLA to exempt oil development and production plans in the Gulf from environmental review under OCSLA.[141] That amendment provided:

> Sec. 25. Oil and Gas Development and Production.
>
> (a)(1) Prior to *development and production* pursuant to an oil and gas lease issued after the date of enactment of this section in any area of the outer Continental Shelf, *other than the Gulf of Mexico*, or issued or maintained prior to such date of enactment in any area of the outer Continental Shelf, *other than the Gulf of Mexico*, with respect to which no oil or gas has been discovered in paying quantities prior to such date of enactment, the lessee shall submit a development and production plan . . . to the Secretary, for approval
>
> . . .
>
> (e)(1) At least once the Secretary shall declare the approval of a *development and production plan* in any area or region . . . of the outer Continental Shelf, *other than the Gulf of Mexico*, to be a major Federal action.[142]

The reason for this exemption is unclear, but it appears that Congress made the change to "expedite exploration and develop-

136. 43 U.S.C. § 1802(1) (2006). The Outer Continental Shelf is an area of submerged lands, subsoil, and seabed that lies between the outer seaward reaches of a state's jurisdiction and that of the United States. 43 U.S.C. § 1331(a) (2006).

137. 43 U.S.C. § 1802(2)(A).

138. 43 U.S.C. § 1334(a) (2006); 43 U.S.C. § 1332(3) (2006); 43 U.S.C. § 1332(6) (2006).

139. 43 U.S.C. § 1344 (2006).

140. *Id.*

141. Outer Continental Shelf Lands Act Amendments of 1978, Pub. L. No. 95–372, 92 Stat. 629 (1978).

142. *Id.* (emphasis added).

ment of the Outer Continental Shelf."[143] The amendment did not expressly exempt exploration plans, such as BP's Gulf Coast plan, from environmental review. In fact, the amendment requires holders of leases to submit an exploration plan for approval by the Secretary of the Interior.[144] The Secretary may issue an exploration permit only after the Secretary finds that "such exploration will not be unduly harmful to aquatic life in the area, result in pollution, create hazardous or unsafe conditions, [or] unreasonably interfere with other uses of the area . . . ."[145] Thus, BP's exploration plan should have been subject to both NEPA review and environmental review under OCSLA.

E. *Deepwater Horizon–MMS review of BP Plan*

At the time of the DWH accident, MMS was the agency charged with managing the nation's natural gas, oil and other mineral resources on the OCS, and was responsible for assessing the environmental impacts of proposed offshore oil exploration and development activities prior to granting a lease.[146] MMS utilized a tiered review process that ultimately led to its decision to categorically exclude BP's exploration plan from environmental review.[147] Tiered review is acceptable under NEPA, and required MMS to incorporate prior environmental reviews into subsequent, site-specific analysis when considering the environmental impacts of offshore exploration activities.[148] However, tiered review presupposes that each step of the process was conducted appropriately. An analysis of the environmental review conducted by MMS demonstrates that MMS had no legitimate basis to exclude BP's exploration plan from environmental review. More importantly, this flawed review process served as the basis for granting many active leases in the Gulf.

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143. 43 U.S.C. § 1802(1) (2006).

144. 43 U.S.C. § 1340(c)(1) (2006).

145. *Id.* § 1340(g)(3).

146. On May 19, 2010, the MMS was reorganized and renamed Bureau of Ocean Energy Management, Regulation and Enforcement. *See* INTERIOR ORDER, *supra* note 12.

147. EXEC. OFFICE OF THE PRESIDENT, 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 17 (2010), *available at* http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ocs-nepa.pdf.

148. *Id.* at 22.

1. MMS: Environmental Review for BP Lease

Under its 2004 internal NEPA compliance procedures, MMS was required to conduct an EIS before approving a five-year offshore oil and gas lease program, approving offshore lease sales, or before approving "offshore oil and gas development and production plan in any area or region of the offshore, other than the central or western Gulf of Mexico . . ."[149] If MMS proposed not to prepare an EIS for any of these actions, it was required to prepare an EA.[150] However, MMS procedures allowed for the categorical exclusion from NEPA review of:

> (10) Approval of an offshore lease or unit *exploration* development/production plan . . . in the *central or western Gulf of Mexico* (30 C.F.R. 250.2) except those proposing facilities: (1) In areas of high seismic risk or seismicity, relatively untested deep water, or remote areas; or (2) within the boundary of a proposed or established marine sanctuary, and/or within or near the boundary of a proposed or established wildlife refuge or areas of high biological sensitivity; or (3) in areas of hazardous natural bottom conditions; or (4) utilizing new or unusual technology.[151]

MMS may have used this as the basis to exempt BP's exploration plan from review.[152] In effect, it appears MMS interpreted the language in the 1978 OCSLA amendment to permit an exemption that Congress never authorized. Because the accident happened at the exploration stage, BP had not yet submitted a development or production plan. Even if MMS had the authority to issue a categorical exclusion for exploration activities, the review process was fatally flawed from the beginning.

MMS issued a final programmatic EIS for its Five Year Offshore Oil and Gas Leasing Program in April of 2007.[153] The pro-

149. U.S. DEP'T. OF INTERIOR, 516 DM 15, DEPARTMENTAL MANUAL 15.4 (A)(1)-(3) (2004) [hereinafter DEP'T MANUAL], *available at* http://206.131.241.18/app_DM/act_getfiles.cfm?relnum=3625. For a detailed review of MMS review process, see KRISTEN ALEXANDER, CONG. RESEARCH SERV., RL 41265, THE 2010 OIL SPILL: THE MINERALS MANAGEMENT SERVICE (MMS) AND THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) (2010), *available at* http://fpc.state.gov/documents/organization/145106.pdf.

150. DEP'T MANUAL, *supra* note 149, at 15.4(B).

151. *Id.* at 15.4(C)(10) (emphasis added).

152. *See* ALEXANDER, *supra* note 149, at 13 (suggesting the 1978 amendment may have been the basis for categorically excluding exploration plans in the Gulf).

