

Lessons Unlearned: The Legal and Policy Legacy of the BP Deepwater Horizon Spill

Mark Davis*

Abstract

The explosion and blowout of the BP Deepwater Horizon well in the Gulf of Mexico dominated much of the news and public discussion during the late spring and summer of 2010. The size and scale of the blowout and its effects on people, communities, and the environment produced loud calls for deep changes in the nation's energy and environmental laws and policies. While some things have changed, the wide ranging changes that many expected have not yet come to pass; indeed if anything the momentum has shifted to letting aggressive oil and gas development resume and to leave the fundamental regulatory framework in place. This article argues that this result is anything but surprising and that the prevailing legal and policy architecture is designed to withstand changing circumstances, even catastrophic ones like the Deepwater Horizon blowout. Changing, much less improving, safety and environmental stewardship practices, will take concerted and focused action that may only take root after future disasters.

Table of Contents

Abstract	155
I. Introduction	156
II. Minimizing and Externalizing Risk—A Matter of Culture and Policy.....	158
A. Assumption 1—America needs this oil and gas.....	159
B. Assumption 2. We can explore for and extract oil and gas without adverse environmental and safety effects.	160
III. Discounting Harm	165
IV. Money	167
V. Law and Culture	170

* Senior Research Fellow and Director of the Tulane Institute on Water Resources Law and Policy, Tulane University. The author is also a former member of the MMS Outer Continental Shelf Policy Committee (2005–2007) and former executive director of the Coalition to Restore Coastal Louisiana, an educational and advocacy organization focused on the conservation and restoration of coastal ecosystems of south Louisiana.

I. Introduction

In the early hours of April 20, 2010, the 126 workers on the *Deepwater Horizon* drilling rig had completed the job of drilling BP's Macondo well in the Gulf of Mexico and by 8 PM were in the process of sealing the well so it could be disconnected from the drilling rig and "temporarily abandoned" until BP was ready to bring it into production.¹ The well had not been an easy one to drill but the potential payoff had been enough to justify the challenge of looking for oil in incredibly difficult circumstances,² circumstances that had put the project millions of dollars over budget and months behind schedule.³

The process of plugging a well involves sealing the well with a concrete plug and injecting seawater into the well shaft to displace the drilling muds that had neutralized the upward pressure of the oil and gas.⁴ It is no simple task, but the crew on the *Deepwater Horizon* was as skilled as any in the world, being made up of personnel from BP, Schlumberger, Halliburton, Anadarko, and Transocean.⁵ All seemed to be going well until a loud hissing sound was heard around 9:40 PM the evening of April 20th and drilling mud began shooting from the well.⁶ For some reason, the efforts to seal and plug the well had failed, and highly pressurized gas was rocketing up toward the rig.⁷ The well had blown out.⁸ Moments later the

1. See NAT'L COMM'N ON THE BP *DEEPWATER HORIZON* OIL SPILL AND OFFSHORE DRILLING, *DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING, REPORT TO THE PRESIDENT 1-2* (2011) [hereinafter NAT'L COMM'N REPORT] (providing a detailed account and specifics of the deep water disaster).

2. The well was drilled in water 4,992 feet deep to a total depth of 18,360 feet. The waters at those depths are nearly freezing, while the hydrocarbons and salts in the deep reservoirs, called "pay zones," are under extremely high pressures and temperatures that make them extremely challenging to work with, increasing the risk of a blowout. For a more detailed explanation of the challenges they faced, see *id.* at 3, 43, 93.

3. See *id.* at 2 (providing background information of BP and their plans for the *Deepwater Horizon* rig).

4. See THE BUREAU OF OCEAN ENERGY MGMT., REGULATION AND ENFORCEMENT, U.S. DEP'T OF THE INTERIOR, REPORT REGARDING THE CAUSES OF THE APRIL 20, 2010 MACONDO WELL BLOWOUT 21-22 (2011) [hereinafter BUREAU OF OCEAN ENERGY MGMT.], available at <http://www.boemre.gov/pdfs/maps/DWHFINAL.pdf> (giving a step-by-step description of what is required to plug a well and how to do it).

5. See generally NAT'L COMM'N REPORT, *supra* note 1, at 1-19 (providing a detailed description of the *Deepwater Horizon* accident, the individuals involved, and conversations that transpired among them).

6. See *id.* at 8, 113 (describing the preliminary events that eventually became the *Deepwater Horizon* disaster).

7. See *id.* at 114 (providing details as to the pressure and flow of the gas coming out of the rotary and leading to the inevitable explosions).

8. See *id.* (giving an explanation of the well and the moments building up to the blowout).

mud and gas hit the rig floor where it ignited and produced a series of explosions that doomed the rig and claimed the lives of eleven workers.⁹

The tragedy of the blowout was compounded by fact that the Blowout Preventer Unit (BOP) failed, which allowed the well to flow until July 15, a total of 87 days.¹⁰ Nearly five million barrels of oil were discharged into the Gulf.¹¹ During that time, it became clear that no realistic or effective containment plan existed,¹² a fact that allowed oil to spread across the northern Gulf and the shores of five Gulf States.¹³ The complexity of assessing the actual rate of flow (estimates ranged from an early figure of 5,000 barrels per day to 100,000 barrels per day),¹⁴ and the fact that the spill was affecting the entire 5,000-foot deep water column instead of just the surface,¹⁵ compounded the efforts to respond to the spill. It became clear that the time to prepare for a spill of this type was before it occurred with the emphasis on not letting it happen.

For such a catastrophe to happen a number of things had to go wrong. The BOP and the concrete plug had to fail,¹⁶ the pre-plugging pressure tests had to be misinterpreted,¹⁷ and early signs that a blowout was brewing had to be missed.¹⁸ Also, the spill response plans drawn by the industry and approved by the Minerals Management Service were

9. *See id.* at 12 (explaining the moments when the workers noticed mud, scrambled to detach their ship, and watched the rig explode).

10. *See id.* at 274 (explaining the problems with the *Deepwater Horizon* blowout preventer and how requiring offshore operators to approve of proposed well designs would be a step in the right direction).

11. One barrel of oil equals 42 gallons (U.S.), making the *Deepwater Horizon* spill roughly 210 million gallons of oil. *See* BUREAU OF OCEAN ENERGY MGMT., *supra* note 3, at 1 (estimating how much oil was dispensed into the ocean by the *Deepwater Horizon* disaster).

12. *See* NAT'L COMM'N REPORT, *supra* note 1, at 56, 243 (discussing how the oil and gas industry made massive investments in oil and gas, but lacked to do the same investments for drilling safety and oil-spill containment technology).

13. *See id.* at 276–77 (describing the immense impact the *Deepwater Horizon* spill had and the challenges the trustees face in assessing and providing compensatory restoration).

14. *See id.* at 146 (explaining how the inaccurate estimates of the well's flow impinged the efforts to adequately respond to the spill).

15. *See id.* at 277 (assessing a challenge the trustees face in providing compensatory restoration since most applications of the Natural Resource Damage Assessment process usually focus on coastal restoration and this spill may have damaged organisms 5,000 feet below the surface).

