

FOR A LUMP OF COAL & A DROP OF OIL: AN
ENVIRONMENTALIST’S CRITIQUE OF THE TRUMP
ADMINISTRATION’S FIRST YEAR OF ENERGY POLICIES

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I. INTRODUCTION

This article examines the Trump administration’s approach to issues related to climate change, as well as the impact of President Trump’s Executive Orders that encourage fossil fuel exploration, extraction, and transport. President Trump has used the Antiquities Act to reduce the size of monuments in order to make available more land for fossil fuel leases. Powerful interest groups and political appointees advocate for traditional energy sources of coal, oil, and gas. These advocates call for a reduction in regulations they believe burden those industries and inhibit land use development. While they believe this will stimulate economic growth, environmentalists believe these measures ignore the impact such resource development has on greenhouse gas emissions, air and water quality, and species survival. This article focuses on major actions of the Trump administration during its first year in office that favor fossil fuel industries over protection of natural resources and the environment, while providing a historical context for these substantial changes.

Part II.A discusses the importance of climate change and its environmental impact. It recognizes the role of greenhouse gases (“GHGs”) in trapping heat in the atmosphere, which contributes to climate change. This in turn leads to an increase in the frequency of strong storms, destruction of coastal areas, harm to marine life, as well as crop failures and droughts in other regions. Part II.B examines President Trump’s decision to withdraw the United States from the Paris Agreement Framework Convention on Climate Change (“Paris Climate Agreement”) and to withdraw other funds that support international recovery efforts for people suffering from the effects of climate change.

Part III examines President Trump’s Executive Orders on Energy Independence and Expediting Environmental Review of Infrastructure Projects, especially as they relate to encouragement of oil pipeline approval, offshore oil drilling, and coal mining. Part III.A explores the details of the Trump energy independence order, promotion of energy leases, and his reversal of several Obama administration climate change orders. Part III.B focuses on the expedited review of infrastructure projects, including the Keystone XL Pipeline and the Dakota Access Pipeline. Part III.C examines the administration’s promotion of offshore exploration and drilling for oil. It contrasts the approach President Obama and other recent presidents took to offshore drilling with that of the Trump administration, which wants to expand those energy opportunities. Part III.D recognizes the diminished focus on renewable energy, with priorities given to encouraging traditional energy resources. Part III.E discusses the Trump administration’s decisions to provide greater flexibility for energy-sector businesses by rescinding the Fracking Rule and reexamining the Methane Waste Rule.

Part IV focuses on the coal industry and the environmental impact of the extraction, production, and use of coal as a fossil fuel. Part IV.A discusses the history of coal leases on federal lands and President Trump’s order promoting the expansion of those leases, as well as court challenges to this change in policy. Part IV.B explains water contamination risks associated with coal mining methods and coal ash disposal. Part IV.C details regulatory attempts under the Surface Mining Control and Reclamation Act to hold the coal industry accountable for environmental harm. One such regulation was the Stream Protection Rule, developed under the Obama administration, which was “disapproved” with the Congressional Review Act (“CRA”) in 2017. Part IV.D addresses concerns over safety and health benefits for coal miners, in light of the Trump administration’s policies to bring back “good” coal jobs.

Part V examines efforts by the Trump administration to diminish regulations and restrictions on land use in favor of expanding energy leases and private development on federal lands. It discusses the role of the Antiquities Act in preserving land vital to historic sites, natural resources and habitat for species versus the Trump administration's decisions to facilitate energy exploration and development by diminishing the size of monuments created by previous Presidents or Congress.

Part VI examines the Clean Power Plan and the decision of the Trump administration to abrogate it. Part VI.A describes the statutory authority under the Clean Air Act ("CAA") and judicial decisions supporting the regulation by the United States Environmental Protection Agency ("EPA") of GHGs that served as the foundation for the Clean Power Plan. Part VI.B describes steps taken by the Trump administration to rescind the Clean Power Plan, which was created under the Obama administration to counter climate change impact of large power plants and other emitters. Part VI.C then examines regulation of mobile sources and CAFE standards, which became necessary with the recognition that such mobile sources emitted GHGs that contributed to climate change.