153. U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., 2007-2012 OUTER CONTINENTAL SHELF OIL AND GAS LEASING PROGRAM: FINAL ENVIRONMENTAL IMPACT STATEMENT (2007), *available at* http://www.boemre.gov/5-year/2007-2012FEIS.htm.

gram covered leases in three regions: the Gulf of Mexico, Atlantic, and Alaska.[154] In the EIS, MMS disregarded the risk of a well blowout, and assumed that any spill would be primarily short term and localized in nature.[155] It assumed that the most likely platform-related oil spill would not exceed 1,500 barrels per day (63,000 gallons).[156] MMS also assumed that it would be unlikely that oil from such a small spill would migrate into coastal water to cause significant environmental harm.[157] The EPA found the EIS acceptable under NEPA.[158]

Environmental groups challenged the validity of the EIS, arguing that MMS failed to take a 'hard look' at the potential harm that could result from the proposed activities in some lease areas.[159] The challenge, however, was not directed to the EIS as it related to the Gulf.[160] The D.C. Circuit vacated and remanded the EIS after finding that MMS failed to consider the environmental sensitivity of different areas of the outer Continental Shelf to drilling activities.[161] Upon remand, MMS removed lease sales in Alaska (North Aleutian Basin; Beaufort Sea; and the Chukchi Sea Sales) noting that it wanted to "appropriately balance discovery of oil and gas with potential environmental damage."[162] However, to offset the loss associated with the cancelled leases, MMS simply added additional lease sales to the Gulf based on its belief that state and local governments supported continued drilling in the Gulf.[163] In doing so, MMS violated its mandate under NEPA by failing to consider the cumulative impact of adding a new lease to the already overcrowded Gulf.

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154. *Id.*

155. *Id.* at IV-75.

156. *Id.* at IV-29.

157. *Id.* at IV-28.

158. *National Environmental Policy Act: EIS Data*, U.S ENVTL. PROT. AGENCY, http://yosemite.epa.gov/oeca/webeis.nsf/EIS01/EC6890E22546695F8525768C005C0579?opendocument (last updated Mar. 24, 2011).

159. Ctr. for Biological Diversity v. U.S. Dep't of the Interior, 563 F.3d 466 (D.C. Cir. 2009).

160. *Id.* at 475–76.

161. *Id.* at 489; *see also* 43 U.S.C. § 1344(a)(2)(G) (2006) (requiring agencies to consider "the relative environmental sensitivity of . . . different areas of the outer Continental Shelf").

162. U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., PRELIMINARY REVISED PROGRAM OUTER CONTINENTAL SHELF OIL AND GAS LEASING PROGRAM FOR 2007–2012 3 (2010), *available at* http://www.boemre.gov/5-year/PDFs/PRP2007-2012.pdf.

163. *Id.* at 4.

In April of 2007, MMS issued an EIS for multiple lease sales in the western and central portions of the Gulf, which included land leased to BP.[164] In that document, MMS evaluated the risks associated with oil exploration and well blowouts.[165] Using historical spill data, MMS predicted that if a large spill occurred it would not exceed 4,600 barrels per day, it would break down within ten days, and it would likely not reach the coast to cause measureable harm.[166] MMS acknowledged that more than 40% of the oil could remain in the water column and spread through the water via natural dispersion, yet did not consider the impact such retention might cause.[167] Moreover, MMS did not consider what would happen to oil that remained below the surface as a result of being treated with dispersants even though it knew that that was an approved method of combating an oil spill.[168] Instead, it noted that, in the event of a spill, the effects would be non-fatal because "fish swim away from spilled oil."[169] It also noted that because fish overproduce eggs, most of which die or get eaten by predators, an oil spill would have "no detectable effect on the adult populations . . . ."[170] MMS failed to consider organisms incapable of migrating away from the spill or the impact oil exposure might have on fish species already in decline due to overfishing. In short, the EIS failed to take the requisite 'hard look' at potential impacts to the Gulf.

Despite finding that there was a 99% chance that spills larger than 10,000 barrels would occur during the 40 year lease pe-

164. U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., GULF OF MEXICO OCS OIL AND GAS LEASE SALES: 2007–2012; WESTERN PLANNING AREA SALES 204, 207, 210, 215, AND 218; CENTRAL PLANNING AREA SALES 205, 206, 208, 213, 216, AND 222; FINAL ENVIRONMENTAL IMPACT STATEMENT (2007) [hereinafter LEASE SALES EIS], *available at* http://www.gomr.boemre.gov/PDFs/2007/2007-018-Vol1.pdf; BP EXPLORATION & PROD. INC., OCS-G 32306, INITIAL EXPLORATION PLAN: MISSISSIPPI CANYON BLOCK 252 § 14.2.1.5 (2009), [hereinafter INITIAL EXPLORATION PLAN] *available at* http://www.gomr.boemre.gov/PI/PDFImages/PLANS/29/29977.pdf.

165. LEASE SALES EIS, *supra* note 164, at 4-232.

166. *Id.*

167. *Id.* at 4-233.

168. *Id.* at 4-240–4-241.

> All evidence to date indicates that oil discharges that occur at the seafloor from a pipeline or losses of well control would rise in the water column, surfacing almost directly over the source location. Therefore, a subsurface oil spill would have to occur very close to a benthic community for rising oil to contact the benthic organisms. (citation omitted).

Id. at 4-240.

169. *Id.* at 4-292.