16. *See id.* at 274 (detailing how the *Deepwater Horizon* BOP was accurate to plus or minus 400 pounds per square inch which resulted in the crew not getting accurate pressure readings).

17. *See id.* at 105–09 (explaining the process of performing a Negative-Pressure Test and how a false reading from BP's Well Site leaders played a key role in the spill).

18. *See id.* at 118–21 (listing the various signs that a blowout was brewing such as pumping foam cement at a time when it would be unstable, wrongly interpreting a Negative-Pressure Test, and BP's temporary abandonment procedure).

completely out of scale to the actual threats posed by a blowout.¹⁹ How those things came to pass, and the degree to which they contributed to the disaster, is still being sorted out and will likely be never be fully ascribed,²⁰ but for our purposes that really is beside the point. The central lessons taught by the *Deepwater Horizon* tragedy are as follows:

1. It was policy to run the risks that led to the blowout;²¹ and
2. The fact that bad things happened, even really bad things, has not by itself changed lesson number one.

II. Minimizing and Externalizing Risk—A Matter of Culture and Policy

The roots of the *Deepwater Horizon* blowout and spill run deep and grew from seeds planted well before the Macondo well was drilled.²² Oil and gas development has often been shrouded in overlapping veils of national energy policy, environmental policy, local economic and cultural priorities, environmental advocacy, and industry lobbying and public relations.²³ Beneath this shroud, the truth is that this nation has no clear energy policy and no true national environmental policy—but we do have an energy and environmental policy in the Central and Western Gulf of Mexico. There, it is policy to encourage oil and gas development, to do it quickly, and to minimize or assume away the risks.²⁴ There is growing pressure to make that the policy elsewhere in the United States as well.

In the Gulf, the nation's need for oil and revenue, local desires for jobs, and the prospect of enormous returns for business combine with the

19. See *id.* at 83–84 (discussing how neither NOAA nor MMS considered possible adverse impacts of one well, how MMS relied on conservative measures included in oil-spill response plans, and how even though the BP Oil Spill Response Plan was not tailored to the Gulf, MMS Gulf of Mexico Regional Office approved it).

20. See, e.g., *id.* These reports both considered the causes of the blowout (but did not fix liability) and recommended changes to the manner in which oil and gas exploration is done and regulated. An array of public and private litigation was also spawned, most of which is still pending at the time this article was prepared.

21. See *id.* at 218 (discussing how even though BP proclaims the importance of safety, it has caused a number of workplace incidents which indicates the company does not have consistent and reliable risk-management processes).

22. See *id.* at 83, 218 (helping to explain how the *Deepwater Horizon* blowout was inevitable because of the oil and gas industry's lack of investments in drilling safety and oil-spill containment technology, environmental protections and safety oversight were ineffective in the Gulf, and BP's lack of reliable risk-management processes).

23. See *id.* at 225 (using the American Petroleum Institute (API) as an example of an organization which has played a dominant role developing safety standards for the oil and gas industry, yet which lobbies for the industry and favors rulemaking that promotes industry autonomy from government oversight).

24. See *id.* at 125–26 (discussing how the time and money-saving decisions by the staff at Macondo did not consider the ultimate risks).

region's historically weak record of environmental and worker protection to create a hot house of oil and gas development, as well as public and private revenue generation.²⁵ To be sure, there were and are discordant voices, but after more than fifty years of offshore drilling, and an even longer history of coastal and near coast drilling, the two central assumptions of oil and gas development in the Central and Western Gulf of Mexico are (1) America needs this oil and (2) we can explore for and extract oil and gas without adverse environmental effect.²⁶

To understand the events that led to the *Deepwater Horizon* spill and its broader importance to how our nation may balance its energy and environmental priorities, both of these tenets need to be better understood, since, for good or ill, the lessons taught in the Gulf should be powerful shapers.

A. Assumption 1 — America needs this oil and gas.

One of the most unassailably true statements one can utter today is that America needs oil and gas. It fuels our cars, trains, and airplanes.²⁷ It heats our homes and offices.²⁸ It is a central component in the manufacture of many of our fabrics, products, and fertilizers.²⁹ It is strategically essential to our national security and economic well-being.³⁰ But saying we need oil and gas is not the same thing as pointing to a specific location and saying we need this oil and gas and we need to get it right now.

The United States is not “energy independent”³¹ and, by all accounts, we lack the hydrocarbon reserves ever to be.³² The oil and gas

25. *See id.* at x (describing how central oil and gas exploration is to the Gulf's economy and, because this industry is woven into the fabric of the Gulf economy, states like Louisiana have suffered destructive alterations to accommodate oil exploration).

26. *See id.* at 294 (explaining how offshore oil and gas will continue to be an important part of the nation's domestic energy supply and how policies about offshore drilling should be shaped with environmental concerns in mind).

27. *See id.* at 295 (providing a general idea of how important oil and gas are to our communication and transportation).

28. *See id.* (indicating how petroleum is woven into every aspect of our lives).

29. *See A Few Products Made From Petroleum*, RANKEN ENERGY CORP., <http://www.ranken-energy.com/Products%20from%20Petroleum.htm> (last visited Nov. 8, 2011) (listing products, fabrics, and other objects that are created using petroleum) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

30. *See* NAT'L COMM'N REPORT, *supra* note 1, at 295 (discussing how our country is not only dependent on oil and gas for everyday needs, but for our military operations and the movement of food which are both critical for our national security and a stable economy).

31. *See id.* (indicating how growing demands for oil around the world pose a long-term challenge for the United States to ever be energy independent).

32. *See id.* (discussing how the demand for oil in the United States, and its major part in American society, is one that renders the United States incapable of being self-sufficient in oil supply).

(particularly the oil) we actually use comes from around the world; it is an international commodity, developed and transported by global enterprises.³³ The economic viability of developing a given oil and gas field is primarily a function of prices set on a world scale.³⁴ Because oil pricing is largely outside the control of the United States, the only way to encourage development of domestic reserves is to reduce the cost side of the ledger, which is exactly what we have done through such measures as royalty relief and expedited and truncated regulatory oversight.³⁵ There may be excellent reasons for providing incentives, such as providing jobs, generating revenues, or to ensure that we have accessible domestic supplies to meet high priority national needs should foreign supplies be disrupted.³⁶ But those reasons, with the exception of protecting against supply disruptions, are not elements of an energy policy; more accurately, they are economic, social, or fiscal policies masquerading as an energy issue. As a result, we as a nation operate under an energy mythology instead of a clear-eyed energy/environmental policy. It is a mythology rooted in a chimeric notion of energy independence, dubious urgency, and a belief that we understand and have adequately managed risk. It is that myth in the service of industry objectives and the desire to generate revenues for the federal government that lies at the heart of this tragedy. And, like all strong myths, it is not easily shaken by contrary experience.

B. Assumption 2 — We can explore for and extract oil and gas without adverse environmental and safety effects.

Oil and gas development was, is, and will likely always be a high risk proposition.³⁷ But one would hardly know that if one were following the public statements by industry spokespersons and supportive elected officials.³⁸ In the public arena, discussion (if it can be called that) of oil and

33. *See id.* at 294 (explaining how domestic consumption of oil has exceeded domestic production for over sixty years which makes the United States dependent on imports for fifty-two percent of its oil consumption).

