DEEPWATER HORIZON TEN YEARS LATER: REGULATIONS, ROLLBACKS, AND WHERE WE GO FROM HERE

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INTRODUCTION

In 1989, the oil tanker *Exxon Valdez* spilled 11 million gallons of oil into the Prince William Sound.¹ At the time, it was the largest oil spill in U.S. history, and the event led to Congress passing the Oil Pollution Act of 1990 (OPA), which drastically strengthened the Environmental Protection Agency's (EPA) ability to prevent and respond to oil spills.² In 2010, an explosion aboard the oil rig *Deepwater Horizon* caused approximately 168 million gallons of oil to spill into the Gulf of Mexico, an environmental disaster whose effects are still being felt in the Gulf region.³ Unlike in 1989, however, Congress did not act; instead, the executive branch took the lead, securing a settlement that some predicted would have a deterrent effect on the oil industry and other polluters.⁴ Additionally, under the Obama administration, federal agencies strengthened regulations, including the Well Control Rule (WCR), "a package of safety measures including backup mechanisms on blowout preventers, regular tests of safety equipment, and independent inspectors so that the public no longer relies on the companies

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^{1.} CNN Editorial Research, *Oil Spill Fast Facts*, CNN (Feb. 26, 2020, 2:09 PM), https://www.cnn.com/2013/07/13/world/oil-spills-fast-facts/index.html [https://perma.cc/2JZU-DAV7].

^{2.} Summary of Oil Pollution Act, U.S. ENV'T PROT. AGENCY (Sept. 28, 2021), https://www.epa.gov/laws-regulations/summary-oil-pollution-act [https://perma.cc/JV9S-FW7N]. Among the Act's most relevant provisions were the establishment of a tax on oil companies that goes toward a fund for cleaning up spills, increased regulations for oil tankers and storage facilities, and the development of Area Contingency Plans. Id.

^{3.} CNN Editorial Research, *supra* note 1.

^{4.} Jeremy P. Jacobs, *How the Gulf Spill Settlement Reshaped Environmental Law*, E&E NEWS: GREENWIRE (Apr. 17, 2020, 12:22 PM), https://www.eenews.net/stories/1062899425 [https://perma.cc/EB5F-48ZY]. For example, in 2017 Volkswagen and the Department of Justice reached a \$4.3 billion settlement for the cases stemming from the highly publicized emissions testing cheating scandal. *Id.*

to police themselves."⁵ Despite these measures, ten years after the spill, Congressional inaction and regulatory rollbacks by the Trump administration—including weakening the Well Control Rule and other regulations—have effectively reinstated the self-regulation system that existed in 2010, leaving the Gulf Coast vulnerable to another disaster.⁶ Immediately upon taking office, President Joe Biden signed an executive order rescinding the Trump WCR-weakening order and directing all agencies to review and consider revising the rules issued during the Trump administration.⁷ President Biden also issued an order pausing all new drilling leases for the time being.

While we remain in this regulatory limbo, lawmakers and regulators should consider new ways to tackle the ever-looming threat of oil spills and the even larger associated problem of climate change. It is clear that reform is needed. If the OPA taught us anything, it is that stricter laws reduce both the number of spills and the amount spilled. Even before the Trump administration rollbacks, the U.S. regulatory system was inadequate to combat the inherent environmental dangers posed by drilling for oil. What is less clear is how to build a future in which coastal states are neither beholden to the oil industry nor threatened by the specter of catastrophic spills. More regulation is needed, but regulation is at best a stopgap

5. Steven Mufson, *Ten Years After Gulf of Mexico Oil Spill, Trump Administration Weakens Regulations*, WASH. POST (Apr. 19, 2020, 3:30 PM), https://www.washingtonpost.com/climate-environment/ten-years-after-gulf-of-mexico-oil-spill-trump-administration-weakens-reforms/2020/04/19/f935ec1c-7ffc-11ea-8013-1b6da0e4a2b7_story.html [https://perma.cc/5XUZ-Z9VT].

Rob Hotakainen, Reviving the Gulf: 'It could all go to hell pretty quickly', E&E NEWS: GREENWIRE (Apr. 16, 2020, 12:03 PM), https://www.eenews.net/special_reports/deepwater_10years/ stories/1062890865 [https://perma.cc/D9YS-9HZ5]. "So far this year, 279 spills have been reported, but that likely excludes many that happened after March 26, when EPA relaxed its rules on polluters in response to the coronavirus pandemic Since then, the number of reported spills in the Gulf has dropped by 43%." Id.; see also Valerie Valcovici, Environmentalists Sue Over Trump Rollback of OilOffshore Safety Regulations, INS (June 12 I https://www.insurancejournal.com/news/national/2019/06/12/529042.htm UNHT].

^{7.} Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, Exec. Order No. 13,990, 86 Fed. Reg. 7037 (Jan. 20, 2021).

^{8.} The U.S. Department of Transportation reports that in 1990, the total number of gallons spilled from all oil spills was almost 8 million. *Freight Facts and Figures*, U.S. DEP'T OF TRANSP. (2013), https://ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/docs/13factsfigures/table5_18.htm [https://perma.cc/RKJ9-7NBT]. In 2000, that number was down to just under 1.5 million. *Id.* By 2009, it was 211,601. *Id.* Additionally, the number of incidents fell from 8,177 in 1990 to 3,304 in 2009.

measure—not to mention one fraught with pushback from powerful interest groups, energy absolutists, and climate change deniers. The more lasting solution is to end American dependence on oil and begin the move towards clean, sustainable energy on a federal level.

This Note will examine several courses of action and their feasibility, ultimately arguing that the best way to end oil spills is to abandon oil altogether. Part I of this Note traces the history of modern oil regulation: *Exxon Valdez* and the OPA, *Deepwater Horizon* and the Obama era regulations, the Trump administration's rollbacks, and state regulation. Part I also examines several courses of action that Congress, federal agencies, and the states could take to prevent and mitigate spills. Finally, Part II examines recent proposals that would start America down the road to clean energy and away from oil dependence, most notably the Green New Deal.

I. HISTORY

A. Post-Exxon Valdez Legislation

In the spring of 1989, the country watched a preventable tragedy slowly unfold as 11 million gallons of crude oil—the largest oil spill in American history at the time—seeped from the damaged hull of the tanker *Exxon Valdez*, which continues to affect the Alaskan coast more than thirty years later. Thousands of Exxon employees, federal responders, and Alaskans worked for months to contain the disaster, but the oil eventually spread some 1,300 miles down the coast, killed hundreds of thousands of animals, collapsed the Alaskan fishing industry, and formed pockets under the sand that could still be released by an earthquake or storm today.

^{9.} Alan Taylor, *Remembering the Exxon Valdez Oil Spill*, ATLANTIC (Mar. 24, 2014), https://www.theatlantic.com/photo/2014/03/remembering-the-exxon-valdez-oil-spill/100703/[https://perma.cc/AY8J-YPX4].