170. LEASE SALES EIS, *supra* note 164, at 4-291.

riod,[171] MMS continued to base its environmental assessment on a spill of 4,600 barrels.[172] As a result, MMS determined that such an offshore spill did not pose a significant risk of harm.[173] Although MMS mentioned a blowout, it predicted that in the event of a blowout, oil would flow for only one half of one day and the volume of oil released would not cause significant harm.[174] MMS did not provide any further analysis. The EPA reviewed the EIS and issued a letter to MMS, formally noting that it had no objection to the proposed offshore activities.[175]

In October of 2007, MMS issued an EA for lease sale 206, which included the plot where the DWH well blew out.[176] In that document, MMS noted that it elected not to prepare an EIS because it found no new significant impact that had not already been addressed in the prior EIS.[177] The EA incorporated much of the EIS, but retreated from the earlier risk assessment in the EIS by noting that previously identified impacts were based on scenarios that were overestimated.[178] MMS noted that offshore spills were not expected to significantly damage any wetland on the Gulf Coast.[179] It also noted that the biggest impact to the offshore environment from the lease sale would be "physical disturbance of the seafloor and minor impacts from sediment resuspension."[180] Although MMS noted that "accidental blowouts, oil spills, and spill-response activities" could impact marine species in the Gulf, it did not go further to analyze what that impact might be or whether the lessee had the ability to adequately respond to such a blowout.[181] MMS simply noted, "blow outs are

171. *Id.* at 4-75.

172. *Id* at 4-232.

173. *Id.* at 4-243.

174. *Id.* at 4-260, 4-239.

175. Letter from Anne Norton Miller, Dir., Office of Fed. Activities, U.S. Envtl. Prot. Agency, to James F. Bennett, Branch of Envtl. Assessment, Minerals Mgmt. Serv. (May 25, 2007), http://yosemite.epa.gov/oeca/webeis.nsf/(PDFView)/20070157/$file/20070157.PDF?OpenElement.

176. U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., MMS 2007-059, PROPOSED GULF OF MEXICO OCS OIL AND GAS LEASE SALE 206, CENTRAL PLANNING AREA: ENVIRONMENTAL ASSESSMENT (2007) [hereinafter LEASE EA], *available at* http://www.gomr.boemre.gov/PDFs/2007/2007-059.pdf.

177. *Id.* at ii. (noting that based on the analysis in the EA, no new significant impacts were identified for proposed lease sale 206).

178. *Id.* at 14.

179. *Id.* at 27.

180. *Id.* at 31, 34.

181. *Id.* at 34, 37, 39.

expected to have temporary localized impacts on water quality."[182]

Collectively, the environmental reviews conducted by MMS were flawed. Each significantly downplayed the potential risk of harm from the proposed activity. Instead of examining impacts which have a low probability of occurrence, but catastrophic consequences if they do occur, MMS elected to examine historical oil spill records to project what might happen in the future. MMS had virtually eliminated from consideration the possibility of significant environmental harm from the activity. Because the review process was tiered, and subsequent reviews were based on earlier risk assumptions, and the stage was set to exclude BP's exploration plan from further environmental review.

2. Categorical Exclusion of BP's Exploration Plan

In its Exploration Plan (EP) for lease sale 206, BP asserted that the chance of an oil spill occurring was unlikely.[183] Although it noted that a blow out would likely result in the release of the "highest volume of liquid hydrocarbons," BP asserted that it was not required to discuss its oil spill response.[184] BP added that it was not required to provide a scenario for a potential blow out, thus it did not discuss the blow out preventer it used on the well.[185] BP certified that it had ability to respond to the worst case scenario, and added that its spill response plan was approved by MMS.[186] However, it defined a "worst-case" scenario as a spill of 162,000 barrels per day.[187] This is more than thirty-five times higher than spill volume upon which MMS based its earlier risk assessments.[188]

BP did not consider any alternative to the proposed activities to minimize environmental harm.[189] BP did not consult any

182. LEASE EA, *supra* note 176, at 22.

183. INITIAL EXPLORATION PLAN, *supra* note 164, § 14.2.1.5.

184. *Id.* § 2.7.

185. *Id.* § 2.7.

186. *Id.* § 7.1.

187. *Id.* After the well exploded, BP estimated that 100,000 barrels per day were leaking from the well. Official estimates later reduced this to 60,000 barrels per day. Ernest Scheyder, *BP Estimates Oil Spill Up to 100,000 Barrels Per Day in Document,* REUTERS (June 29, 2010, 7:19 PM), http://www.reuters.com/article/2010/06/20/us-oil-spill-idUSN1416392020100620; Justin Gillis, *Estimates of Oil Flow Jump Higher,* N.Y. TIMES, June 15, 2010, http://www.nytimes.com/2010/06/16/us/16spill.html (noting that as much as 60,000 barrels a day were flowing from the well).

188. LEASE SALE EIS, *supra* note 164, at 4-232.

189. INITIAL EXPLORATION PLAN, *supra* note 164, § 14.5.

other agency regarding the potential impacts of activity, and it noted that there would be no mitigation measures taken to "avoid, diminish or eliminate potential impacts on environmental resources."[190] Despite its spill assessment, BP asserted that in the unlikely event of a spill, the impact would be minimal and would cause only sub-lethal effects on fish, marine mammals and birds.[191] It added that if a blowout occurred, it would not have a significant impact on the environment "based on the industry wide standards for using proven equipment and technology for such responses . . . ."[192]

BP pushed hard to get the CEQ to expand the use of categorical exclusions for its activities, and even suggested that the prohibition against activities that impact endangered species be loosened.[193] MMS categorically excluded BP's exploration plan from environmental review despite recognizing that "[t]he primary difference between surface and subsea technologies is the restricted ability to detect and respond to releases in the deepwater environment and the extreme temperatures and pressures on the seafloor."[194]

As the DWH accident progressed, and the reality of a catastrophic deepwater spill captured the world's attention, MMS continued to issue leases for offshore exploration and drilling in the Gulf. From April 21, 2010—one day after the blowout—through May, 7 2010, the MMS issued twenty-seven additional drilling permits for the Gulf.[195] Two of those permits were issued to BP and were based on the same faulty environmental review process.[196]

On May 30, 2010, the Secretary of Interior imposed a moratorium on deepwater drilling after finding that "under current con-

190. *Id.* §§ 7.1, 14.6.

191. *Id.* § 142.1.6-8.