34. *See id.* at 296 (providing examples of sudden interruptions in the oil supply which underscore the nation's vulnerability and affects oil and gas prices worldwide).

35. *See id.* at 26 (discussing how federal policies helped protect domestic market for higher-cost offshore oil).

36. *See id.* at 295–96 (describing U.S. dependency on foreign oil and its national security concerns regarding hostile exporting nations and the possibility of financing terrorist organizations).

37. *See id.* at x (showing how oil and gas development has been, and will continue to be, a high risk proposition by listing states and regions that have suffered due to oil exploration).

38. *See, e.g.,* John B. Breaux, *Let's Drill For Oil*, WALL.ST. J., Jan. 18, 2001, at A26 (making a case for expanding oil and gas exploration into the Arctic National Wildlife Refuge, arguing that the experience in Louisiana had shown that it could be done without

gas drilling has taken on an unfortunate polarized tone that emphasizes either a preference for no new drilling³⁹ or a preference for drilling wherever there is oil and gas.⁴⁰ The former view is steeped in the social and environmental risks posed by oil and gas.⁴¹ It is also patently unrealistic given our current dependence on petroleum.⁴²

The latter “drill, baby, drill”⁴³ view is driven by the assumption that those risks are minimal and well-managed.⁴⁴ If the *Deepwater Horizon* disaster demonstrated anything, it is that this position is both wrong and irresponsible—but it is also the view that has dominated oil and gas policy in the Central and Western Gulf of Mexico for years.⁴⁵

The history of oil and gas development in the Gulf and its associated coastal systems dates back more than a century, with plays such as the Anse la Butte Field in Iberia Parish, Louisiana, proving that the coastal regions held promising levels of oil and gas.⁴⁶ The first true open water well in the Gulf was drilled by the Pure and Superior oil companies in 1938 more than a mile south of the coastal town of Cameron, Louisiana.⁴⁷ These swamps, marshes, and vast open water areas posed extremely difficult engineering and logistical challenges, challenges that were met

environmental impact). Asked to defend the statement, Senator John Breaux replied that any damage that had been done had occurred before environmental restrictions had been imposed. See John Biers, *Breaux Blasted For Praising La. Oil Project*, NEW ORLEANS TIMES PICAYUNE, Feb. 8, 2001, at 5 (“We made mistakes in the early days. We’ve learned from our mistakes.”).

39. See *Support The No New Drilling Act*, SURFRIDER FOUND., http://action.surfrider.org/p/dia/action/public/?action_KEY=3114 (last visited Nov. 8, 2011) (asking people to sign a petition and support the No New Drilling Act in Congress) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

40. See Breaux, *supra* note 37 (promoting the oil drilling in the Arctic National Wildlife Refuge).

41. See NAT’L COMM’N REPORT, *supra* note 1, at 175–76 (discussing the various impacts oil can have on organisms and plants).

42. See *id.* at 295 (justifying how it would be impossible for the United States to not continue drilling since oil and gas is a part of our everyday lives).

43. This phrase was popularized, though not originated, by Republican Vice-presidential candidate Sarah Palin at a debate with Democratic candidate Joe Biden on October 2, 2008 at Washington University, St. Louis, Mo.

44. See Breaux, *supra* note 37 (advocating for oil drilling based on studies evaluating the environmental effects of oil rigs in Prudhoe Bay).

45. See NAT’L COMM’N REPORT, *supra* note 1, at 84 (discussing how the view that dominated in the Gulf of Mexico was based on the assumption that there were appropriate measures implemented to avoid risks since the MMS Gulf of Mexico Regional Office approved drilling plans without additional analysis).

46. See KENNY A. FRANKS & PAUL F. LAMBERT, *EARLY LOUISIANA AND ARKANSAS OIL: A PHOTOGRAPHIC HISTORY, 1901–1946*, at 178 (1982) (providing background information to reflect the long history between the Gulf and oil development).

47. See *id.* at 208 (discussing the advancement of offshore drilling technology in the 1930s and how this innovation increased shallow offshore exploration in southern Louisiana).

with innovation and brute force.⁴⁸ In those days, the environment was not something to be protected, but something to be dominated.⁴⁹ The resulting network of crisscrossing canals, oil storage pits, waste pits, and abandoned wells and pipelines has conservatively led to the loss of more than 249,000 acres of land in coastal Louisiana alone between 1932 and 1990.⁵⁰ The diversity of those impacts also bears witness to an underappreciated fact—the footprint of oil and gas development is much bigger than the well site.⁵¹ It includes support, transmission, and storage facilities ranging from roads, ports, pipelines, and helipads to pipe yards, terminals, waste and storage facilities. Offshore oil development can be fairly compared to space exploration: for every rocket that is launched there is a vast complex of construction, support, and service systems that back it up. The same is true for offshore rigs; even in the absence of a spill, there is a vast, mostly land- or coast-based, system of supporting activities that supply all of the materials, labor, food, water, and emergency services that the offshore industry requires.⁵² Though less dramatic than a spill, the environmental impacts of this sprawling system can be profound and lasting.⁵³ These historic and ongoing impacts have been documented in a litany of reports,⁵⁴ Environmental Impact Statements, and perhaps most improbably in a law suit filed in in 2006 by the State of Louisiana in an effort to block future offshore leases by the Minerals Management Service until the impacts on

48. See *id.* at 183, 188–89 (describing the difficult conditions the swamps and marshes created in southern Louisiana and its impact on the crew).

49. See *id.* at 183 (elaborating on how the workers would overcome the environmental difficulties by designing specialized equipment).

50. U.S. ARMY CORPS OF ENG'RS, LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION STUDY: PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT 4–139 (2004), available at <http://www.lca.gov/Library/ProductList.aspx?ProdType=0&folder=1126> (reporting on cumulative coastal land loss in the Deltaic Plain from 1932–1990).

51. See USGS NAT'L WETLANDS RESEARCH CTR., OUTER CONTINENTAL SHELF RELATED PIPELINES AND NAVIGATION CANALS IN THE WESTERN AND CENTRAL GULF OF MEXICO: RELATIVE IMPACTS ON WETLAND HABITATS AND EFFECTIVENESS OF MITIGATION STUDY 2 (2009) [hereinafter USGS Study], available at <http://www.gomr.boemre.gov/PI/PDFImages/ESPIS/4/4875.pdf> (discussing the intense habitat changes and wetland impacts of OCS pipelines and how these are additional side effects to oil and gas drilling that go unnoticed).

52. See NAT'L COMM'N REPORT, *supra* note 1, at viii (pointing out that oil drilling is a complex system and blaming one person or group of people for a spill paints an incomplete picture because of the number companies, individuals, and organizations involved).

53. See *id.* at x (discussing the long-term impact to large, sensitive regions such as the Chesapeake Bay, the Everglades, and the Great Lakes which was not cause by oil spills, but by alterations to accommodate oil explorations).