^{10.} Stephen Leahy, Exxon Valdez Changed the Oil Industry Forever—But New Threats Emerge, NAT'L GEOGRAPHIC (Mar. 22, 2019), https://www.nationalgeographic.com/environment/2019/03/oilspills-30-years-after-exxon-valdez/#close [https://perma.cc/W7YJ-36Q6]. Among the casualties were 250,000 seabirds, around 3,000 sea otters, 300 harbor seals, 250 bald eagles, 22 killer whales, and billions of salmon eggs. Id. Additionally, the collapse of the pacific herring population caused fisherman to go bankrupt. Id.

Out of these multiple tragedies, however, there was a silver lining. Congress responded by passing the Oil Pollution Act (OPA) of 1990, 11 which gave the EPA increased power to prevent and respond to oil spills.¹² To address the main causes of the Exxon Valdez spill, ¹³ the OPA required oil tankers to have double hulls and provided for review and revocation of licenses for alcohol and drug abuse. 14 But the legislation went further. To prevent future spills, the OPA also increased penalties for oil companies responsible for spills;15 imposed strict joint, and several liability on responsible parties, and limited their defenses; 16 empowered the EPA and Coast Guard to draw up new regulations for storage facilities and tankers;¹⁷ and established the Interagency Coordinating Committee on Oil Pollution Research to research and develop new technologies for preventing and mitigating oil spills. 18 As to spill response, the OPA established the Oil Spill Liability Trust Fund (OSLTF) to finance oil spill clean-up when the responsible party is unable or unwilling to do so. 19 The OSLTF is funded by a tax on oil, as well as penalties recovered under the OPA.²⁰ Finally, the OPA required the Coast Guard and EPA to develop Area Contingency Plans which go into effect in the event of a spill.²¹

^{11.} Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484 (codified as amended in scattered sections of U.S.C.).

^{12.} Summary of the Oil Pollution Act, supra note 2.

^{13.} The Exxon Valdez was a single-hulled tanker; if it had been double-hulled, the collision would have been less likely to have spilled oil. Exxon Valdez Oil Spill, HISTORY.COM, https://www.history.com/topics/1980s/exxon-valdez-oil-spill [https://perma.cc/3PYK-HNWT] (last updated Mar. 23, 2021). The captain of the Exxon Valdez, Joseph Hazelwood, was acquitted of being intoxicated at the helm, but was convicted on a misdemeanor charge of negligent discharge of oil. Taylor, supra note 9.

^{14.} Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484, 509-511, 517-522 (codified as amended in scattered sections of 46 U.S.C.).

^{15.} Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484, 533-541 (codified as amended in scattered sections of 33 U.S.C. and 46 U.S.C.).

^{16.} Jaclyn A. Zimmermann, *Inadequacies of the Oil Pollution Act of 1990: Why the United States Should Adopt the Convention on Civil Liability*, 23 FORDHAM INT'L L.J. 1499, 1520 (1999).

^{17.} Summary of the Oil Pollution Act, supra note 2.

^{18. 33} U.S.C. § 2761.

^{19. 26} U.S.C. § 9509.

^{20.} Id.

^{21.} Summary of the Oil Protection Act, supra note 2; 33 U.S.C. § 1321. "The impacts of an oil spill can vary widely, from isolated incidents that are contained on-site to incidents that have a local, regional, national, or international impact. Contingency plans are developed to address the specific geographic scope of the incident. Such plans enable responders to address incidents by helping to identify and coordinate the activities of the different government agencies and private organizations involved in the response." Area Contingency Planning, U.S. ENV'T PROT. AGENCY (Sept. 1, 2021),

The salutary effects of the OPA are undeniable, and it remains one of the most important pieces of American environmental law. In the 1970s, the International Tanker Owners Pollution Federation (ITOPF), an association of shipowners that responds to oil spills, reported seventy-nine spills per year. In the past decade, that number was six. ²² Both the number of spills and number of gallons spilled have trended downward since 1990, even amid sustained growth in the global petroleum and gas products trade. ²³ That said, even in the 1990s critics argued that the OPA did not go far enough, and oil spills—some even worse than *Exxon Valdez*—have continued to occur. ²⁴

B. The Failure of Regulation: Deepwater Horizon and Its Effects

On April 20, 2010, the British Petroleum-operated oil drilling rig *Deepwater Horizon* exploded, killing eleven workers and setting a new record for the largest oil spill in American history.²⁵ One hundred thirty-four million gallons flowed into the Gulf of Mexico in the eighty-seven days it took to cap the damaged well.²⁶ Despite the efforts of BP and several federal agencies using floating booms and dispersants to control the spread, the spill devastated coastal communities and wildlife from Texas to Florida,

https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/area-contingency-planning#main-content [https://perma.cc/MU2Z-QH26].

^{22.} Leahy, *supra* note 10. See also Max Roser, Oil Spills, OUR WORLD IN DATA (Apr. 2017), https://ourworldindata.org/oil-spills [https://perma.cc/84FC-YEZW] ("While in the 1970s there were 24.5 large (> 700 tonnes) oil spills per year, in the 2010s the average number of large oil spills decreased to 1.7 oil spills per year.").

^{23.} Roser, supra note 22.

^{24.} See Zimmerman, supra note 16, at 1532 ("In practice, OPA has helped create safer design requirements and higher liability limits internationally. However, by allowing states to implement their own laws, OPA fails to create a uniform system. Even with strict state laws, shipowners have found loopholes that allow them to circumvent requirements. OPA applies only to assets subject to U.S. jurisdiction, therefore, shipowners without assets in the United States can travel in OPA waters without liability.") (footnotes omitted).

^{25.} Matt Lee-Ashley, 10 Years After Deepwater Horizon, Oil Spills and Accidents Are on the Rise, CTR. FOR AM. PROGRESS (Mar. 3, 2020), https://www.americanprogress.org/issues/green/news/2020/03/03/481027/10-years-deepwater-horizon-oil-spills-accidents-rise/ [https://perma.cc/T4LC-C5XX].

^{26.} Deepwater Horizon – BP Gulf of Mexico Oil Spill, U.S. ENV'T PROT. AGENCY (Jan. 14, 2022), https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill [https://perma.cc/H83C-VELN].

and its long-term effects are still unknown.²⁷ In dealing with the aftermath, three questions needed answers: how did this happen, how should the responsible parties be punished, and how could another disaster be avoided. This Note will address each in turn.

1. How It Happened

In May of 2010, President Obama announced the creation of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling ("the Commission").²⁸ The Commission's purpose was to "determine the causes of the disaster, and to improve the country's ability to respond to spills, and to recommend reforms to make offshore energy production safer."29 As to the causes of the disaster, the Commission concluded that the explosion could have been prevented but for "a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic failures in risk management that they place in doubt the safety culture of the entire industry."30

The Commission found that BP knew that its blowout preventer—a piece of equipment meant to automatically seal the well in the event of a loss of control—was faulty, but failed to fix it.³¹ But more than that, BP failed to create and implement the sort of effective safety and contingency plans at the heart of the OPA, and, without adequate oversight, this yielded catastrophic results.³² In sum, shortcuts, omissions, and "a cascade of deeply flawed failure and signal analysis, decision-making, communication, and organisational-managerial processes" on the part of BP led to the entirely-

Ocean Portal Team, Gulf Oil Spill, SMITHSONIAN INST. (Apr. https://ocean.si.edu/conservation/pollution/gulf-oil-spill [https://perma.cc/FF94-W8QY].