Part VII examines key organizations and individuals who have influenced President Trump's skepticism of climate change and have resulted in a diminution in the importance of scientifically-based decisions. Part VII.A discusses key interest groups and individuals who influenced President Trump's withdrawal from the Paris Climate Agreement and fostered his pro-energy, anti-regulation policies. Part VII.B recognizes the importance of judicial appointments in fostering the administration's pro-business agenda. Part VII.C examines President Trump's key appointees (many of whom are climate change skeptics) and their attempts to replace independent scientists with individuals from industries their agencies traditionally regulate. The appointment of climate change skeptics and opponents of government regulation to key leadership positions has resulted in diminished reliance on independent scientific expertise in the development of energy and environmental policy.

The article concludes with the recognition that it will be difficult to implement majoritarian positions favoring climate change regulation and environmental protection. While there was bipartisan support for environmental protection laws in the 1970s and early 1980s, partisan politics and the influence of wealthy business interests make environmental protection increasingly difficult today. Before there can be legislation explicitly recognizing the reality of climate change and delegating specific authority to EPA to regulate GHGs, there must be a

revival of bipartisan environmentalism that emphasizes the importance of science-based decision-making.

II. CLIMATE CHANGE – REALITY AND DENIAL

A. Climate Change Reality

For the third year in a row, global surface temperatures are the warmest since 1880, when official record keeping commenced.¹ The National Aeronautics and Space Administration (“NASA”) reports that sixteen of the seventeen warmest years on record occurred since 2001, with 2016 being the warmest.² The National Oceanic and Atmospheric Administration (“NOAA”) found that the hottest ten years have occurred during the past twenty years (1998-2017).³ The Intergovernmental Panel on Climate Change (“IPCC”), formed by the United Nations and World Metrological Organization, reported that the period of 1995-2006 included eleven of the twelve warmest years since 1850—when instrumental records of the global surface temperatures were first kept.⁴ The IPCC forecasted a rise in global temperatures between two and 11.5 degrees Fahrenheit by the end of the century.⁵ The scientific validity of global warming is increasingly difficult to dismiss as a product of bias. Even a study financed substantially by the staunchly conservative Charles Koch Foundation concluded that temperatures have risen since the 1950s.⁶

According to the National Research Council of the National Academy of Sciences, ninety-seven percent of abstracts of scientific peer-reviewed articles on climate change (examined in various university studies)

¹ *Global Climate Change Vital Sign of the Planet*, NASA, <https://climate.nasa.gov/vital-signs/global-temperature/> (last visited Mar. 27, 2018).

² *NOAA Data Shows 2016 Warmest Year on Record Globally*, NASA (Jan 18, 2017), <https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally>.

³ *National Climate Report - Annual 2017*, NOAA, <https://www.ncdc.noaa.gov/sotc/national/201713>, but heat wave indicators still place the 1930s dust bowl at the top point of large sections of the nation experiencing heat waves, *Climate Change Indicators: High and Low Temperatures*, EPA, <https://www.epa.gov/climate-indicators/climate-change-indicators-high-and-low-temperatures>.

⁴ *Warming of the Climate System is Unequivocal: Highlights of the Fourth IPCC Assessment Report*, UNITED NATIONS CHRON. (June 2007). See also NATIONAL RESEARCH COUNCIL, *ADVANCING THE SCIENCE OF CLIMATE CHANGE* 286 (Nat’l Academies Press 2010).

⁵ *Future Temperature Changes*, EPA (Mar. 24, 2012), <http://www.epa.gov/climatechange/science/futuretc.html> (content no longer available under current administration).

⁶ Seth Borenstein, *Skeptics Fund Study that Supports Global Warming*, SPRINGFIELD NEWS-LEADER, Oct. 31, 2011, at 3A (recognizing that prominent backer of global warming skeptics Richard Muller agreed that global warming is a reality).

conclude that human activities are causing climate change.⁷ Critics of the Trump administration were relieved that the 2017 Climate Science Special Report was released by Trump administration, a report which recognized that the periods between 1901-2016 were the “warmest in the history of modern civilization” and concluded “based on extensive evidence, that it is extremely likely that human activities, especially emission of greenhouse gasses, are the dominant cause of the observed warming since the mid-20th century.”⁸

The IPCC concluded that “[w]arming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level.”⁹ For instance, Antarctica is one of the fastest warming areas of the earth; massive icebergs, one the size of Delaware, broke off Antarctica’s Larsen C ice shelf in July of 2017.¹⁰ Massive icebergs have been carved off of Greenland’s Petermann Glacier, a ninety-seven square mile section in 2010 and a fifty square miles section in 2012.¹¹

More extreme weather patterns are emerging, which climatologists predict will cause significant disruption of marine life, crop failure, and potential collapse of the food chain as a consequence of climate change.¹² This fits the pattern that climate scientists like Jim Hurrell of the National Center for Atmospheric Research have been predicting: more extreme weather patterns with more frequent and more severe droughts, tornados,¹³ floods,¹⁴ and hurricanes will occur as people pump higher

⁷ *Scientific Consensus: Earth’s Climate is Warming*, NASA, <https://climate.nasa.gov/scientific-consensus/> (last visited Mar. 27, 2017).