54. See USGS Study, *supra* note 50 (providing an example of a report that was conducted on the impacts of pipelines and methods used to accommodate oil explorations in the Gulf of Mexico).

Louisiana and its natural resources was better acknowledged and dealt with.⁵⁵

Of course, when there is a spill, the impacts can be severe and wide ranging, as demonstrated by the 1969 Union Oil blowout in Santa Barbara, California (24,000–71,000 barrels),⁵⁶ the 1989 *Exxon Valdez* grounding (10–11 million barrels),⁵⁷ or the 1979 *Ixtoc I* blowout in the Bay of Campeche (3 million barrels).⁵⁸ These events, while hardly commonplace, are also not rare. Between 1955 and 2010 there were more than 44 notable blowouts worldwide, nearly one every 15 months.⁵⁹

There is a similar story on the safety side. It goes almost without saying that the business of finding and developing oil and gas resources can be dangerous work.⁶⁰ It involves working in extreme conditions with immensely complex machinery to access some of the most powerful and dynamic natural resources on earth.⁶¹ Sometimes things go wrong, and when they do people can be badly hurt or killed. In 1980, the *Alexander Kielland*, serving as a dormitory for offshore oil workers in the North Sea, capsized killing 123 people.⁶² In 1988, the semi-submersible rig the *Ocean Ranger* sank off the coast of Newfoundland killing all 84 crew members.⁶³

55. See *Blanco v. Burton*, No. Civ. A. 06-3813, 2006 WL 2366046 (E.D. La. Aug. 14, 2006) (evidencing additional documentation of the environmental impacts caused by oil explorations and offshore drilling).

56. See NAT'L COMM'N REPORT, *supra* note 1, at 28–29 (providing information on how the Union Oil blowout affected thirty miles of California beaches and lethally soaked birds).

57. See *id.* at 194 (describing the long-term effects oil spills can have, such as the post-traumatic stress disorder experienced by the cleanup workers from the Exxon Valdez disaster).

58. See RESTREPO & ASSOC., IXTOC I OIL SPILL ECONOMIC IMPACT STUDY, VOLUME I, VOLUME II: EXECUTIVE SUMMARY, AND VOLUME III: INPUT-OUTPUT MODEL FOR ECONOMIC ANALYSIS, INSTRUCTION MANUAL 2 (1982) [hereinafter RESTREPO STUDY], available at <http://www.gomr.boemre.gov/PI/PDFImages/ESPIS/3/3931.pdf> (describing how the Ixtoc I oil spill affected the region in various ways, such as tourism).

59. See *The Real Deal On Blowouts*, MARITIME INJURY LAWYER, <http://www.themaritimelawyer.com/the-real-deal-on-blowouts/> (last visited Nov. 8, 2011) (providing statistics on the frequency of blowouts to support the theory that they are not as rare as people may think) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

60. See NAT'L COMM'N REPORT, *supra* note 1, at vi (discussing how the *Deepwater Horizon* oil spill caused the lives of eleven crew members and others were seriously injured as evidence of how dangerous oil and gas developments can be).

61. See *id.* at 21–22 (detailing the difficulties and risks, such as hurricanes, waves, and adapting land-drilling methods offshore, all which were associated with the Creole Platform, the first well in the Gulf of Mexico).

62. See *id.* at 68 (providing an example of the impact oil rigs accidents can have on all those involved).

63. See *id.* at 68–69 (giving an additional example of the serious risks associated with oil rigs and the tragic fatalities involved).

Despite the abundant documentation of environmental and safety risks and a record that shows that blowouts and spills of more than 1,000 barrels are hardly anomalies,⁶⁴ it has been industry and governmental policy and practice in the United States to ignore or downplay those facts.⁶⁵ Indeed, it is fair to say, it has been policy to urge that it would be contrary to national interests to act more cautiously. That last point was made clear when Louisiana challenged the adequacy of the environmental analysis done by the Minerals Management Service in connection with Lease Sale 200 in the Gulf of Mexico.⁶⁶ Essentially Louisiana made the obvious case that there were, in fact, significant impacts (often secondary and cumulative) from offshore development on Louisiana's coastal resources and communities, impacts that had become clearer and more urgent following Hurricanes Katrina and Rita in 2005.⁶⁷ MMS refused to consider the state's request to delay the lease sale to allow a fresh look at the environmental baseline following the hurricanes of 2005 for a better environmental review, asserting that the purpose of the 1978 amendments to the Outer Continental Submerged Lands Act was to expedite oil and gas development and that "*any delay of this sale imposes significant and unnecessary economic and national defense costs.*"⁶⁸ The American Petroleum Institute echoed the MMS's concern about economic calamity and industrial upheaval should the lease sale be delayed or cancelled.⁶⁹ Although the court denied Louisiana's request for a preliminary injunction, it found a substantial likelihood that the state would prevail on the merits, so MMS voluntarily deferred Lease Sale 200.⁷⁰ The nation's economy and national security suffered no noticeable ill effects.

64. *See generally id.* (laying out the history of oil and gas development and the continuous risks and tragedies associated with them).

65. *See id.* at 84 (providing a perfect example of a governmental organization ignoring those facts: knowing the history and risks involved with oil and gas development, the MMS Gulf of Mexico Regional Office approved BP's Oil Spill Response Plan without any analysis or close scrutiny).

66. *See generally* Blanco v. Burton, No. Civ. A. 06-3813, 2006 WL 2366046 (E.D. La. Aug. 14, 2006) (describing how the governor of Louisiana, Kathleen Babineaux, filed a motion for preliminary injunction against Minerals Management Services regarding their compliance with the Department of the Interior's requirements in connection with Lease Sale 200).

67. *See id.* at 5 (discussing that Louisiana made its argument about significant offshore development impacts by submitting comments to MMS and by a letter sent from LDNR to MMS regarding the need for them to reevaluate all coastal activities).

68. *Id.* at *29 (emphasis added).

69. *See id.* at *1 (supporting the American Petroleum Institute's view against the motion for preliminary injunction by emphasizing them as a party to this case).

70. *See id.* at *21 (discussing the court's decision to deny the motion for preliminary injunction, but realizing that the state of Louisiana made legitimate claims that could possibly be substantiated).

This boosterish, hyper-confident approach to offshore development contributed significantly to the *Deepwater Horizon* tragedy and is in stark contrast to the way offshore oil and gas development has trended in other places in the world.⁷¹ The question is Why? Three factors go a long way to answering that question.

III. Discounting Harm

Few things are as driven by self-confidence as business and politics, so it should not be a surprise to find that the decisions underpinning the *Deepwater Horizon* project were shot through with boldness and certainty. Indeed, so characteristic has overconfidence become in economic decision-making that it has, with a great deal of fairness, been referred to by a recipient of the Nobel Prize in Economics as “the engine of capitalism.”⁷² The *Deepwater Horizon* is a case study in just how true that observation may be.