^{28.} NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL & OFFSHORE DRILLING, https://www.govinfo.gov/content/pkg/GPO-THE PRESIDENT (2011), vi OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf [https://perma.cc/V33K-5K5Y] [hereinafter DEEPWATER HORIZON REPORT].

^{29.} Id.

^{30.} Id. at vii.31. Ben Bryant, Deepwater Horizon and the Gulf Oil Spill- The Key Questions Answered, GUARDIAN (Apr. 20, 2011), https://www.theguardian.com/environment/2011/apr/20/deepwaterhorizon-key-questions-answered [https://perma.cc/M4MV-Q9DS].

^{32.} Id.

preventable disaster, suggesting that the laws and regulations in place in 2010 needed to be strengthened to put external pressure on oil companies.³³

2. The Response

Because the OPA imposes almost unlimited liability on companies that spill oil,³⁴ it is not surprising that *Deepwater Horizon* launched hundreds of lawsuits. The most important, however, was a civil suit³⁵ filed by the United States and five Gulf states against BP under the Clean Water Act³⁶ and the OPA.³⁷ *In re Oil Spill* resulted in a more than \$20 billion settlement, the largest civil settlement ever reached in the United States.³⁸ Some experts have lauded the settlement as ushering in a new era of multi-billion dollar pollution settlements and its ostensible deterrent effects on other polluters.³⁹ The decision to vigorously pursue these settlements was a conscious one by the Obama administration Department of Justice because, unlike in 1989, Congress failed to act.

3. How to Prevent Another Disaster: Regulatory Action in the Obama Administration

The Obama administration did more than prosecute BP. The Commission's report contained several recommendations geared toward preventing another blowout. It concluded that:

Changes in safety and environmental practices, safety training, drilling technology, containment and clean-up technology, preparedness, corporate culture, and management behavior will be required if deepwater energy

34. 33 U.S.C. §§ 2701-04.

^{33.} *Id*

^{35.} In re Oil Spill by the Oil Rig Deepwater Horizon in the Gulf of Mexico, $808\,F.$ Supp. $2d\,943\,(E.D.\,La.\,2011).$

^{36. 33} U.S.C. § 1251 et seq. (1971).

^{37.} The federal government also pursued criminal charges that are beyond the scope of this Note, resulting in a \$4 billion settlement. Jeremy P. Jacobs, *How the Gulf Spill Settlement Reshaped Environmental Law*, E&E NEWS (Apr. 17, 2020), https://www.eenews.net/stories/1062899425 [https://perma.cc/FRY3-K9TG].

^{38.} *Id*.

^{39.} *Id.* (quoting former DOJ environmental crimes attorney David Uhlmann) ("The Gulf oil spill changed how we think about the size of settlements in major criminal and civil cases.").

operations are to be pursued in the Gulf—or elsewhere. . . . Beyond the oil and gas industry's response, the inadequacies in permitting and regulatory standards, practices, and oversight revealed by the crisis have already caused significant changes in the federal rules and procedures for deepwater drilling. But further action, including the creation of an independent safety authority, is clearly warranted ⁴⁰

The Commission drew parallels between the *Deepwater Horizon* spill and the Three Mile Island nuclear accident, and it pointed to the transformation of the nuclear energy industry's safety culture following Three Mile Island as evidence that self-policing can be a helpful supplement to necessary government regulation.⁴¹ Three parallels between the two industries guided the Commission's ultimate recommendation. First, it noted that in both industries, "the entire industry's reputation, and perhaps its viability, ultimately turn on its lowest-performing members."42 Following Three Mile Island, the nuclear industry created the nonprofit Institute of Nuclear Power Operations (INPO) to promote safety among industry participants.⁴³

The Commission argued that similar organizations for oil and gas predicated on the self-interest of industry actors and industry selfpolicing—could improve the lax safety culture that facilitated the blowout.⁴⁴ Second, the Commission pointed out that oil companies do not own the natural resources in the outer continental shelf. 45 Like any utility, those resources belong to the American people, and thus the federal government could condition extraction upon participation in industry-wide safety regimes.⁴⁶ Finally, effective government oversight of complex and

^{40.} DEEPWATER HORIZON REPORT, supra note 28, at 215.

^{41.} Id. at 235-36. Three-Mile Island was a highly publicized nuclear reactor meltdown in Pennsylvania that took place in 1979. Chelsea Koerbler, 40 Years After Three Mile Island Accident, Question Health Impacts, WPMT FOX43 https://www.fox43.com/article/news/local/contests/40-years-after-three-mile-island-accident-somestill-question-health-impacts/521-394e2a3b-ff71-4b32-80a7-acfd9361f5b8.

^{42.} *Id.* at 239. 43. *Id.* at 235.

^{44.} Id. at 239.

^{45.} Id.

^{46.} Id. at 239-40.

dangerous industries depends on the "in-house technical expertise" of government regulators, but, as with nuclear regulation, such highly technical governmental expertise is difficult to find.⁴⁷

Ultimately, the Commission concluded that an INPO-style self-policing entity for oil and gas, equipped with adequate industry expertise, could improve safety. 48 Analyzing these parallels as well as the facts of the Deepwater Horizon spill, the Commission divided its recommendations into seven categories:

- (A) "Improving the Safety of Offshore Operations,"
- (B) "Safeguarding the Environment,"
- (C) "Strengthening Oil Spill Response, Planning, and Capacity,"
- (D) "Advancing Well-Containment Capabilities,"
- (E) "Overcoming the Impacts of the *Deepwater Horizon* Spill and Restoring the Gulf,"
- (F) Ensuring Financial Responsibilities," and
- (G) "Overcoming the Impacts of the Deepwater Horizon Spill and Restoring the Gulf."49

Each category contains several valuable recommendations, but I will focus on three key overarching themes therein.

First, the Commission recommended promoting stronger incentives for industry participants to invest in safety, risk reduction, and spill response infrastructure.⁵⁰ Specifically, Recommendation F1 called on Congress to "significantly increase the liability cap and financial responsibility" to provide incentives for oil companies to follow safety procedures as well as compensate victims of spills.⁵¹ Similarly, Recommendation F2 asked Congress to "increase the limit on per-incident payouts from the Oil Spill Liability Trust Fund" because it found these restricted payments to victims

Id. at 240. Specifically, the Commission stated that "the salary differential, combined with the sheer depth of industry expertise on a wide variety of topics critical to understanding and managing offshore drilling operations, would make that goal illusory." Id.

^{48.} Id.