⁸ U.S. GLOBAL CLIMATE CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT (Vol. 1 2017), <https://science2017.globalchange.gov/> (peer reviewed four-year national assessment required of the National Academy of Science).

⁹ IPCC, CLIMATE CHANGE 2007: SYNTHESIS REPORT 26, 30 (2017) (examining 577 climate studies, with a particular focus on seventy-five to reach its conclusions).

¹⁰ *Massive Iceberg Breaks Off from Antarctica*, NASA (July 12, 2017), <https://www.nasa.gov/feature/goddard/2017/massive-iceberg-breaks-off-from-antarctica>.

¹¹ Hannah Osborne, *NASA Images Reveal Huge Crack on Greenland’s Petermann Glacier*, NEWSWEEK (Apr. 18, 2017).

¹² *Climate Impacts on Agriculture and Food Supply*, EPA (historical material that existed on EPA website Jan. 19, 2017), https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-agriculture-and-food-supply_.html.

¹³ See, e.g., *2011 Tornado Information*, NOAA, http://www.noaanews.noaa.gov/2011_tornado_information.html. (last visited Mar. 27, 2018) (reporting Joplin, Missouri experienced an E5 tornado on May 22, 2011; and also reporting that a record number of tornados, 1817, occurred in 2004).

¹⁴ See, e.g., NOAA, CLIMATE ASSESSMENT REPORT: UNDERSTANDING AND EXPLAINING CLIMATE EXTREMES IN THE MISSOURI RIVER BASIN ASSOCIATED WITH THE 2011 FLOODING 22 (Dec. 23, 2013) (report for Army Corps of Engineers) (finding Missouri and the Missouri River

levels of greenhouse gases into the atmosphere.¹⁵ There have been multiple record-breaking floods worldwide this century.¹⁶ The 2017 United States governmental Climate Science Special Report recognizes that “[c]hanges in precipitation are one of the most important potential outcomes of a warming world because precipitation is integral to the very nature of society and ecosystems.”¹⁷ Severe droughts in California have led to massive fires, such as the Thomas Fire in December of 2017 (California’s largest fire to date).¹⁸

Hurricanes Harvey, Irma, and Maria set records in 2017, with even graver impacts than Hurricanes Katrina and Sandy.¹⁹ Hurricane Harvey dumped over 60.58 inches of rain (33 trillion gallons)²⁰ on Southern Texas communities in the Houston area, the most rain concentration from any hurricane or tropical storm on a United States coast in history.²¹ In addition, Harvey caused \$180 billion in damages, compared with a “normal” average of \$6 billion annually from flooding events.²² Category-4 Hurricane Maria dumped 6.44 inches of rain per hour on Puerto Rico, even more than Harvey’s 5.8 inches per hour on Houston.²³ Twenty inches total of rain fell on Puerto Rico during Hurricane Maria, while Hurricane Irma deposited the same amount on Cuba.²⁴ Although preserving the integrity of wetlands can help minimize the impact of storm surges, greater efforts to reduce global warming are needed to

basin experienced record flooding in the Spring of 2011, with January to May of that year being the wettest on record since at least 1895; however, the Missouri River Basin had been experiencing a reduced frequency of wet Springs prior to 2011); *Record Flooding in April/May 2017 Swamps Parts of Missouri, Arkansas, Illinois*, THE WEATHER CHANNEL (May 6, 2017), <https://weather.com/storms/severe/news/flood-threat-forecast-south-mississippi-valley-April-2017> (Missouri and Arkansas again experienced record rainfalls and flooding in the spring of 2017).

¹⁵ Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,494, 66,516–24 (Dec. 15, 2009) (codified 40 C.F.R. ch.1).

¹⁶ See *World Flood Timeline*, <http://www.mapreport.com/subtopics/d/w.html#2016> (last visited Mar. 27, 2018) (noting record breaking floods in Brazil, Pakistan, Niger, and the United States among other countries over the last fifteen years).