The MMS Environmental Impact Statements that have been prepared in connection with Gulf oil and gas development are voluminous tomes that describe at some length all of the things that are important about the Gulf and the sorts of things that might occur as a result of offshore activity that could harm them.⁷³ Oil spills are one of those.⁷⁴ How, then, could it be possible that a known risk could have been so poorly planned for?⁷⁵ The Environmental Impact Statements also provide an answer to that question.⁷⁶

First and foremost, large oil spills are described by MMS as “low probability events.”⁷⁷ While this is undoubtedly true, it misses the critical question of how much damage might be done by a truly large spill.⁷⁸ MMS

71. See e.g., NAT'L COMM'N REPORT, *supra* note 1, at 69 (describing foreign regulators, including the United Kingdom, Norway, and Canada, that, in the aftermath of fatal accidents, added a risk-based approach to regulation).

72. DANIEL KAHNEMAN, THINKING FAST AND SLOW, ch. 24 (2011).

73. See generally MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGION NO. 2007-018, GULF OF MEXICO OCS OIL AND GAS LEASE SALES: 2007–2010, FINAL ENVIRONMENTAL IMPACT STATEMENT (2007) [hereinafter MMS EIS 2007] (describing important features of the Gulf, including wetlands, beaches, and recreational resources, and harms that may occur in these areas due to OCS exploration and development, such as oil spills, wetlands loss, air emissions, discharges, and water quality degradation).

74. See *id.* at xi (stating that oil spills are a possible harm that could result due to offshore activity).

75. See *id.* at xii (acknowledging that oil spills are a risk involved with OCS exploration and development and describing the predicted impact of a spill).

76. See *id.* at xii (describing the likelihood of an oil spill and the damage that could occur as a result).

77. See *id.* at 228 (stating that there is a low probability of a large oil spill).

78. See *id.* at 229–32 (describing the likelihood and frequency of an oil spill and stating that the mean number of spills is less than one for the proposed action in the WPA

divides spills into two categories, those of less than 1,000 barrels and those of 1,000 barrels or more.⁷⁹ No separate analysis of the harm from mega spills is done or required, even those that are well within the realm of experience as evidenced by the *Exxon Valdez* and *Ixtoc I* incidents.⁸⁰ Similarly, no separate analysis was done to consider the risks—and response limitations—of drilling in ultra-deep water. The Oil Pollution Act (OPA) does require “worst case” response planning, but it was left to MMS to determine what constituted such a worst case and what an adequate Oil Spill Response Plan was.⁸¹ In the case of the Macondo well, the worst case scenarios ranged from 28,033 to 250,000 barrels,⁸² and the response plan was the now infamous cut and paste plan that included referenced impacts to walruses, sea lions, and sea otters, creatures that do not exist in the Gulf.⁸³

That MMS signed off on this Oil Spill Response Plan (and virtually identical plans for other deep water drillers) signals a lack of serious consideration by that agency.⁸⁴ The fact that it was practice to approve Oil Spill Response Plans within thirty days of submission suggests that cursory review was in fact policy.⁸⁵ Clearly, the working assumption was that nothing really bad could happen and if it did, industry would be ready.⁸⁶ No distinction was made between spills of thousands of barrels and hundreds of thousands, and certainly not millions of barrels.⁸⁷

Despite a number of laws ostensibly promising that oil and gas exploration would be done in a cautious manner that was protective of the environment (and those industries and communities that depend upon it), no

and CPA and estimating the most likely size of an oil spill greater than or equal to 1,000 bbl to be 4,600 bbl).

79. *See id.* at 231–36 (using risk analysis of an oil spill for those less than 1,000 barrels and those more than 1,000 barrels).

80. *See* NAT'L COMM'N REPORT, *supra* note 1, at 70 (describing the scope of the *Exxon Valdez* spill with 11 million gallons of oil spilled off of the shore in Alaska); *see also* MMS EIS 2007, *supra* note 72, at 244 (stating that in the *Ixtoc* spill, the rig fell into the well).

81. *See* Oil Pollution Act of 1990, 33 U.S.C. §§ 2701–20 (1990) (establishing liability and compensation procedures for oil exploration and development incidents and requiring response plans).

82. *See* NAT'L COMM'N REPORT, *supra* note 1, at 84 (discussing that BP's Oil Response Plan identified three different worst-case scenarios and predicted the amount of barrels of oil discharge).

83. *See id.* (stating that BP's Response Plan copied information from NOAA websites and much of the information in the Plan did not apply to the Gulf).

84. *See id.* (noting that the MMS approval of BP's Response Plan without additional analysis signaled “a lack of attention to detail”).

85. *See id.* (explaining that the MMS Regional Office's usual approval period for oil response plans was thirty days).

86. *See id.* (stating that the Regional Office did not submit response plans to other federal agencies or allow for a period of notice and comment).

87. *See id.* (describing that BP and MMS paid little attention to detail in writing and approving the Response Plan).

site-specific analysis of the risks or harms from the Macondo well or any other well was being done.⁸⁸ In many ways, the industry, regulators, policy makers, and even much of the environmental community had been lulled into a sense of security based on the experience of the thousands of wells that had been drilled in the Gulf in the preceding decades.⁸⁹ By assuming that past was prelude and that the risks of a blow out or spill in the extreme conditions of ultra-deep exploration were manageable through the same techniques used in less hostile environments, effective steps to prevent and respond to the *Deepwater Horizon* blowout were not taken.⁹⁰ By assuming that the vast scale of harm that resulted was unthinkable, the seeds of disaster were sown.

IV. Money

From the beginning, offshore oil and gas has been about money and power.⁹¹ In the years following World War II, the nation's growing appetite for energy coupled with the United States' growth as a world power and need for revenues to create a de facto joint venture between government and industry.⁹² This was particularly true in the days before environmental laws complicated the governmental role.⁹³ The desire to control offshore development and to reap its financial benefits was at the heart of the Truman Administration's assertion of federal control of the nation's tidelands and the mineral wealth beneath them as a matter of "paramount" national interest.⁹⁴ The ensuing litigation and legislation drew the line

88. *See id.* at 84–85 (discussing the “minimalist approach” in Federal oversight of oil and gas activity in the Gulf).

89. *See id.* at 90 (explaining various factors that came together to cause the blowout, most notably, a failure of management).

90. *See id.* at 115 (describing causes of the blowout, including oversight by BP, Halliburton, Transocean, and government regulators and a lack of technical expertise to prevent this type of disaster).

91. *See id.* at 57 (stating that the discussions prior to the enactment of the Outer Continental Shelf Lands Act of 1953 demonstrated that the debate centered around money and explaining that this Act is the foundation of federal legislation for offshore oil and gas development).

92. *See* Outer Continental Shelf Lands Act of 1953, 43 U.S.C. §§ 1331–56 (2010) (establishing an oil and gas leasing program with federal agency oversight for portions of the Outer Continental Shelf); *see also* NAT'L COMM'N REPORT, *supra* note 1, at 57–58 (describing the Outer Continental Shelf Lands Act that gave the federal government responsibility for overseeing offshore mineral development).

93. *See* NAT'L COMM'N REPORT, *supra* note 1, at 58–59 (discussing the rise of environmental laws that impacted offshore oil and gas development).