192. *Id.* § 14.2.2.1.

193. *See, e.g.*, Letter from Margaret D. Laney, Senior Fed. Affairs Dir., BP America Inc., to Nancy Sutley, Chair, Council on Envtl. Quality (Apr. 9, 2010), http://media.washingtonpost.com/wp-srv/nation/pdf/BP_letter_050410.pdf.

194. NIXON, *supra* note 8, at 31.

195. *See* Press Release, Ctr. for Biological Diversity, MMS Approved 27 Gulf Drilling Operations After BP Disaster, 26 Were Exempted From Environmental Review, Including Two to BP (May 7, 2010), http://www.biologicaldiversity.org/news/press_releases/2010/post-disaster-permits-05-07-2010.html; *see also MMS Approved Drilling Plans 4/21/2010-5/7/2010*, CTR. FOR BIOLOGICAL DIVERSITY, http://www.biologicaldiversity.org/programs/public_lands/energy/dirty_energy_development/oil_and_gas/gulf_oil_spill/pdfs/MMS_Approved_Drilling_2010-05-07_v2.pdf (last visited Jan. 26, 2011) [hereinafter *MMS Drilling Plans*].

196. *MMS Drilling Plans*, *supra* note 195.

ditions, deepwater drilling poses an unacceptable threat of serious and irreparable harm or damage to wildlife and the marine, coastal and human environment . . . ."[197] Less than five months later, without addressing the environmental review process or the use of categorical exclusions, the Secretary lifted the moratorium.[198] Not surprisingly, that decision has already been challenged.[199] As that and other lawsuits proceed through the courts, deepwater drilling continues to pose significant risks to the Gulf environment.

V.
ANALYSIS AND RECOMMENDATIONS

The current U.S. ocean policy recognizes the interconnected nature of the global ocean environment and the responsibility to take action to protect, maintain and restore the health and biological diversity of the ocean system.[200] It also acknowledges obligations under international law to prevent domestic activities from causing harm to waters beyond U.S. jurisdiction.[201] The practice of categorically excluding deepwater drilling activities in the Gulf from environmental review has significant domestic and international ramifications and should be eliminated. The practice violates federal law, is inconsistent with ecosystem-based management that lies at the core of U.S. ocean policy, and is contrary to principles of ocean governance accepted under international law.

197. U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., NTL NO. 2010-N04, NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL AND GAS LEASES IN THE OUTER CONTINENTAL SHELF REGIONS OF THE GULF OF MEXICO AND THE PACIFIC TO IMPLEMENT THE DIRECTIVE TO IMPOSE A MORATORIUM ON ALL DRILLING OF DEEPWATER WELLS 1 (2010), *available at* http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=33716.

198. Decision Memorandum from the Sec'y of Interior Ken Salazar to the Director of Bureau of Ocean Energy Management, Regulation, and Enforcement (Oct. 12, 2010), http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=64767.

199. Press Release, Ctr. for Biological Diversity, Lawsuit Seeks Renewed Moratorium on Deepwater Oil Drilling, Demands Environmental Review (Oct. 23, 2010), http://www.biologicaldiversity.org/news/press_releases/2010/drilling-moratorium-10-23-2010.html.

200. *See generally* CEQ FINAL RECOMMENDATIONS, *infra* note 238.

201. *Id.*

A. *Categorical Exclusions for Exploration Plans Violate NEPA and OCSLA*

NEPA applies to oil exploration activities in deepwater environments under U.S. jurisdiction.[202] Indeed, NEPA itself was promulgated, in part, in response to an offshore oil well blow out.[203] Courts have recognized that the NEPA review process for offshore oil leasing, exploration and development/production activities is a tiered analysis and that the level of specificity required in an environmental review varies at each stage of the analysis.[204] As such, courts have been willing to accept that staged consideration of uncertain environmental factors does not violate the rule of reason requirement under NEPA.[205] However, courts do require agencies to conduct a detailed assessment of potential environmental impacts at some point *prior* to commencing activity.[206] The current environmental review process for offshore drilling activities ignores this mandate, and is inconsistent with current U.S. ocean policy that requires informed decision making for activities that impact the oceans. The BP disaster provides a clear example of the flaws in the review process. MMS failed to take a 'hard look' at the potential environmental impacts of deep sea drilling by failing to consider a catastrophic oil spill and by failing to consider the need to use dispersants at the sea floor. Because the EISs and EA conducted by MMS were insufficient and therefore invalid, its subsequent decision to categorically exclude BP's exploration plan from environmental review violated federal law and U.S. ocean policy.

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202. Vill. of False Pass v. Clark, 733 F.2d 605 (9th Cir. 1984); *see also* Natural Res. Def. Council v. U.S. Dep't of Navy, No. CV-01-07781, 2002 WL 32095131, at *10–12 (C.D. Cal. 2002) (holding that presumption against extraterritoriality did not bar the application of National Environmental Policy Act (NEPA) to Navy sea tests having an effect in United States Exclusive Economic Zone).

203. *See generally* Keith C. Clarke & Jeffrey J. Hemphill, *The Santa Barbara Oil Spill, A Retrospective,* 64 Y.B. ASS'N PAC. COAST GEOGRAPHERS 157, 157–62 (2002), *available at* http://www.geog.ucsb.edu/~kclarke/Papers/SBOilSpill1969.pdf.

204. 40 C.F.R. § 1502.20 (2010); *see also* County of Suffolk v. Sec'y of the Interior, 562 F.2d 1368, 1378 (2d Cir. 1977).

205. *Id.* at 1378.

206. *See, e.g.,* Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976).

1. MMS: Failure to Assess the Impacts of a Catastrophic Oil Spill

Although CEQ regulations implementing NEPA no longer require agencies to consider worst case scenarios in an EIS, they do require agencies to consider reasonably foreseeable significant impacts and impacts that have a low probability of occurrence but catastrophic consequences if they do occur so long as the potential impact is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.[207] In its environmental review, MMS never considered the risk of a catastrophic spill even though the possibility of such a spill was reasonably foreseeable and MMS knew that such a spill could result in catastrophic damage to the Gulf environment. It did this even though the likelihood of, and impacts from, a well blow out were neither speculative nor indefinite.