^{49.} Id. at 250.
50. Mark A. Cohen & Alan Krupnick, Deepwater Drilling: Recommendations for a Safer Future, RESOURCES MAG. (May 12, 2011), https://www.resourcesmag.org/commonresources/deepwater-drilling-recommendations-for-a-safer-future-1/ [https://perma.cc/8QAG-HVR6].

^{51.} DEEPWATER HORIZON REPORT, supra note 28, at 284.

under the OPA to be inadequate.⁵² Recommendation F3 asked the Department of the Interior to "enhance auditing and evaluation of the risk of offshore drilling activities by individual participants" to increase oversight by drillers' insurance companies.⁵³ Finally, perhaps drawing on the INPO model, the Commission suggested the possibility of a risk-based insurance pool into which independent companies engaged in drilling would pay premiums and out of which damages would be paid in the event of a spill.⁵⁴

Second, the Commission recommended reforming regulation to adapt to the special risks associated with deepwater drilling.⁵⁵ Recommendations A1 through A3 address the need for increased safety standards.⁵⁶ The Commission recommended that the Department of the Interior "utilize state-of-the-art risk assessment methodologies such as the detailed precursor analysis models developed in the nuclear industry."⁵⁷

Third, and perhaps most importantly, the Commission called for the strengthening of governmental oversight.⁵⁸ Recommendation A4 called on Congress and the Department of the Interior to create a new independent agency tasked with oversight of offshore drilling facilities.⁵⁹ A5 argues for a mechanism—such as "the use of lease provisions for the payment of regulatory fees"—to fund this new agency.⁶⁰

The Commission Report is a sprawling, 398-page document that signaled the Obama administration's willingness to take the root causes of *Deepwater Horizon* seriously. Although not all of its recommendations were implemented, the Report contains valuable insight into how the federal

54. *Id.* at 285.

59. DEEPWATER HORIZON REPORT, *supra* note 28, at 256. The full text of A4 reads "Congress and the Department of the Interior should create an independent agency within the Department of the Interior with enforcement authority to oversee all aspects of offshore drilling safety (operational and occupational), as well as the structural and operational integrity of all offshore energy production facilities, including both oil and gas production and renewable energy production." *Id.*

^{52.} Id. at 286.

^{53.} *Id*.

^{55.} Cohen & Krupnick, supra note 50.

^{56.} DEEPWATER HORIZON REPORT, *supra* note 28, at 252.

^{57.} Cohen & Krupnick, *supra* note 50.

^{58.} Id.

^{60.} *Id.* The full text of A5 reads: "Congress and the Department of the Interior should provide a mechanism, including the use of lease provisions for the payment of regulatory fees, for adequate, stable, and secure funding to the key regulatory agencies—Interior, Coast Guard, and NOAA—to ensure that they can perform their duties, expedite permits and reviews as needed, and hire experienced engineers, inspectors, scientists, and first responders." *Id.*

government can prevent and mitigate future catastrophes. As the Trump administration has given way to a Biden administration and unified Democratic control of the federal government, the President, regulators, Congress, and the states should revisit this important document.

C. The Well Control Rule and Other Obama-Era Regulations

Even before the Commission Report was released, the executive branch, faced with a massive failure in their oversight and regulation, took steps to correct these inadequacies. On May 19, 2010, then-Secretary of the Interior Ken Salazar signed a Secretarial Order dissolving the Minerals Management Service (MMS), which had been in charge of offshore energy regulation since 1982.⁶¹ In its place, the Department of the Interior created three new entities: (1) the Bureau of Ocean Energy Management (BOEM), "responsible for the sustainable development of the Outer Continental Shelf's conventional and renewable energy resources, including resource evaluation, planning, and other activities related to leasing"; (2) the Bureau of Safety and Environmental Enforcement (BSEE), "responsible for ensuring comprehensive oversight, safety, and environmental protection in all offshore energy activities"; and (3) the Office of Natural Resources Revenue (ONRR), "responsible for the royalty and revenue management function including the collection and distribution of revenue, auditing and compliance, and asset management."62

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^{61.} Bureau of Safety and Environmental Enforcement, *Reorganization*, https://www.bsee.gov/who-we-are/about-us/history/reorganization [https://perma.cc/2DVK-FK4V]. Secretary Salazar stated that

The Minerals Management Service has three distinct and conflicting missions that – for the benefit of effective enforcement, energy development, and revenue collection – must be divided... The reorganization I am ordering today is the next step in our reform agenda and will enable us to carry out these three separate and equally-important missions with greater effectiveness and transparency. These reforms will strengthen oversight of offshore energy operations, improve the structure for revenue and royalty collections on behalf of the American people, and help our country build the clean energy future we need.

Press Release, Dept. of the Interior, Salazar Divides MMS's Three Conflicting Missions (May 19, 2010), https://www.doi.gov/news/pressreleases/Salazar-Divides-MMSs-Three-Conflicting-Missions [https://perma.cc/7X5B-MX9A].

^{62.} Press Release, Dept. of the Interior, *supra* note 61.

In April of 2016, BSEE finalized the Blowout Preventer and Well Control Rule (WCR).⁶³ Many of the provisions in the final rule had been implemented by interim rules as early as 2010, but the final rule represented a comprehensive set of regulations aimed at enhancing blowout preventer and well control requirements. Among its most important provisions were (1) requiring oil companies to upgrade drilling technology and practices, such as adding back-up safety mechanisms; (2) requiring operators to regularly test safety equipment; (3) requiring inspectors to be completely independent from the oil industry, ending the self-regulating regime that facilitated *Deepwater Horizon*; and (4) increasing federal oversight in the form of independent safety certification for blowout protectors and biweekly testing.⁶⁴

This combination of clear standards, an oversight regime robust enough to enforce them, and incentives for industry self-policing could have prevented the *Deepwater Horizon* blowout. In the wake of that incident, the idea that better regulation can reduce oil spills was once again proven correct; continuing the trend started by the OPA in 1990, spills have decreased in the decade since *Deepwater Horizon*. However, there is reason to doubt the idea that spills have been completely dealt with. The Trump administration significantly rolled back the key provisions of the WCR, creating an environment in which polluters are empowered to under-report spills.⁶⁵

Despite this deregulation, however, the self-interest rationale for industry self-policing has proven powerful, and some argue that private industry is still equipped to prevent and handle spills.⁶⁶ Following *Deepwater Horizon*, companies like the Marine Well Containment Company (MWCC) have emerged to fill the role that INPO fills in the nuclear industry.⁶⁷ Major oil companies like BP, Shell, ExxonMobil,

64. Suit Filed Over Well Control Rule Repeal, MARITIME EXECUTIVE (June 11, 2019, 7:04 PM), https://www.maritime-executive.com/article/suit-filed-over-well-control-rule-repeal [https://perma.cc/AK35-GX4J].

^{63. 81} C.F.R. § 250 (2016).

^{65.} Alejandra Borunda, We Still Don't Know the Full Impacts of the BP Oil Spill, 10 Years Later, NAT'L GEOGRAPHIC (Apr. 20, 2020), https://www.nationalgeographic.com/science/2020/04/bp-oil-spill-still-dont-know-effects-decade-later/ [https://perma.cc/3M77-AZ23].