94. *See id.* at 57–58 (stating that Truman's administration assumed power over the U.S. continental shelf and declared that the federal government had “paramount rights” to the area, above the rights of the states).

between federal and state waters and mineral rights.⁹⁵ What was really at stake in this protracted dispute was not whether offshore oil and gas development would occur but whether the federal or state governments would we reap the benefits of leasing and royalties.⁹⁶

Oil and gas development can be highly profitable for those in the business of finding, extracting, and transporting oil and gas.⁹⁷ It is also hugely lucrative to the governments that host it.⁹⁸ Between the years 2000 and 2010, the federal government collected between \$4 billion and \$18 billion per year in lease payments, royalties, and bonuses.⁹⁹ It was the business of MMS to collect those sums, the same MMS that was supposed to regulate the oil and gas industry.¹⁰⁰

95. See Submerged Lands Act of 1953, 43 U.S.C. §§ 1301–15 (2010) (stating that the United States retains rights of regulation and control over lands and navigable waters, including leasing, use, and development of the lands and natural resources); see also Outer Continental Shelf Lands Act of 1953, 43 U.S.C. §§ 1331–56(a) (2010) (providing for federal management of a leasing program for mineral rights for the Outer Continental Shelf); *United States v. Louisiana*, 363 U.S. 1 (1960) (holding that the states could not interfere with the United States' power to property in the Gulf of Mexico and determining that the United States has rights against the states to the lands, minerals, and natural resources located within the disputed property in the Gulf of Mexico); *United States v. California*, 332 U.S. 19 (1947) (holding that the State trespassed on government property and was enjoined from doing so and finding that the national government has superior rights to three miles of property underwater off of the shore of California with full rights to the resources located within the area).

96. See *United States v. Louisiana*, 363 U.S. at 11–12 (analyzing the dispute between the federal government and the Gulf States over which party has rights to the natural resources in the disputed area offshore); see also *United States v. California*, 332 U.S. at 22–24 (explaining the disagreement between the federal government and California over rights to land off of the coast of California); NAT'L COMM'N REPORT, *supra* note 1, at 58 (discussing estimates of the value of federal land offshore and stating that revenue from leases of these lands would flow directly into the federal treasury); *id.* at 63–64 (describing the increase in oil prices from the original leasing of lands during the Truman administration to the creation of the MMS and estimating that these revenues and royalties were the second largest revenue source for the federal government).

97. See NAT'L COMM'N REPORT, *supra* note 1, at 36–38 (discussing the highly profitable oil extraction for Shell that brought in wells at Auger, an area located 136 miles off of the coast of Louisiana in the Gulf of Mexico, and stating that industry collected more than 10,000 barrels per day); see also *id.* at 45–47 (describing BP's success in the Gulf for oil extraction and the multiple discoveries of large reserves in the Gulf during the 1990s and 2000s).

98. See *id.* at 64 (showing the United States' billions of dollars in revenues from 1955 to 2010 and contrasting the differences in revenues from the beginning of offshore oil reserves discovery to present).

99. See *id.* (displaying the differences in the federal government's revenues from leases of offshore oil reserves from 2000 to 2010).

100. See *id.* (explaining that Secretary of Interior James Watt created the MMS and that the responsibilities from offshore leasing would pass from the U.S. Geological Survey to the new agency).

The money generating aspect of MMS was not an accident; it was central to its creation.¹⁰¹ Spurring oil and gas development and the associated revenues were its reason for being.¹⁰² A creation of the Reagan Administration and Secretary of Interior James Watt, it was envisioned as a vehicle for leasing one billion acres of offshore areas within a five-year period.¹⁰³ The actual leasing history failed to live up to Secretary Watt's billion-acre pledge, but the commitment was largely fulfilled in the Central and Western Gulf of Mexico.¹⁰⁴ That area became a generator of great profit to many in industry and a generator of vital revenues to federal, state, and local governments.¹⁰⁵ Just how important can be seen in the antipathy for the post-*Deepwater Horizon* moratorium on new leases and the ensuing period of greater regulatory scrutiny (or de facto moratorium as critics have called it).¹⁰⁶

The bottom line was and is that without expanded leasing, there could be no growth of revenue. The model of shared interest in drilling soon and fast had been built.¹⁰⁷ The post-spill breakup of MMS and the creation of the Bureau of Ocean Energy Management, Regulation, and Enforcement is an important break from that model, but whether it ultimately succeeds or is subordinated to revenue and energy generation is an open issue.¹⁰⁸

101. See *id.* at 64–65 (discussing Secretary Watt's creation of the MMS to assume leasing responsibilities previously handled by the U.S. Geological Survey).

102. See *id.* at 65–66 (describing that soon after the Secretary created the MMS, he issued a new five-year plan to increase leasing to about one billion acres, an increase eighteen times the fifty-five million acres in the original five-year plan for the MMS).

103. For a concise description of this history, see *id.* at 63–67, discussing the creation of the MMS by Secretary Watt and the new five-year plan issued for the Agency to increase leasing to almost one billion acres.

104. See *id.* at 65–67 (explaining that Secretary Watt's plan to drastically increase leasing in the Gulf was not met on the scale he imagined due to oil exploration and development unpopularity, buy-back of leases, court challenges, and many one-year moratoriums issued by the House Appropriations Committee).

105. See *id.* (noting that Secretary Watt's plan changed the method of leasing and drastically expanded offshore drilling in the Gulf and discussing Gulf States' efforts to increase their share of revenues received from leases).

106. See, e.g., Ben Casselman and Dan Gilbert, *Drilling is Stalled Even After Ban is Lifted*, WALL ST. J., Jan. 3, 2011, <http://online.wsj.com/article/SB10001424052970204204004576050451696859780.html> (describing that in response to the delay by the Obama Administration in issuing deepwater permits following the *Deepwater Horizon* incident, some companies are shifting investments out of the Gulf).

107. See NAT'L COMM'N REPORT, *supra* note 1, at 33 (discussing the area-wide offshore leasing program implemented by the Interior Department in 1982 that increased the areas industry could access for offshore drilling); see also Casselman and Gilbert, *supra* note 106 (stating that the delay in issuing deepwater permits is negatively impacting large oil companies that have billions of dollars in investments in the Gulf that are on hold).

108. See NAT'L COMM'N REPORT, *supra* note 1, at 255 (describing the reaction to the Macondo well failure that led Secretary Ken Salazar to rename the MMS the Bureau of

V. Law and Culture

Wishful thinking and a need for revenue may explain a lot about how the *Deepwater Horizon* tragedy came to pass,¹⁰⁹ but they do not adequately explain why fundamental change in our nation's approach to its energy and environmental duties have been slow to come and may not come at all.¹¹⁰

The relaxed approach to assessing and managing risk on the Macondo well job were not anomalies (reserving judgment on the issues of well design and rig management specific to the *Deepwater Horizon* rig).¹¹¹ Even if the Macondo well had been perfectly planned and drilled, the possibility of a blowout and spill still existed (e.g., from earth quakes, mudslides, acts of terror, or war).¹¹² The decision to ignore or minimize those risks was born of a culture of risk taking and shared purpose and a legal framework that shifted risk and responsibility from the industry and the federal government and onto millions of others in the Gulf Coast, onto the environment, and onto future generations assuming a large share of living with that risk.¹¹³

It was also born of a fundamental difference between legal/economic risk and environmental risk.¹¹⁴ Like any business decision, the decision to look for oil is driven by a risk-versus-reward analysis.¹¹⁵ If the perceived risks are higher than the rewards, business looks elsewhere for opportunities. Of course, if it is not good business to explore for oil offshore, then there is no money coming to government from lease sales, royalties, or bonuses. Government cannot do much to increase the rewards

Ocean Energy Management, Regulation, and Enforcement and to split the Agency's responsibilities into three offices).