Since 1955, there have been fifty offshore well blow outs.[208] Prior to the DWH accident, the five worst well blowouts resulted in the release of more than 170 million gallons of oil into the marine environment.[209] The scientific literature is replete with studies documenting the significant short-and-long-term impacts that result from oil released into the marine environment. Indeed, almost a decade earlier MMS itself recognized the significant harm that would likely result in the event of a catastrophic well blow out. In 2000, MMS acknowledged that:

> Deepwater operations have the potential to result in oil spills on the OCS that are greatly larger than those previously analyzed .... The behavior and transport dynamics of accidental subsea release of oil are not completely understood. After weathering and dissipation, proportionally greater volumes of oil could remain in the marine environment or be delivered to coastal habitats than spill volumes that have been previously analyzed in MMS NEPA documents.[210]

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207. 40 C.F.R. § 1502.22(b).

208. *Offshore Blowouts*, OIL RIG DISASTERS, http://home.versatel.nl/the_sims/rig/i-blowout.htm (last visited Jan. 31, 2011); *Rig Incident List*, OIL RIG DISASTERS, http://home.versatel.nl/the_sims/rig/losses.htm (last visited Jan. 31, 2011).

209. *Offshore Blowouts*, OIL RIG DISASTERS, http://home.versatel.nl/the_sims/rig/i-blowout.htm (last visited Jan. 31, 2011).

210. U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., MMS 2000-001, GULF OF MEXICO DEEPWATER OPERATIONS AND ACTIVITIES, ENVIRONMENTAL ASSESSMENT iv (2000) [hereinafter GULF EA], *available at* http://www.gomr.boemre.gov/PDFs/2000/2000-001.pdf.

MMS also acknowledged that in the event of a well blow out, workers may need to drill a relief well to regain control of the well and that drilling the relief well could take several months to complete.[211]

MMS knew that drilling in the deepwater environment posed significant and unique risks to the marine environment, and chose to ignore what might happen if a well blew out 5,000 feet below the surface of the water. Instead, it chose to focus on the environmental impacts expected from a 4,600 barrel spill, even though it acknowledged that there was a 99% chance that multiple spills exceeding 10,000 barrels would occur in the lease area. MMS's actions are particular egregious in view of the fact that BP managers estimated that a well blowout would result in the release of 162,000 barrels per day. MMS's decision to ignore the very real potential for a release in such a high risk area was unreasonable and rendered the environmental review invalid. Worse perhaps is the fact that the same ill-informed environmental review process served as the basis for granting many other active leases in the Gulf.

2. MMS: Failure to Assess the Impacts of Using Dispersants in Deep Water

Prior to the DWH accident, dispersants had never been used near the sea floor.[212] The government knew that use of dispersants on the surface of the water caused environmental harm, and admitted that it had no idea what harm might occur through the use of dispersants at a well-head located 5,000 feet below the sea.[213] It did, however, recognize that deep sea dispersant use, "increases the extent of biological impacts to deep water pelagic" environments that may cause "changes in the diversity, structure and function of the microbial community, leading to changes in trophic level dynamics and changes to key biogeochemical cycles."[214] The EPA Administrator acknowledged that the use of dispersants was "unprecedented" and that "the effects of underwater dispersant use on the environment are still widely un-

211. *Id.* at II–16.

212. Lisa P. Jackson, Adm'r, Envtl. Prot. Agency, Statement on Dispersants (May 12, 2010), *available at* http://yosemite.epa.gov/opa/admpress.nsf/8d49f7ad4bbcf4ef852573590040b7f6/ccfda3e057e5dded852577220071da1b!OpenDocument.

213. DEEPWATER REPORT, *supra* note 79, at 15.

214. *Id.*

known," but still decided to allow BP to use the dispersant.[215] The EPA took that action despite evidence of toxicity because that dispersant was listed on the National Contingency Plan schedule of devices and substances that may be used to remove or control oil discharges.[216] The EPA noted that "when mixed with oil, [the dispersant] is generally no more or less toxic than mixtures with the other available alternatives."[217] In effect, the EPA authorized BP to clean up the toxic oil by breaking the oil apart with another toxic chemical. It did so despite having no understanding of how such use would impact deepwater ecosystems. Given the increased level of activity at deep sea sites, and the fact that chemical dispersants are an approved method of responding to oil spills, MMS should have assessed the potential use of dispersants at the well head. BP's own estimate of the flow volume shows that it was well aware of how much oil might escape from the well in the event of a blow out, and it must have known that it would not be capable of responding to the spill without the use of dispersants at the well-head. Had MMS considered this, that decision may have prompted the EPA to conduct appropriate tests on dispersants to determine the risk posed by the subsea use of dispersants. Instead, BP was caught unprepared and the EPA was forced to use the Gulf as a testing ground for the deep sea use of a toxic substance. MMS was required to take additional action before allowing BP to commence exploration activities, and its failure to do so violated NEPA.[218]

3. MMS: Categorical Exclusion of BP's Exploration Plan

MMS's decision to categorically exclude BP's exploration plan from environmental review was based on its own internal regulations, which are based, in part, on a 1978 amendment to the OCSLA.[219] Congress amended the OCSLA to create new polices

215. Lisa P. Jackson, Adm'r, Envtl. Prot. Agency, Statement on Dispersants (May 12, 2010), *available at* http://yosemite.epa.gov/opa/admpress.nsf/8d49f7ad4bbcf4ef852573590040b7f6/ccfda3e057e5dded852577220071da1b!OpenDocument.

216. *National Contingency Plan (NCP) Subpart J–Product Schedule*, U.S ENVTL. PROT. AGENCY EMERGENCY MGMT., http://www.epa.gov/emergencies/content/ncp/index.htm (last updated Mar. 3, 2011).