^{66.} Jeff Brady, 10 Years After Deepwater Horizon Oil Spill, Industry Says It's Better Prepared, NPR (Apr. 20, 2020), https://www.npr.org/2020/04/20/835092985/10-years-after-deepwater-horizon-oil-spill-industry-says-its-better-prepared [https://perma.cc/6E7L-89R7].

^{67.} Id.

Chevron, and Conoco subscribe to MWCC, which expends common funds to cap damaged wells and clean up spilled oil.⁶⁸ After-the-fact mitigation, however, is simply not enough. Industry self-policing is helpful, certainly, but such industry action needs to be supplemented by effective government regulation, namely, oversight. This is where the Trump administration failed, putting the coasts and offshore workers in danger, but the Biden administration has the opportunity to create meaningful change.

D. Trump Administration Rollbacks and Their Consequences

On March 28, 2017, President Donald Trump signed an executive order calling on agencies to "review all existing regulations, orders, guidance documents, policies, and any other similar agency actions (collectively, agency actions) that potentially burden the development or use of domestically produced energy resources, with particular attention to oil, natural gas, coal, and nuclear energy resources." The Bureau of Safety and Environmental Enforcement, part of the Department of the Interior (which was then headed by Secretary of the Interior Ryan Zinke, who resigned amid alleged ethical violations), took this directive to heart and began working on the Revised Well Control Rule.

The new version of the rule sought "to amend, revise, or remove current regulatory provisions that create unnecessary burdens on stakeholders while ensuring safety and environmental protection," but its real purpose was clear—to get rid of the safety and oversight provisions of the Obama-era regulation. First, the revised rule decreased the interval for blowout preventer testing from every fourteen days to every twenty-one days, citing complaints from the industry that such frequent testing was too costly. Second, the 2016 WCR had established criteria for the use of BSEE

^{68.} *Id*.

^{69.} Exec. Order No. 13,783, 82 Fed. Reg. 16093 (Mar. 28, 2017).

^{70.} Zinke's department was also criticized by conservationists for selling oil and gas leases on public lands such as Arctic National Wildlife Refuge, Bears Ears National Park, and Grand Staircase-Escalante National Park, as well as rolling back the Endangered Species Act. Virginia Cramer, *Zinke's Interior to Open Yet More Public Land to Oil & Gas Leasing*, SIERRA CLUB (Sept. 2018), https://www.sierraclub.org/press-releases/2018/09/zinke-s-interior-open-yet-more-public-land-oil-gas-leasing [https://perma.cc/2NZN-6JCO].

^{71.} Oil and Gas and Sulfur Operations in the Outer Continental Shelf-Blowout Preventer Systems and Well Control Revisions, 84 C.F.R. § 21908 (2019).

^{72.} Id.

Approved Verification Organizations (BAVOs).⁷³ The revised rule removed all references to BAVOs, replacing them with references to "independent third parties," despite the fact that "multiple commenters expressed concerns that changing BAVO requirements in the new rule would negatively affect safety and accountability."⁷⁴

Another commenter asserted that this change would reduce oversight, suggesting that if BSEE does not have a role in approving the inspectors, the operators would be able to choose who inspects their blowout preventors (BOPs) and that such inspectors would not even be required to be present during inspection. One commenter asserted that reports prepared by a third-party that is not present during the actual inspection would be of minimal value and be too late to affect real change/improvement.⁷⁵

Despite these and other common-sense critiques of the proposed new rule, the Trump administration BSEE assumed that all of the independent third parties from which BAVOs were certified would be qualified to perform rig inspections. Among the other changes were the removal of certain requirements for real-time monitoring of offshore operations by onshore engineers, an extension of the date by which blowout preventers would be required to comply with federal requirements, and a relaxed procedure for obtaining waivers that would allow companies to work around the WCR's "safe drilling margin" requirements, which are designed to reduce the risk of sudden changes in well pressure that could cause a *Deepwater Horizon*-style blowout. As a result of these oversight-decreasing provisions, BSEE conducted nearly 2,000 fewer inspections of offshore facilities than it did in the previous three-year period.

Even before these revisions to the WCR went into effect, the administration signaled to oil companies that if they did not like the rules, they would not have to follow them. According to a Freedom of Information

^{73. &}quot;A BAVO is an entity that submits qualifications to BSEE and receives BSEE approval in order to perform certain independent engineering reviews and provides reasonable assurances that certain equipment would perform as designed under the operating conditions relevant to the particular well where the equipment will be used." *Id.*

^{74.} *Id*.

^{75.} *Id*.

^{76.} *Id*.

^{77.} *Id*.

^{78.} Sara Sneath, \emph{Oil} , HOUMATODAY (Mar. 3, 2020), https://www.houmatoday.com/news/20200303/offshore-oil-and-gas-accidents-and-fatalities-increase-amid-regulatory-rollbacks [https://perma.cc/R63K-Y7JM].

Act request filed by Politico, the Trump administration, starting in 2017, gave out nearly 1,700 exemptions to Obama-era safety rules; the most common exemptions were waivers that allowed companies to ignore the WCR's tighter rules for blowout preventers—the very same device that malfunctioned aboard *Deepwater Horizon*.⁷⁹

Taken together, these actions by the Trump administration severely weakened the ability of the federal government to detect and respond to dangerous conditions on oil drilling platforms. In 2018 and 2019, the number of injuries on the federal Outer Continental Shelf increased 21% compared to the previous two years. Local media reports indicate that not only were there more injuries, but they were also more severe; BSEE reported only one fatality in 2018, but in 2019 there were at least nine offshore deaths, more than the previous five years combined. In addition to these tragic deaths, because oversight was relaxed under the Trump administration, oil companies are empowered to under-report their accidents, including those that produce spills. Expression of the produce spills.

As President Joe Biden holds office with unified Democratic control of the legislative and executive branches, his administration would do well to revisit the legacy of the *Deepwater Horizon* Commission's important report. That report contains valuable insight into what a robustly functioning oversight regime would look like in the offshore drilling industry. Beyond rescinding the Trump administration's Revised Well Control Rule, the new administration, through BSEE, could establish more frequent audits of drilling platforms and offshore facilities; investigate newer, safer drilling technology; and put in place more stringent requirements for granting new offshore drilling leases on federal land.

In the first days of his administration, President Biden signaled that he would be taking environmentalism seriously: he rejoined the Paris Climate

^{79.} Ben Lefebvre, *Interior Hands Out Nearly 1,700 Waivers to Offshore Drilling Safety Rules*, POLITICO (Feb. 25, 2019), https://www.politico.com/story/2019/02/25/offshore-drilling-trump-administration-interior-department-1190762 [https://perma.cc/NAK2-KHSH].

^{80.} Sneath, *supra* note 78.

^{81.} Ia

^{82.} As of April, there were 279 reported spills in federal waters, but that number likely excludes many that happened after March 26, when the EPA relaxed its rules for drillers further in response to the COVID-19 pandemic. Hotakainen, *supra* note 6.