109. *See generally id.* at 54–85 (discussing the beginning of the leasing program and the large revenues obtained by the federal government and explaining oil companies' expansion efforts for oil drilling to increase their profits).

110. *See id.* at 122–27 (characterizing the root causes of the Macondo well blowout as failures in industry and government and opposition to efforts to increase regulatory oversight and tighten safety guidelines from the government and industry).

111. *See id.* at 115 (stating that the blowout was the result of a lack of management, resources, and expertise from the government coupled with oversight by industry).

112. *See id.* at 127 (acknowledging that deepwater drilling comes with inherent risks since drilling occurs well below the ocean floor).

113. *See id.* at 126–27 (discussing causes of the blowout that include industry's ability to decide many critical aspects of drilling without oversight or review by MMS, as well as the lack of training, resources, and political support given to MMS).

114. *See id.* at 58–59 (noting that when offshore drilling began, there were very few environmental regulations and any regulations were separate from the offshore leasing policies until the National Environmental Policy Act was signed into law).

115. *See id.* at 24–28 (explaining the development of new drilling technologies beginning in the 1950s and the costs associated with drilling and summarizing industries' decisions of whether to invest in oil exploration based on how much oil may be discovered).

for developing products whose value is set by worldwide markets, but it can certainly do something about reducing financial risk and costs by relaxing regulatory and royalty requirements—exactly the course of action followed by the United States in the central and western Gulf of Mexico.¹¹⁶

When oil and gas development began in near-shore and offshore waters, there were few applicable laws or regulations.¹¹⁷ It was an era of “minimum regulation, maximum cooperation.”¹¹⁸ In the 1953 film *Thunder Bay*, it is a glorious moment, not a blowout, when the intrepid oil man, played by Jimmy Stewart, strikes oil and the gushing oil covers the rig and the surrounding waters.¹¹⁹ Those were the years in which the deep (if sometimes troubled) relationship between the oil and gas industry, government, and communities were shaped.¹²⁰ In some places, such as California, events like the Santa Barbara spill prompted a rejection of the industry,¹²¹ but not in the Central and Western Gulf of Mexico, particularly off the coasts of Alabama, Louisiana, and Texas.¹²²

116. *See id.* (stating that while industries initially tried different approaches to oil exploration in the Gulf, the federal government took a minimalist approach to regulating these activities and encouraged exploration).

117. *See id.* (discussing that, during the 1950s and 1960s, the federal government facilitated oil exploration by increasing the number of areas leased to industry and the U.S. Geological Survey, the agency in charge of offshore drilling, issued orders that outlined procedures for drilling, but these were minimal).

118. *See id.* at 28 (describing federal oversight of oil exploration during the 1950s and 1960s).

119. THUNDER BAY (Universal Studios 1953). This fictional depiction of early offshore oil exploration in Louisiana includes prescient scenes about the conflicts between the new oil economy and the traditional ways and values of the local communities. *See id.* Claims that the oil men would “kill our shrimp . . . [then] want to kill our people,” and that they would “spoil everything they touch” were countered by Stewart’s character lecture to an angry mob:

You may put me out of business . . . but that isn’t important. The important thing is there’s oil under this Gulf. We need it. Everybody needs it. You need it. Without this oil this country of ours would stop and start to die. It doesn’t make any difference what you do to me . . . you can’t stop progress, nobody can. There’s gonna be a hundred rigs just like this all over the Gulf. This is gonna be the richest oil field in the world.

See id. In the movie, he strikes oil, falls in love with the local girl who railed against the “dirty oil men,” and the shrimp love the rigs. A love affair between a state, a culture, an industry, and a nation all exist on one reel. *See id.*

120. *See generally* NAT’L COMM’N REPORT, *supra* note 1, at 25–28 (describing Gulf offshore oil exploration and federal oversight over these activities).

121. *See id.* at 28–29 (characterizing the Santa Barbara oil spill as the largest oil accident until the Macondo well blowout and stating that the spill led President Nixon to issue a moratorium on oil drilling and production in California waters in 1969).

122. *See id.* at 56 (distinguishing the reaction to the Santa Barbara oil spill with oil drilling activity in the Gulf and stating that in the Gulf, federal regulations and standards for oil exploration activities were relaxed, which promoted an expansion of oil and gas production and an increase in revenue to the federal government).

Over the course of the second half of the Twentieth Century, the national trend toward greater environmental and worker safety awareness produced a series of laws that intended to strengthen environmental protections and work safety rights.¹²³ Laws such as the National Environmental Policy Act, the Clean Water Act, the Coastal Zone Management Act, the Marine Mammal Protection Act, the Outer Continental Shelf Lands Act amendments of 1978, and the Oil Pollution Act created a new framework for regulating offshore oil and gas development.¹²⁴ But, so strong were the political/economic ties in the Central and Western Gulf that even the advent of new environmental sensitivities and laws were not allowed to get ahead of the basic business of finding and pumping oil and gas.¹²⁵

123. See Marine Mammal Protection Act, 16 U.S.C. §§ 1361–1423(h) (1972) (acknowledging that some animals are in danger of extinction and establishing a framework for obtaining a sustainable population of marine mammals); see also Coastal Zone Management Act of 1972, 16 U.S.C. §§ 1451–64 (1972) (establishing a national policy to preserve and protect coastal areas of the United States and encouraging states to develop coastal zone management plans); Clean Water Act, 33 U.S.C. §§ 1251–1387 (1972) (setting regulations on pollutants deposited into navigable waters); Oil Pollution Act of 1990, 33 U.S.C. §§ 2701–62 (1990) (establishing provisions for liability and compensation guidelines for oil exploration and development incidents); National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–70 (1970) (creating the Environmental Protection Agency to conduct activities including research, monitoring, standard-setting, and enforcement of environmental regulations and requiring federal agencies to submit an environmental impact statement for activity that has a significant impact upon the environment); Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331–56(a) (amended 1978) (reflecting growing concern over the increase in oil exploration and drilling activities and establishing greater environmental safeguards and increased cooperation between the federal government and the states); NAT'L COMM'N REPORT, *supra* note 1, at 79–80 (describing the passage of laws for environmental protection to areas subject to oil and gas exploration and drilling).