217. *Questions and Answers on Dispersants*, U.S. ENVTL. PROT. AGENCY EMERGENCY, http://www.epa.gov/bpspill/dispersants-qanda.html#application (last updated Jan. 10, 2011).

218. 40 C.F.R. § 1508.4 (noting that prior to issuing a categorical exclusion, an agency must consider extraordinary circumstances present that may have a significant impact).

219. *See* Pub. L. No. 95-372, 92 Stat. 629.

that would result in, "expedited exploration and development" of the outer continental shelf.[220] Congress did not authorize an exemption for exploration plans covering activities in the Gulf. Indeed, Congress expressly required review and approval of exploration plans in the Gulf.[221] Yet, MMS interpreted the language of the amendment broadly to exempt all exploration and development/production plans in the Gulf from environmental review.[222]

MMS's interpretation of OCSLA improperly suggests that provisions in OCSLA take precedence over competing provisions in NEPA—they do not. The Acts are complementary. OCSLA, through MMS, requires a lessee to obtain approval of an exploration plan via permitting before starting to drill, and that plan must include a project-specific environmental impact analysis that assesses the potential effects of the exploration activities.[223] MMS then conducts an environmental review pursuant to NEPA.[224] Without Congressional authorization, MMS avoided this review process by exempting exploration plans for activities in the Gulf, and therefore violated both OCSLA and NEPA.

Even if MMS had the authority to issue a categorical exclusion under OCSLA, under NEPA it had no basis to issue the exclusion for the BP Exploration Plan. Agencies are allowed to issue a categorical exclusion only for those activities that do not individually or cumulatively have a significant effect on the human environment.[225] Agencies must consider "extraordinary circumstances" in which a normally excluded action could have significant environmental effects.[226]

MMS never considered the possibility of a catastrophic spill or even a large spill, so it had no way of determining how a well blow out at 5,000 feet below the sea surface would impact the marine environment. MMS also failed to consider the environmental impact of using dispersants at the well-head. MMS did not have sufficient information to adequately assess whether the exploration activities could have an individual or cumulatively significant effect on the human environment required to issue the categorical exclusion. Moreover, it failed to consider the ex-

220. Pub. L. No. 95-372, 92 Stat. 629.
221. 43 U.S.C. § 1340(c)(1) (2006).
222. DEP'T MANUAL, *supra* note 137.
223. 30 C.F.R. § 250.227 (2010).
224. 30 C.F.R. § 250.232(c).
225. 40 C.F.R. § 1508.4.
226. *Id.*

traordinary circumstances—pollution, overfishing, increasing ocean acidification—that already imperil the Gulf environment or impact leasing more land for exploration and development may have to that environment.

In *Alaska Wilderness League v. Kempthorne*, environmental groups challenged MMS's approval of an exploration plan to drill multiple offshore exploratory wells in the Alaskan Beaufort Sea over a three year period.[227] Petitioners argued that MMS violated NEPA and OCSLA by approving the plan without taking a 'hard look' at the impacts the exploration activities would have on marine mammals in the program area.[228] MMS approved the plan without conducting an EIS, despite evidence of potential impacts.[229] The Ninth Circuit vacated MMS' approval of the plan and ordered MMS to take a hard look at the potential impacts.[230] The opinion was later vacated and the issue declared moot when MMS rescinded its approval of the exploration plan.[231] Here, had MMS subjected BP's exploration plan to environmental review, it may have determined that it was inadequate because it did not adequately address the potential impacts to marine resources from a well-blow out or the sub-sea use of dispersants.

At a minimum, MMS should have conducted an EA for the exploration plan because MMS admitted that it lacked critical knowledge on how the proposed activity would impact deep sea communities. Had MMS examined BP's exploration plan, MMS would have been required to evaluate the impact from a well blow out and the propriety of using a blow out preventer that fell below the state of the art in the industry.[232]

As a result of its "hands-off" approach to regulation and indifference to its substantive mission, MMS has been reorganized.[233] With that change comes the opportunity to properly balance the need to protect impaired marine systems with the need to extract oil to meet the nation's energy needs. Given the declining health of the Gulf, the practice of categorically excluding exploration and development/production plans from environmental review must end.

227. 548 F.3d 815 (9th Cir. 2008).
228. *Id.*
229. *Id.*
230. *Id.*
231. Alaska Wilderness League v. Salazar, 571 F.3d 859, 859 (9th Cir. 2009).
232. 30 C.F.R. §§ 250.213, .219, .231, .243(h) (2010).
233. Decision memorandum, *supra* note 198.

B. *The Existing Environmental Review Process for Deepwater Drilling in the Gulf is Inconsistent with U.S. Ocean Policy.*

The new U.S. ocean policy requires agencies to use an ecosystem-based approach to manage ocean resources. This represents a paradigm shift away from traditional sector or single-species based management that often led to fragmented and inconsistent protection of the marine environment.

After the DWH accident, President Obama signed an Executive Order (EO) establishing a new national policy for the Stewardship of the Ocean, Coasts, and Great Lakes.[234] The EO announced the current stewardship policy of the United States to:

> Protect, maintain, and restore the health and biological diversity of ocean . . . ecosystems and resources; [i]mprove the resiliency of ocean . . . communities and economies, [u]se the best available science and knowledge to inform decisions affecting the ocean . . . and to] [s]upport sustainable, safe, secure, and productive access to, and uses of the ocean . . .[235]

The new policy requires agencies to consider the marine ecosystems as part of the "global interconnected systems of air, land, ice, and water" and "their relationships to humans and their activities."[236] The new policy addresses current and future uses of the oceans and requires agencies to work collaboratively by employing ecosystem-based and adaptive management principles in all decisions that impact the ocean and its resources.[237] Ecosystem-based management "integrate[s] ecological, social, economic, commerce, health, and security goals, and recognize[s] humans as key components of the ecosystem and healthy ecosystems as essential to human well-being."[238] Adaptive management requires "routine reassessment of management actions to allow for better informed and improved future decisions."[239] It

234. Exec. Order No. 13547, 75 Fed. Reg. 43,023 (July 19, 2010) [hereinafter EO], *available at* http://www.whitehouse.gov/the-press-office/executive-order-stewardship-ocean-our-coasts-and-great-lakes.