¹⁷ U.S. GLOBAL CLIMATE CHANGE RESEARCH PROGRAM, *supra* note 8, at ch 7 (citing the five-year California drought, from 2011-2016, as an example).

¹⁸ George Skelton, *Gov. Jerry Brown Warns Climate Change Has Us ‘on the Road to Hell.’ California’s Wildfires Show He’s on to Something*, L.A. TIMES (Dec. 14, 2017), <http://beta.latimes.com/politics/la-pol-ca-skelton-jerry-brown-wildfires-20171214-story.html>.

¹⁹ Umair Irfan, *One of the Clearest Signs of Climate Change in Hurricanes Irma, Maria, and Harvey was the Rain*, VOX (Sept. 29, 2017), <https://www.vox.com/energy-and-environment/2017/9/28/16362522/hurricane-maria-2017-irma-harvey-rain-flooding-climate-change>.

²⁰ *Id.*

²¹ *With Death Toll at 30, Storm Makes 2nd Landfall*, N.Y. TIMES (Aug. 30, 2017), <https://www.nytimes.com/2017/08/29/us/hurricane-harvey-storm-flooding.html>.

²² Irfan, *supra* note 19.

²³ *Id.*

²⁴ *Id.*

reduce the likelihood of such strong storms. James Kosin, an atmospheric scientist at NOAA and Center for Weather and Climate Protection, explains that warmer air and warmer water lead to more intense hurricanes. For every degree Celsius increase in temperature, air can hold seven percent more water.²⁵ Average rising temperatures are thus a significant component of the increase in huge storms.²⁶

Since lakes and oceans are staying warmer longer into the fall, this effect is true in the winter as well as the summer. The Great Lakes are freezing later in the season, generating “lake effect snows” of greater intensity. Some scientists think that the loss of sea ice in the Arctic is affecting the jet stream pattern, bringing more cold air from the North.²⁷

Gases that trap heat in the Earth’s atmosphere are called “greenhouse gases” (“GHGs”).²⁸ GHGs include carbon dioxide (“CO₂”),²⁹ methane (“CH₄”),³⁰ Nitrogen Oxide (“N₂O”)³¹ and fluorinated gasses.³² Global GHG emissions increased by seventy percent from 1970 to 2004 according to the IPCC, with annual carbon dioxide emissions growing by eighty percent.³³ In 2010, worldwide emissions of carbon dioxide increased by six percent (564 million more tons of carbon in the air than in 2009), producing the highest annual net increase ever in carbon

²⁵ *Id.* See also *Climate*, NOAA, <http://www.noaa.gov/climate> (last visited Mar. 27, 2018) (indicating that the average surface temperature of the earth has risen 1.68° Fahrenheit from 1880 to 2016).

²⁶ Irfan, *supra* note 19.

²⁷ See *A ‘Perfect Storm’: Extreme Winter Weather, Bitter Cold, and Climate Change*, CLIMATE REALITY PROJECT (Jan. 4, 2018), <https://www.climateactproject.org/blog/perfect-storm-extreme-winter-weather-bitter-cold-and-climate-change>.

²⁸ Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. at 66,499.

²⁹ CO₂ enters the atmosphere through the burning of fossil fuels—oil, natural gas, and coal—solid waste, trees and wood products, and also as a result of other chemical reactions, e.g., manufacture of cement. *Global Greenhouse Gas Emissions*, EPA, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data> (last visited Mar. 27, 2018) (note this information used to be listed by the EPA under the heading climate change, but now refers to greenhouse gases without discussing climate effects).

³⁰ Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills. *Id.*

³¹ Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste. *Id.*

³² Fluorinated Gases include Hydrofluorocarbons (“HFCs”), perfluorocarbons (“PFCs”), and sulfur hexafluoride (“SF₆”) are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes (and are not naturally occurring substances. *Id.* Fluorinated gases are sometimes used as substitutes for ozone-depleting substances (e.g., CFCs, HCFCs, and halons). These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential (“GWP”) gases.