Accord and revoked approval of the Keystone XL pipeline. ⁸³ Most importantly for this Note's discussion, President Biden signed an executive order on his first day in office calling for "immediate review of agency actions taken between January 20, 2017, and January 20, 2021," and placed a "temporary moratorium on all activities of the Federal Government relating to the implementation of the Coastal Plain Oil and Gas Leasing Program." These actions are important in their own right because they have the potential to undo the damage from the Trump administration's deregulation, but for long-term stability in oil and gas regulation, Congress needs to act.

Congress could pass legislation enshrining these changes to agency regulations into the United States Code, making it more difficult for future administrations to deregulate as much as the last one did. In addition, Congress could pass a law permanently banning new oil leases, as is its right under the OSCLA; it could also pass stricter safety requirements, higher fines for polluters and those who ignore safety requirements, or revoke permits for companies who have shown disregard for the rules. Ultimately, Congress could even pass legislation to end oil drilling entirely in favor of clean energy, akin to the Green New Deal, a proposition discussed in Section II.

But the buck does not stop with the federal government. States, too, have an important role to play if there is to be a safer, more accountable energy regime.

E. States' Role in Oil and Gas Regulation

"In general, most oil drilling and production is regulated by the states." States have the broad power, within their jurisdictions, to issue citations, order remedial actions, and set requirements for the awarding and

^{83.} Matthew Brown, *Biden Halts Oil and Gas Leases, Permits on US Land and Water*, ASSOCIATED PRESS (Jan. 21, 2021), https://apnews.com/article/joe-biden-billings-a3a37acf2fce55449b704b01badc1f67 [https://perma.cc/7KRZ-7VYD].

^{84.} Exec. Order No. 13,990, 86 Fed. Reg. 7037 (Jan. 20, 2021).

^{85.} U.S. Regulation of Oil and Gas Operations, AM. GEOSCIENCES INST. (June 6, 2018), https://www.americangeosciences.org/geoscience-currents/us-regulation-oil-and-gas-operations [https://perma.cc/JPV2-GU5G].

revoking of leases or permits, among other things;86 they also regulate the operation of oil pipelines and the construction of natural gas gathering lines.⁸⁷ The Submerged Lands Act (SLA) of 1953 grants individual states the rights to the natural resources of submerged land within three nautical miles from the coastline into the Atlantic, Pacific, and Arctic Ocean, and the Gulf of Mexico.88

Given this broad grant of authority to the states, state laws vary widely. For a particularly prominent and relevant example, this Note will focus on regulations in Louisiana, because it has four times as many offshore drilling sites as any other coastal state, and it received the largest amount from the BP settlement action to which it was a party.⁸⁹

The Louisiana state legislature has granted their Commissioner of Conservation broad authority to govern the relations between the state and the oil industry. The Commissioner has jurisdiction over "laws relating to the conservation of oil or gas," including the ability to "take any action as reasonably appears to him to be necessary to enforce" Title 30 of the Louisiana Code, which addresses minerals, oil, gas, and environmental quality, and "the authority to make, after notice and hearings as provided in this Chapter, any reasonable rules, regulations, and orders that are necessary from time to time in the proper administration and enforcement of this Chapter, including rules, regulations, or orders."90 Additionally, if the Commissioner determines that a driller has violated a provision of state law.

^{86.} Michael P. Joy & Sashe D. Dimitroff, Oil and Gas Regulation in the United States: Overview, THOMSON REUTERS PRACTICAL LAW (June 1, 2016).

^{87.} U.S. Regulation of Oil and Gas Operations, supra note 85.
88. 43 U.S.C. §§ 1301-1315 (2002). The SLA was first enacted in 1953, along with the OSCLA. Id. The only exceptions are Texas and the west coast of Florida, where State jurisdiction extends from the coastline to no more than three marine leagues (16.2 km) into the Gulf of Mexico. Id.

^{89.} Elizabeth Crisp, U.S. House Advances Legislation to Restrict Offshore Oil, Gas Drilling; U.S. Sen. Bill Cassidy Vows to Block It, ADVOCATE (Sept. https://www.theadvocate.com/baton_rouge/news/politics/article_14a7892a-d4d0-11e9-9b95fb6b81bd1395.html [https://perma.cc/4BDM-Y3RN].

^{90.} LA. STAT. ANN. § 30:4 (2018). Specifically,

[[]T]he commissioner has the authority to collect data; to make investigations and inspections; to examine properties, leases, papers, books, and records; to examine, survey, check, test, and gauge oil and gas wells, tanks, refineries, and modes of transportation; to hold hearings; to provide for the keeping of records and the making of reports; to require the submission of an emergency phone number by which the operator may be contacted in case of an emergency; and to take any action as reasonably appears to him to be necessary to enforce this Chapter.

he must give that entity written notice to bring their conduct into the bounds of the law. ⁹¹ If the entity fails to comply, the Commissioner is empowered to either issue an order requiring compliance or commence a civil action against the offender. ⁹² The penalty in either case is limited to \$200 per day of noncompliance. ⁹³

To begin drilling operations in Louisiana coastal waters, one must fill out a Coastal Use Permit ("CUP") and file it with the state Department of Natural Resources Office of Coastal Management. He CUP application involves sixteen steps, such as "Step 4: Pre-Application/Geological Review Meeting/Wetland Determination Information"; "Step 10: Proposed Project Descriptions," which asks for excavation areas, volumes, types of equipment, and other technical aspects of the proposed project; and "Step 11: Proposed Project Impacts" on the state's wetlands. Among these steps to gain state approval, the requirement of a safety or contingency plan is conspicuously absent.

Despite the broad grant of authority to the state government and the \$18.7 billion restitution from the BP settlement, the state has not taken affirmative steps to increase the safety requirements or oversight on drillers who benefit from Louisiana's large reserves of oil and natural gas—most state action focuses on restoration rather than prevention. In addition to the enormous BP settlement, Louisiana recently received \$95 million from a federal oil revenue-sharing pact. Still, rather than place stricter rules on the industries that drain its coast of its valuable natural resources to try to make sure another *Deepwater Horizon* does not occur, Louisiana has instead opted to spend its money on rebuilding its coasts.

93. *Id.* "In determining the amount of the penalty, or the amount agreed upon in compromise, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of a violation, shall be considered by the commissioner." *Id.* 94. LA. STAT. ANN. § 214.30 (2018).

^{91.} La. Stat. Ann. § 30:24 (2018).

^{92.} Id.

^{95.} A Coastal User's Guide to the Louisiana Coastal Resources Program, LA. DEP'T OF NAT. RES. OFF. OF COASTAL MGMT. (Jan. 2015), https://data.dnr.la.gov/LCP/LCPHANDBOOK/FinalUsersGuide.pdf [https://perma.cc/U282-Y94Q].