235. *Id.*

236. *Id.*

237. *Id.*

238. COUNCIL ON ENVTL. QUALITY, EXEC. OFFICE OF THE PRESIDENT, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE 14 (2010) [hereinafter CEQ FINAL RECOMMENDATIONS], *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.

239. *Id.* at 2.

allows resource managers to incorporate new information into the decision making process to ensure decisions at each stage incorporate the latest knowledge and consider changing conditions that may impact the decision making process.[240] Although the new policy seeks to balance multiple uses of the marine environment, the primary goal of the new policy is to improve the overall health of the marine environment.[241]

The EO directs all federal agencies to implement the new policy as delineated in the final recommendations of the Interagency Ocean Policy Task Force.[242] In implementing the new policy, every agency decision and action affecting the ocean must be guided by the stewardship principles and national priority objectives to the fullest extent consistent with applicable law.[243] For example, in addition to considering direct impacts of a proposed action, agencies must also consider indirect impacts—those "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[244] These include "effects on natural resources and on the components, structures, and functioning of affected ecosystems."[245]

The federal environmental review process for deepwater drilling remains inconsistent with this new ocean policy. When MMS was reorganized into the Bureau of Ocean Energy Management Regulations and Enforcement (BOEMRE), the new agency retained many of MMS's flawed practices. In 2001, MMS created a grid system that separated the Gulf into multiple areas based on biological similarity.[246] It then prepared programmatic environmental assessments (Grid EA) to address the impacts of proposed development projects in each grid.[247] The grid system is specifically intended to serve as a foundational reference docu-

240. *Id.* at 30.

241. EO, *supra* note 234.

242. EO, *supra* 234.

243. *Id.*

244. 40 C.F.R. § 1508.8 (b) (2010).

245. 40 C.F.R. § 1508.8.

246. *MMS Launches "Grid Environmental Assessment" Program to Implement Environmental Reviews Efficiently*, U.S. DEP'T OF INTERIOR, MINERALS MGMT. SERV., (Oct. 25, 2001), http://www.gomr.boemre.gov/homepg/whatsnew/newsreal/2001/011026f.html [hereinafter *MMS Grid*]; *see also Grid EA and ROV Survey Status Report*, BUREAU OF OCEAN ENERGY MGMT., REGULATION, AND ENFORCEMENT, http://www.gomr.boemre.gov/homepg/regulate/environ/ea_grid/ea_grid.asp (last updated Feb. 2, 2011) (indicating that as of Feb. 12, 2010, the grid system expanded to include twenty-one grids of biological similarity.)

247. *MMS Grid*, *supra* note 246.

ment in the tiered NEPA review process, and to reduce the need for further analysis because subsequent documents can build on the original Grid EA.[248] In fact, all subsequent EAs are only required to focus on issues and impacts of the specific project that are substantially different from those analyzed in the Grid EA.[249]

Although each Grid EA considers a wide range of environmental and socioeconomic impacts that may harm a particular grid, the system is inconsistent with U.S. ocean policy. By design, the grid system fails to address the interconnectedness of the Gulf system. The grid system evaluates the Gulf as multiple, distinct ecosystems. It fails to address the migration of marine species and the impact such migration has on different grids. It also fails to address the impact of surface and deep sea currents that can cause the movement of larval species and pollutants from one grid to another.

Using a programmatic EA as the basis for future grid-specific EAs expedites the environmental review process, but it also raises a strong possibility that important environmental considerations that impact the entire Gulf ecosystem will be missed. The grid system ensures that environmental reviews are conducted in the same fragmented manner that created the need for a fundamental revision to ocean policy. Indeed, MMS continued to use the grid system even after acknowledging that it knew little about deep sea environments or how species are distributed within the Gulf.[250] BOEMRE continues to base environmental assessments on site-specific inquiries. BOEMRE must reconfigure its existing grid system to allow for the comprehensive evaluation of all potential impacts to the Gulf system.

C. *Categorically Excluding Exploration Activities on the Outer Continental Shelf from Environmental Review is Inconsistent with U.S. Obligations under International Law*

Oceans cover 140 million square miles, roughly 72% of earth's surface and play a vital role in the development and security of

248. NIXON, *supra* note 8, at 23.
249. *MMS Grid*, *supra* note 246.
250. NIXON, *supra* note 8, at 31–32.

coastal states.[251] Recognizing the need to preserve ocean resources while maintaining national security, members of the United Nations developed a comprehensive set of rules to govern ocean activities and procedures to resolve competing and overlapping ocean uses. That work culminated in the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which has since served as a de facto international constitution governing ocean-related activities to ensure the conservation of marine resources for future generations.[252] Through its provisions, UNCLOS acts to protect the economic, environmental, and national security interests of member states use of the ocean and provides a mechanism for the cooperative resolution of conflicts.

Under UNCLOS, states are obligated to protect and preserve the marine environment.[253] Although states have a sovereign right to exploit their natural resources, they may only do so in accordance with their obligation to protect and preserve the environment.[254] States must take "all measures . . . necessary to prevent, reduce and control pollution of the marine environment from any source . . . and must employ the "best practicable means at their disposal and in accordance with their capabilities" to prevent such pollution.[255] States also have an affirmative obligation "to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment."[256] Further, coastal states have an affirmative obligation to enact and enforce domestic laws when dealing with pollution from sea bed activities consistent with the certain environmental provisions of UNCLOS.[257] Collectively, these provisions reveal an international consensus that coastal states have positive duties and responsibilities to take action to protect and preserve the marine environment. The obligation of states to control marine pollution extends to all po-

251. *The Oceans are the Very Foundation of Human Life*, UNITED NATIONS, DIV. FOR OCEAN AFFAIRS AND THE LAW OF THE SEA, http://www.un.org/Depts/los/oceans_foundation.htm (last visited Feb. 2, 2011).