³³ IPCC, *supra* note 9, at 5.

pollution.³⁴ Carbon dioxide reached 400 parts per million by 2016; before 1950 it never exceeded 300 parts per million.³⁵ Although gases are generated by both stationary and mobile sources, they mix with other gases in the atmosphere and are picked up by wind patterns that disperse the combined gases to remote locations. Consequently, the negative effects of GHGs are not limited to the region that produces them.³⁶

In 2007, the United States Supreme Court ruled that the EPA had authority under the CAA to regulate GHGs.³⁷ In response, the Agency issued a 2009 finding that CO₂ and other GHGs are linked to climate change and are harmful to human health and the environment, in what was called the Endangerment Rule discussed in Part VI.³⁸ In support of that finding, the EPA found an “unambiguous warming trend over the past 100 years,” and especially “over the past 30 years.”³⁹ The Obama Administration developed the Clean Power Plan to reduce GHGs from coal-fired power plants, but the Trump Administration is rescinding that plan.⁴⁰

Seven in ten Americans believe that global warming is occurring, according to a 2017 study published by the Yale Program on Climate Change Communication, and fifty-eight percent believe it is mostly caused by human activity.⁴¹ In a separate Yale University poll of Trump voters, sixty-two percent of Trump supporters approve of either taxing or regulating pollution that causes global warming.⁴² According to a Harvard University poll more than half of registered voters, including fifty-four percent of Republicans, do not believe that environmental regulations cost American jobs, and over sixty percent did not want the President to

³⁴ Seth Borenstein, *Biggest Jump ever seen in Global Warming Gases*, BOSTON GLOBE (Nov. 3, 2011), <https://www.bostonglobe.com/news/nation/2011/11/03/biggest-jump-ever-seen-global-warming-gases/b1VYJHTZNSgThyLlegBPaO/story.html>,

(referencing work from the U.S. Department of Energy’s Oak Ridge National Lab and IPCC).

³⁵ Rebecca Lindsey, *Climate Change: Atmospheric Carbon Dioxide*, NOAA (Oct. 17, 2017), <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>.

³⁶ See Kyle Henne, *The Destiny of Natural Gas: Recent Rulings on the Foreseeability of Downstream Greenhouse Gas Emissions*, 49 TRENDS, Jan./Feb. 2018, at 1-2.

³⁷ *Massachusetts v. Env’tl. Prot. Agency*, 549 U.S. 497, 528-529 (2007) (quoting 42 U.S.C. §7602(g)).

³⁸ *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act*, 74 Fed. Reg. 66,499.

³⁹ *Id.* at 66,517.

⁴⁰ *Repeal of Carbon Pollution Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, 82 Fed. Reg. 48,036 (Oct. 16, 2017).

⁴¹ YALE PROGRAM ON CLIMATE CHANGE COMMUNICATION, *CLIMATE CHANGE IN THE AMERICAN MIND* (May 2017).

⁴² YALE PROGRAM ON CLIMATE CHANGE COMMUNICATION, *TRUMP VOTERS & GLOBAL WARMING* (Feb. 6, 2017); See also Lenzy Krehbiel-Burton, *Polls: Attitudes on Energy, Environmental Policy Not so Disparate*, MO LAWYER’S WEEKLY, June 19, 2017 at 11.

withdraw from the Paris Climate Agreement.⁴³ Nevertheless, the Trump administration is denying the importance of climate change and reversing the Obama administration's support of global agreements to counter effects of climate change.

B. Denial of Climate Change Related Funding and Withdrawal from the Paris Climate Agreement

President Trump's response to climate change is to defund, stay enforcement, order prompt review of infrastructure projects, and direct agencies to review and repeal environmental regulations, especially those that could be linked to climate change. In short, the Trump mantra is: "Climate change? We're not spending money on that anymore."⁴⁴ Such policies ignore overwhelming evidence of climate change and its impact on humans and the planet. Even in the wake of hurricanes Harvey and Irma, President Trump held fast to climate change denial.⁴⁵ President Trump's Administrator of the EPA, Scott Pruitt, ordered the removal of climate change information from the EPA website,⁴⁶ and the Secretary of Interior Ryan Zinke has fostered a pro-energy agenda by opening federal lands to fossil fuel extraction leases and staffing the department primarily with individuals from the energy extraction industries.⁴⁷

NOAA's coordination of climate research within the federal government has been a challenging task.⁴⁸ That body's role is further

⁴³ *Poll: Majority of Americans Oppose President Trump's Proposed Cuts to EPA's Budget, Withdrawing from Paris Climate Treaty*, HARVARD SCHOOL OF PUBLIC HEALTH (Apr. 26, 2017), <https://www.hsph.harvard.edu/news/press-releases/poll-majority-americans-oppose-president-trumps-proposed-cuts-epas-budget-withdrawing-paris-climate-treaty/>.