^{96.} Elizabeth Crisp, Louisiana Gets Nearly \$95 Million for Coastal Restoration From Federal Oil Revenue-Sharing Pact, ADVOCATE (Apr. 25, 2019), https://www.theadvocate.com/baton_rouge/news/politics/article_6eeea1ce-676c-11e9-8ce1-6bf8dbd5f66b.html [https://perma.cc/87V5-RDBP].

^{97.} Mark Schleifstein, State Rebuilt 5.1 Square Miles of Coast With \$500M in Fines Since BP Deepwater Horizon, ADVOCATE (Apr. 18, 2019),

As is the case at the federal level, states have the option to take action to ensure that their coasts and workers are protected. However, state legislatures could pass more robust requirements—such as safety plans—for entering into leases with companies who profit off of drilling into states' natural resources. They could also levy heavier fines on companies who break the rules; two hundred dollars per day, the current cap on noncompliance fines in Louisiana, is not adequate deterrence for companies worth hundreds of billions of dollars. Louisiana and other coastal states could also legislate mandatory revocation of leases if rules are not followed, rather than leaving the decision to the discretion of the Commissioner of Conservation. States could also legislate more intensive oversight of oil drilling operations. Finally, Louisiana and other states could stop giving tax breaks to companies who disregard the safety of the coast and workers, discussed in more detail below.

Unfortunately, this sort of state action is not likely to occur anytime soon. In Louisiana, the oil and gas industry pays lobbyists to fight vigorously to prevent the state from passing stricter legislation, contribute heavily to candidates at all levels and branches of state and local government in order to kill potential state-initiated lawsuits, and campaign viciously against "job-killing" proposals that the Democrats and leftleaning groups put forth. 98 As long as the industry continues to contribute to politicians and generate jobs and wealth, oil will continue to be the golden calf of the Gulf Coast states.

Last year, Baton Rouge's newspaper of record, *The Advocate*, echoed criticism from Louisiana's state and national representatives in response to the Democrats' 2020 national platform that called for banning new oil and gas permitting,⁹⁹ calling it "extreme" and "economically stupid." Such vehement opposition is hard to overcome, especially when the opposition is

https://www.theadvocate.com/baton_rouge/sports/outdoors/article_d4cfd5ea-8a23-5be1-a67c-4f4b21e9e876.html [https://perma.cc/G97L-E38E].

^{98.} Sue Lincoln, *Who Runs Louisiana*, BAYOU BRIEF (Jan. 6, 2019) https://www.bayoubrief.com/2019/01/06/who-runs-louisiana/ [https://perma.cc/KVL7-G4B8].

^{99.} Crisp, *supra* note 89; Mike Mahone, *Louisiana Legislators Fight New Offshore Drilling Regulations*, MAHONE FIRM (2019), https://mahonefirm.com/louisiana-legislators-fight-new-offshore-drilling-regulations/[https://perma.cc/3NES-VFQQ].

^{100.} Staff Editorial, *Our Views: Democrats' Idea of Banning Oil and Gas Drilling is Economically Stupid*, ADVOCATE (Sept. 6, 2020), https://www.theadvocate.com/baton_rouge/opinion/our_views/article_afd9909c-ed29-11ea-8f33-d33b4189f883.html [https://perma.cc/VMW6-B439].

so well-funded, established, and well-organized. It is also not an easy argument to dismiss; for all of their over-the-top rhetoric and dubious objectivity, the legislators and lobbyists who invoke Louisiana's dependence on the oil industry have a point. Since 1901, when the first oil well in the state began operations, the industry has dominated the state economy and state politics; in 1993, an influential report showed that the offshore oil and gas industry impacted the state economy by over three billion dollars each year. 101 However, the tide has begun to turn; as Louisiana has become more conservative, mineral revenues have accounted for less and less of the state's budget. In 1982, over 42% of the state general fund came from mineral revenues; in 2019, that number was 6%. 102 This change was largely fueled by the application of the industrial tax exemption program (ITEP) to industry leaders, allowing them a tax break in exchange for not following through on the omnipresent threat to take their business and jobs elsewhere. 103 Additionally, due to computerization and automation, industry jobs in Louisiana have declined 46% in the past twenty years. 104

Given this pittance which the industry contributes to state coffers and overall economy, politicians in Baton Rouge and Washington D.C. ought to reconsider their devotion to an industry which has held them hostage since the days of Huey Long. But even if the industry's importance to the state's economy has been overblown, even if the state is forced to spend millions each year on coastal rehabilitation, and even if the threat to leave the state is absurdly empty, there still remains the fact that the oil and gas industry has incredibly deep pockets and will continue to spend lavishly on politicians who support deregulation and energy absolutism. Until those representatives are given some incentive to break from the industry script, it is unlikely that Louisiana or any other Gulf state will act to reign in companies like BP, Exxon, and Shell. Thus, federal action is likely the answer.

One way to undermine the outsized influence the industry has wielded over Louisiana and other coastal politicians for the past century would simply be an old-fashioned Congressional pork barrel giveaway: offering federal money to states who choose to develop green energy and cease

^{101.} Lincoln, supra note 98.

^{102.} Id.

^{103.} Id.

^{104.} *Id*.

granting leases to drillers. Another would be stricter campaign finance laws at the federal or state legislative level, which would prevent corporations from spending so much on politics. But given the precedents of *Buckley v. Valeo*¹⁰⁵ and *Citizens United v. Federal Election Commission*, ¹⁰⁶ a proposal of this sort would almost certainly run headlong into the First Amendment wall. Finally, and most feasibly, a policy which made adherence to big oil economically unwise or politically unpopular would eliminate the problem for good, and the Green New Deal proposes to do just that.

II. ANALYSIS & PROPOSAL

So far, this Note has proceeded from the assumption that oil and gas will always be with us, such that the best answer to the question "what should we do about oil spills?" naturally involves the industry continuing in more or less the same form it has taken for the past century. However, there is another solution to the question; it involves envisioning a world in which there are no oil spills because no one is drilling for oil.

Since climate change came to the public's attention in the 1980s, invoking a future of unsurvivable temperatures, sea level rise, and shrinking ice sheets, scientists and policymakers have looked for cleaner alternatives to fossil fuels—wind power, solar power, geothermal heat, and water, to name a few. The U.S. response to this global crisis has been slow and is stymied frequently by so-called "climate change deniers," but there is key legislation in place to help combat climate change. One such law is the Energy Policy Act of 2005, which gives a federal tax credit to residential property owners for using solar fuel cells. 107 Additionally, the American Recovery and Reinvestment Act of 2009—which allocated 800 billion federal dollars to combat a depression—contained an unprecedented 90 billion dollar grant to go toward clean electricity, renewable fuels, advanced batteries, energy efficiency, a smarter grid, and other green energy projects. 108

^{105. 424} U.S. 1 (1976).

^{106. 558} U.S. 310 (2010).

^{107.} Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 1038. The Act was amended in 2008 to extend to wind energy.

^{108.} American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115.