124. See Marine Mammal Protection Act, 16 U.S.C. §§ 1361–1423(h) (1972) (creating limits on activities that negatively affect marine mammals, including oil exploration and drilling); see also Coastal Zone Management Act of 1972, 16 U.S.C. §§ 1451–64 (1972) (providing regulations for preserving coastal areas of the United States connected with economic development of these areas); Clean Water Act, 33 U.S.C. §§ 1251–1387 (1972) (establishing regulations for any substances deposited into navigable waters); Oil Pollution Act of 1990, 33 U.S.C. §§ 2701–62 (1990) (creating guidelines for handling oil spills and expanding the federal government's ability to respond to spills); National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–70 (1970) (establishing federal guidelines for managing environmental issues, including the creation of the Environmental Protection Agency); Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331–56(a) (amended 1978) (creating an oil spill liability fund and providing regulations for management and exploitation of oil in the Outer Continental Shelf); NAT'L COMM'N REPORT, *supra* note 1, at 79–82 (discussing the enactment of new laws to provide regulations for oil exploration and drilling).

125. See NAT'L COMM'N REPORT, *supra* note 1, at 80–82 (stating that, as a result of compromises between industry and the federal government, many federal laws designed to increase regulations on oil drilling and exploration did not apply regulations as stringently in the Gulf).

For example, the provision of the Outer Continental Shelf Lands Act requiring that consideration be given to environmental concerns in leasing decisions¹²⁶ is effectively mooted by another provision of that same Act that requires exploration plans to be approved within thirty days after they are submitted,¹²⁷ a window so truncated that it can effectively prevent any meaningful environmental analysis.¹²⁸ Other examples can be found in the practices of “tiering” NEPA compliance and of granting “categorical exclusions” from NEPA to activities that do not, alone or in combination, have a significant effect on the human environment.¹²⁹ In concept both practices make perfect sense. In practice, however, tiering and categorical exclusions have too frequently allowed important environmental concerns to be largely overlooked.¹³⁰

There is more than regulatory relief behind the inducements to drill; there are direct financial incentives as well, such as those provided by the Deep Water Royalty Relief Act of 1995,¹³¹ which suspended a portion of the royalties owed from new deepwater production.

The point here is not to criticize individual laws or policies, but rather to place them on the table so their roles and impacts can be assessed. Whatever their merits, there has been general expression of dissatisfaction with their application in this case.¹³² That is understandable, as is the

126. See Outer Continental Shelf Lands Act, 43 U.S.C. § 1344(a)(1) (amended 1978) (explaining that management of the outer continental shelf must be done in accordance with environmental values).

127. See *id.* § 1340(c)(1) (establishing that the Secretary of the Interior must approve oil exploration plans within thirty days of submission).

128. See NAT'L COMM'N REPORT, *supra* note 1, at 80–82 (discussing that portions of the 1978 version of the Outer Continental Shelf Lands Act are against full consideration of environmental concerns since the thirty-day time period is insufficient to determine whether environmental safeguards can be met).

129. In concept, tiering would allow for general environmental impacts to be reviewed at earlier phases of the offshore leasing with narrower and deeper analysis to be done as the activity moved from the leasing to the actual exploration and production phase.

130. See, e.g., NAT'L COMM'N REPORT, *supra* note 1, at 260.

131. See Outer Continental Shelf Deep Water Royalty Relief Act, Pub. L. No. 104-58, 109 Stat. 563 (1995) (establishing a royalty-relief program to allow industries with leases to forego the payment of royalties on deepwater oil production).

132. See generally NAT'L COMM'N REPORT, *supra* note 1, at 217–91 (discussing that a combination of increased government oversight and industry changes to increase risk management and safety regulations are needed to prevent future disastrous oil spills); GULF COAST ECOSYSTEM RESTORATION TASK FORCE, GULF OF MEXICO REGIONAL ECOSYSTEM RESTORATION STRATEGY (Preliminary) (2011) [hereinafter GULF COAST RESTORATION STRATEGY] (describing the need for improvements in government oversight and collaboration with Gulf States to improve community planning, risk assessment, environmental stewardship, and science-based methods for monitoring Gulf Coast oil operations).

tendency to look for lessons that have been learned from this tragedy.¹³³ But, there is an important difference between a lesson taught and a lesson learned. Indeed, for a lesson to be learned, there must be some responsible actor capable of learning. In the case of the *Deepwater Horizon* spill, where virtually all of the major actors are institutions of one sort or the other,¹³⁴ it is inconsistent with past experience to expect learning and change to flow naturally from experience. With the exception of the administrative dismantling of MMS and the decision by industry to create an independent spill response entity,¹³⁵ very little has changed despite a plethora of reports, hearings, and commentaries.¹³⁶ That should not be a surprise. The legal framework that directed the actions of the industry and governmental players is still the same after the accident as it was before.¹³⁷ The institutions themselves are very limited in their ability to learn from any event and to change as a result of it, especially when that would require a change in underlying law or policy.

Until the systemic conditions, overconfidence, and hubris that paved the way to disaster on April 20, 2010, are addressed and changed the only real barrier between ourselves and repeated avoidable tragedy will be good luck. That does not have to be our path, but to change it will take real effort.

The further we get from the spill, the less likely it is that anything fundamental will happen. To be sure, there are still efforts underway,¹³⁸ but

133. For example, Part III of the National Commission Report is titled “Lessons Learned: Industry, Government, Energy Policy.” See NAT’L COMM’N REPORT, *supra* note 1, at 215–306 (explaining that a need for change in many areas of oil exploration and drilling, as well as for government oversight, including environmental practices, containment and clean-up technologies, preparedness, and management behavior, were lessons learned from the *Deepwater Horizon* spill).

134. See *generally id.* (describing the numerous actors at play in the *Deepwater Horizon* spill in the areas of oil exploration, oversight, and management).

135. See *id.* at 55–85 (explaining the timeline of the creation of MMS to the dismantling of MMS due to the Agency’s mishandling of regulatory duties related to oil spill response plans).

136. See *id.* at 249–91 (discussing the numerous hearings held by Congress on the *Deepwater Horizon* spill, reports submitted to Congress from industry and federal agencies, and the recommendations for how to improve conditions and oversight to prevent future oil spills of the magnitude of *Deepwater Horizon*).

137. See Oil Pollution Act of 1990, 33 U.S.C. §§ 2701–62 (1990) (establishing a process for establishing liability and assessing the damages caused by spills); see also NAT’L COMM’N REPORT, *supra* note 1, at 183–84 (discussing the Oil Pollution Act’s provisions for assessing damages and establishing liability for oil spills).

138. See NAT’L COMM’N REPORT, *supra* note 1, at 249–91 (proposing recommendations for improvement in government oversight and industry response and management of oil spills); see *generally* GULF COAST RESTORATION STRATEGY, *supra* note 131 (establishing the need for increased environmental regulations along the Gulf Coast and presenting a strategy for Gulf Coast restoration following the *Deepwater Horizon* disaster, including efforts to

if they succeed, it will likely be because of an enormous effort on the part of committed stakeholders and key elected officials to keep the issues alive. The takeaway here is that people learn, but institutions react. Without concerted effort, one can only expect them to react in ways that recreate the pre-event status quo. The *Deepwater Horizon* blowout may have taught many important lessons, but as yet, most of them are still unlearned by those most responsible.

restore and conserve Gulf Coast habitats, restore water quality, replenish and protection Gulf Coast coastal and marine organisms, and enhance community resilience).