⁴⁴ Patrick Goodenough, *WH on Global Climate Change: "We're Not Spending Money on That Anymore"*, CNS NEWS (Mar. 16, 2017), <https://www.cnsnews.com/news/article/patrick-goodenough/wh-global-climate-change-were-not-spending-money-anymore-waste-your> (quoting Mick Mulvaney, the head of Trump's Office of Management and Budget).

⁴⁵ Alana Abramson, *No, Trump Still Hasn't Changed His Mind About Climate Change After Hurricane Irma and Harvey*, TIME (Sept. 11, 2017), <http://time.com/4936507/donald-trump-climate-change-hurricane-irma-hurricane-harvey/>.

⁴⁶ See Rene Marsh, *EPA Removes Climate Change Information from Website*, CNN (Apr. 29, 2017), <http://www.cnn.com/2017/04/29/politics/epa-climate-change-website/>; but see *Air Pollution: Current and Future Challenges*, EPA, https://www.epa.gov/clean-air-act-overview/air-pollution-current-and-future-challenges#_edn8 (last visited Mar. 27, 2018).

⁴⁷ Tay Wiles, *Amit Monument Review, a Pro-Energy Interior Emerges*, HIGH COUNTRY NEWS (Aug. 1, 2017), <http://www.hcn.org/articles/interiors-energy-priorities-undergird-sweeping-monuments-review>.

⁴⁸ *Proposed NOAA FY2012 Reorganization*, NOAA (on file with author) (noting attempts "to bring together NOAA's existing widely dispersed climate capabilities under a single line office management structure to more efficiently and effectively respond to the rapidly increasing demand for *climate services* – easily accessible and timely scientific data and information about climate that helps people make informed decisions in their lives, businesses, and communities" and provide

complicated by President Trump's threat to halt NASA's research on climate change and terminate funding of some science missions.⁴⁹ NASA's role in forecasting where and when these storms may occur is essential to planning for the safety of citizens when anticipated storms are likely,⁵⁰ whether or not those storms are intensified by climate change.

In the early months of his administration, President Trump announced that he would be cancelling payments to United Nations programs related to climate change and withdrawing funds from the Green Climate Change Fund.⁵¹ This fund helps provide survival funding for developing nations that are struggling with the impact of droughts, crop failure, floods, increasing strong storms, heating, insect infestation, rising oceans, and acidification of oceans (which impacts survival of marine life, a food source for many people). A country with great wealth (such as the United States) has a moral obligation to help other countries that face the effects of climate change, especially considering the United States' extensive use of fossil fuels and conspicuous consumption practices.⁵² People who face inadequate water resources, crops, or food supplies, through little fault of their own, need and deserve aid from wealthy countries—aid which Trump announced the United States would no longer provide.⁵³

Other presidents have seen such survival problems as a security threat to the United States, both in its impact domestically and as a catalyst for

better climate forecasts have been caught in a political quagmire). *See also NOAA Pushes Back Against Reorganization Plan*, CNN (Jan. 17, 2012), <http://ireport.cnn.com/docs/DOC-732467>.

⁴⁹ OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, AMERICA FIRST A BUDGET BLUEPRINT TO MAKE AMERICA GREAT AGAIN 43 (Mar. 13, 2017).

⁵⁰ *Weather*, NASA, <https://science.nasa.gov/earth-science/focus-areas/earth-weather> (last visited Mar. 27, 2018); *Predicting the Weather*, NASA (June 29, 2009), https://www.nasa.gov/multimedia/imagegallery/image_feature_1399.html (recognizing the importance of the 2009 launch of a United Launch Alliance Delta IV with the NASA/NOAA Geostationary Operational Environmental Satellite-O that will provide more accurate prediction and tracking of severe storms and other weather phenomena, resulting in earlier and more precise warnings to the public).

⁵¹ A point Trump reinforced in his withdrawal from the Paris Accord speech, see *President Trump Announces U.S. Withdraw from the Paris Climate Accord*, THE WHITE HOUSE (June 1, 2017), <https://www.whitehouse.gov/blog/2017/06/01/president-donald-j-trump-announces-us-withdrawal-paris-climate-accord>. *See also* Nell Greenfield Boyce, *Trump's Budget Slashes Climate Change Funding*, NPR MORNING EDITION (Mar. 16, 2017), <http://www.npr.org/sections/thetwo-way/2017/03/16/520399205/trumpw-budget-slashes-climate-change-funding>.