Other key laws enforced by the EPA, however—such as the Clean Water Act, the Clean Air Act, and the Resource Conservation and Recovery Act (RCRA)—are focused more on short-term pollution and punishing only the most blatant polluters. This is a laudable goal and important legislation to be sure, but that legislation stops short of addressing the root cause of climate change—our modern world's dependence on dirty energy. The laws of the United States should not simply seek to punish polluters or clean up their messes; it should reward innovators in energy production, provide incentives to lawmakers, states, and private actors to abandon fossil fuels; and invest in technology that would end climate catastrophes like oil spills.

In February of 2019, Representative Alexandria Ocasio-Cortez of New York and Senator Edward Markey of Massachusetts introduced a resolution "recognizing the duty of the Federal Government to create a Green New Deal."109 While not binding even if passed by Congress, the controversial Green New Deal resolution lays out an ambitious ten-year plan for the United States, with the goals of "achieving net-zero greenhouse gas emissions; establishing millions of high-wage jobs and ensuring economic security for all; investing in infrastructure and industry; securing clean air and water, climate and community resiliency, healthy food, access to nature, and a sustainable environment for all; and promoting justice and equality."110 Putting aside the political reality of such a piece of legislation being passed in the near future for now (it has been stalled in a House committee since February 12, 2019), the Green New Deal resolution offers a template for what a robust U.S. investment in green energy would look like, as well as a glimpse at a path forward in the movement away from oil and oil spills.

Invoking the legacy of "Federal Government-led mobilizations during World War II and the New Deal" which "created the greatest middle class that the United States has ever seen," the Green New Deal offers several provisions geared towards ending America's dependence on fossil fuels, as well as mitigating the problems that they have caused, all couched in a program of infrastructure improvement, job creation, and equality for all. Much of the resolution is characterized by aspirational language and barebones policy statements which are far short of a fully-formed statutory

 $^{109. \;\;} H.R. \; Res. \; 109, \, 116 th \; Cong. \; (2019); \; S. \; Res. \; 59, \, 116 th \; Cong. \; (2019).$

^{110.} Id.

^{111.} Id.

scheme—"investing in sustainable farming," "removing pollution and greenhouse gas emissions from manufacturing and industry as much as is technologically feasible," "mitigating and managing the long-term adverse health, economic, and other effects of pollution and climate change"—but what the resolution does offer by way of substantive proposals would do much to end fossil fuel dependence.¹¹²

To "meet [...] 100 percent of the power demand in the United States through clean, renewable, and zero-emission sources," the resolution calls for "dramatically expanding and upgrading renewable power sources," as well as "building or upgrading to energy-efficient, distributed, and 'smart' power grids, and ensuring affordable access to electricity" and moving all government buildings to net-zero emissions and maximum energy efficiency. Inferring from this (at times vague) language, we can assume that the resolution's sponsors wish to invest federal money in those who produce green energy, as the Obama administration did in the 2009 stimulus package.

Just as with that piece of legislation, vehement criticism has come from the political right, claiming that such a plan would be too expensive, is unrealistic, 114 represents an insidious overreach by a bloated federal government, and is a threat to principles of federalism and limited government. While it is impossible to estimate how much an investment of this magnitude would actually cost, proponents of the Green New Deal argue that climate change will cost the economy even more and in the long-term, an investment in clean energy will pay itself off. Professor Mark Jacobson, director of Stanford University's Atmosphere/Energy Program, for example, estimates that the Green New Deal will initially cost around 9.5 trillion dollars and that this cost will be spread out over many years, while adherence to fossil fuels will cost 5.9 trillion per year going forward

^{112.} Id.

^{113.} Id.

^{114.} Senator Tom Cotton of Arkansas, for example, claimed that the proposal would require Americans to "ride around on high-speed light rail, supposedly powered by unicorn tears." Lisa Friedman, *What Is the Green New Deal? A Climate Proposal, Explained*, N.Y. TIMES (Feb. 21, 2019), https://www.nytimes.com/2019/02/21/climate/green-new-deal-questions-answers.html [https://perma.cc/FPN2-UJ29].

^{115.} Id.

in the form of energy costs (\$2 trillion per year), air pollution health costs (\$600 billion per year), and climate costs (\$3.3 trillion per year). 116

Departing from energy policy, a Green New Deal would overhaul the nation's transportation infrastructure, including investing in zero-emissions vehicles, clean public transportation, and high-speed railways. This provision of the Green New Deal would strike at the heart of the petrochemical industry, which relies largely on Americans using vehicles fueled by their products. With less demand for gasoline and oil, companies would be forced to adapt or perish, and in either case, the coasts would benefit. Besides the obvious danger to the coasts presented by oil spills, climate change-caused sea level rise has already cost Louisiana 25 billion dollars, as the state loses twenty-five square miles of land per decade. With decreased incentive to drill new wells or operate old ones, energy companies moving toward green alternatives will be less of a threat, and oil spills will decrease, both in volume spilled and number of incidents.

In short, by investing capital in new technology and new industries, the Green New Deal would start the United States down the road to energy independence, with the added bonuses of job creation, economic stimulation, better quality of life, and improved technology. As with any ambitious piece of legislation, the Green New Deal has its flaws, and its lack of substantive detail leaves a lot to be desired, but it represents a marked improvement over the policies of the Trump administration that left our coasts vulnerable and our politics and daily lives more oil-dependent than ever. Democrats have the opportunity to make good on decades of climate promises and undo the legacy of laissez-faire oil regulation, and the political momentum to take decisive action. With necessary research and collaboration with scientists, state and local governments, and industry, a law that builds upon the framework of the Green New Deal could have the legs to permanently end the era of big oil spills.

^{116.} Rob Jordan, Stanford Energy and Environment Experts Examine Strengths and Weaknesses of the Green New Deal, STANFORD NEWS (Mar. 28, 2019), https://news.stanford.edu/2019/03/28/strengths-weaknesses-green-new-deal/ [https://perma.cc/JL5D-WL9A].

^{117.} H.R. Res. 109, 116th Cong. (2019).

^{118.} Louisiana's Sea Level Is Rising, And It's Already Costing Over \$25 Billion, SEALEVELRISE.ORG, https://sealevelrise.org/states/louisiana/[https://perma.cc/8F6T-7SF3].

CONCLUSION

Congressional inaction and Trump administration rollbacks have created an environment in which a spill akin to Deepwater Horizon could occur in the near future, with drastic implications on the Gulf Coast. Regulatory reform at the federal and state levels are needed, but given the current political climate and dependence on oil and gas, such changes are unlikely to occur. Additionally, while such changes are desirable, even the most robust regulatory measures cannot prevent pollution; replacing oil and gas with green energy would remove the specter of coastal disasters in the short term and mitigate the effects of climate change on our coasts in the long term. With Democratic control of the House, the Senate, and the White House, a fundamental shift in our energy policy is perhaps more achievable now than ever. The Oil Pollution Act, the Well Control Rule, the Clean Water Act, and other short-term-focused statutes have had their day and proven their point: government action can create a cleaner environment. But as the costs of big oil continue to outweigh the benefits, it is time to look to the future of energy and start to build it. Bold, innovative action is needed; our climate emergency demands nothing less.