252. *Id.*

253. United Nations Convention on the Law of the Sea, Dec. 10, 1983, 21 ILM 1261, 1833 U.N.T.S 3.

254. *Id.* at art. 193.

255. *Id.* at art. 194(1).

256. *Id.* at art. 194(2).

257. *Id.* at art. 208(1)–(2), 214.

tential pollution sources, including offshore drilling operations.[258]

Although the United States has not ratified UNCLOS, it has acknowledged that most of the Convention's provisions reflect binding, customary law and apply to U.S. activities.[259] In his EO announcing the new U.S. ocean policy, President Obama reiterated the need to ratify UNCLOS to allow the United States to exercise a more integral role in the preservation and restoration of the world's oceans.[260]

The accidental release of oil associated with offshore exploration and development activities in the Gulf presents a constant threat to the natural resources of nations in the wider Caribbean basin. In recognition of this constant threat, the United States is also a bound by two regional agreements to protect the Gulf environment from oil pollution. Following the Ixtoc I accident, the U.S. signed an agreement with Mexico that requires both nations to take steps to prevent harm to the marine environment from oil spills.[261] The United States, along with twenty-three coastal states on the Caribbean Sea and Gulf of Mexico, also ratified the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention).[262] That Convention requires parties to:

> [T]ake all appropriate measures in conformity with international law . . . to prevent, reduce and control pollution of the Convention area and to ensure sound environmental management, using for this purpose the best practicable means at their disposal and in accordance with their capabilities. [Art. 4(1)];
>
> [T]ake all appropriate measures to prevent, reduce and control pollution of the Convention area resulting directly or indirectly from exploration and exploitation of the sea-bed and its subsoil. [Art. 8]; and
>
> [A]ssess within its capabilities . . . the potential effects of such projects on the marine environment, particularly in coastal areas, so that appropriate measures may be taken to prevent any substan-

258. *See id.* at art. 197, 208.

259. *See* United States v. Royal Caribbean Cruises, Ltd., 24 F. Supp. 2d 155, 159 (D. P.R. 1997).

260. EO, *supra* note 234.

261. Agreement Regarding Pollution of the Marine Environment by Discharges of Hydrocarbons and Other Hazardous Substances, U.S.-Mex., June 26, 1980, T.I.A.S. No. 10,021.

262. *See* Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Mar. 24, 1983, T.I.A.S. No. 11,085, 1506 U.N.T.S.157.

> tial pollution of, or significant and harmful changes to, the Convention area. [Art. 12(2)].[263]

The Oil Spill Protocol to the Cartagena Convention further requires contracting parties to cooperate in protecting the marine and coastal environment of the wider Caribbean basin and to ensure they have the means of responding to oil spill incidents under their jurisdiction.[264]

Although the U.S. retains a sovereign right to exploit its natural resources, it must do so in a manner that does not cause harm to neighboring states. That almost happened during the DWH accident, and could happen in the future if greater safeguards are not taken.[265] By failing to conduct adequate environmental reviews and by exempting critical exploration activities from environmental review, MMS violated its obligations under UNCLOS and regional agreements. Given the increasing industry activity in the Gulf, and the movement of that activity into the outer Gulf, the risk of harm posed to other countries from U.S. oil exploration and development activities remains high. The United States must take appropriate steps in recognition of its obligations under international law to ensure that activities occurring under its jurisdiction do not cause harm to neighboring countries.

VI.
CONCLUSION

Someone once remarked, "[i]f the sea floor was writ in Braille the bumps on the bottom of the Gulf of Mexico would spell,

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263. *Id.*

264. A Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region art. 3, Mar. 24, 1983, T.I.A.S. No. 11,085, 1506 U.N.T.S.157.

265. As the DWH spill continued, U.S. and international authorities became increasingly concerned with the possibility that oil from the spill would migrate beyond U.S. waters to cause harm in foreign territories. Howard LaFranchi, *International Sensitivities: What If BP Oil Spill Heads for Cuba?*, CHRISTIAN SCI. MONITOR, June 11, 2010, http://www.csmonitor.com/USA/Foreign-Policy/2010/0611/International-sensitivities-What-if-BP-oil-spill-heads-for-Cuba. NOAA administrators were concerned with the possibility that oil would migrate from the spill site into the Loop Current, which could transport the oil through the Florida Straits and into the Atlantic Ocean. *See* Press Release, Nat'l Oceanic & Atmospheric Admin., NOAA Sends Two Ships to Study Loop Current and Coastal Florida Waters (June 30, 2010), http://www.noaanews.noaa.gov/stories2010/20100630_ships.html (noting that two NOAA dispatched two ships to conduct biological and chemical surveys of waters in the eastern Gulf of Mexico and the Florida Straits to determine the movement of the oil from the Deepwater Horizon spill site).

'Gardens of Eden."[266] Today, that Garden is imperiled by increasing anthropogenic pollution, overfishing and ocean acidification. Unfettered offshore oil exploration and development activity in the Gulf increases that stress, and poses substantial risks to the future sustainability of the Gulf ecosystem. Increasing demand for oil coupled with dwindling supplies has forced the industry to venture into deeper and deeper water to find remaining reserves. To properly balance the dual goals of meeting U.S. energy demands and protecting the environment, the environmental review process for offshore exploration and development activities must be reevaluated. This process should begin by eliminating categorical exclusions and subjecting all aspects of the proposed activity to stringent environmental review.

266. NAT'l Oceanic & Atmospheric Admin., Gulf of Mexico Science Forum, A Scientific Forum on the Gulf of Mexico: The Islands in the Stream Concept 4 (2008) (quoting Ernest D. Estevez), *available at* http://sanctuaries.noaa.gov/about/pdfs/se_gom.pdf.