⁵² *Energy and Global Warming*, CENTER FOR BIOLOGICAL DIVERSITY, http://www.biologicaldiversity.org/programs/climate_law_institute/energy_and_global_warming/index.html (last visited Mar. 27, 2018).

⁵³ *See* Andrew Taylor, *GOP-controlled House Subcommittees Reject Trump Budget Cuts*, ASSOCIATED PRESS (June 28, 2017), <https://www.apnews.com/55042a6dd94e430d9c58c9ffc624802c/GOP-controlled-House-subcommittees-reject-Trump-budget-cuts> (discussing that congressional committees are looking at budget proposals; the Food for Peace program funding was restored by an Appropriation subcommittee, retaining the \$1.6 billion which Trump's budget proposal would delete).

immigration,⁵⁴ but President Trump argues that the “true threat to national security is not climate change but regulations that get in the way of U.S. economic and energy ‘dominance.’”⁵⁵

In light of that policy position, President Trump decided to withdraw⁵⁶ the United States from its commitment to the 2015 Paris Climate Agreement.⁵⁷ In an open letter to the President, leaders of forty-four organizations, such as the Heritage Foundation, Hartland Institute, American Energy Alliance, and Myron Ebell of the Competitive Enterprise Institute (and member of the Trump transition team) reminded President Trump of his campaign promise to pull out of the Paris Climate Agreement.⁵⁸ Many of the groups opposed to the Paris Climate Agreement have financial ties to the Charles and David Koch (who are heavily invested in oil and traditional energy businesses).⁵⁹ It was estimated that in 2009 alone, the Koch brothers spent \$50 million to finance climate change skepticism.⁶⁰ Trump also listened to EPA’s Scott Pruitt, White House strategist Steve Bannon, and twenty conservative Republican senators who advised him to withdraw from the Paris Climate Agreement.⁶¹

By withdrawing from the Paris Climate Agreement and other United Nations commitments, President Trump has abdicated the leadership role once held by the United States. Even though such withdrawal from the

⁵⁴ See CNA MILITARY ADVISORY BOARD, NATIONAL SECURITY AND THE ACCELERATING RISK OF CLIMATE CHANGE (2014). See also *Air Pollution: Current and Future Challenges*, EPA, *supra* note 46.

⁵⁵ Jean Chemnick, *Trump Drops Climate Threats from National Security Strategy*, SCIENTIFIC AMERICAN (Dec. 19, 2017), <https://www.scientificamerican.com/article/trump-drops-climate-threats-from-national-security-strategy/>.

⁵⁶ *President Trump Announces U.S. Withdrawal from the Paris Climate Accord*, *supra* note 51.

⁵⁷ Paris Agreement to the United Nations Framework Convention on Climate Change, Nov. 18, 2016. 175 of 197 participating parties (countries) have ratified the convention as of this writing. *Paris Agreement*, UNITED NATIONS CLIMATE CHANGE, http://unfccc.int/paris_agreement/items/9485.php (last visited Mar. 27, 2018).

⁵⁸ *Forty Four Free-Market Groups Urge Trump to Withdraw from Paris Climate Agreement*, COMPETITIVE ENTER. INST. (May 8, 2017), <https://cei.org/content/forty-four-free-market-groups-urge-trump-withdraw-paris-climate-agreement>.

⁵⁹ Michael Shear & Diane Cardwell, *Trump Advisers Wage Tug of War Before Decision on Climate Deal*, N.Y. TIMES (May 30, 2017), <https://www.nytimes.com/2017/05/30/us/politics/paris-climate-agreement-trump.html>;

Graham Readfearn, *Pushing Trump to Exit Paris Climate Deal Have Taken Millions from Koch Brothers, Exxon*, DESMOG (May 10, 2017), <https://www.desmogblog.com/2017/05/10/conservative-groups-pushing-trump-exit-paris-deal-have-taken-millions-koch-brothers-and-exxon>.

⁶⁰ David Sasson, *Koch Brothers Positioned to Become Big Winners if Keystone XL Pipeline is Approved*, REUTERS (Feb. 10, 2011), <https://www.reuters.com/article/idUS292515702420110210>.

⁶¹ See Camila Domonoske & Colin Dwyer, *Trump Announces Withdrawal From Paris Climate Accord*, NPR (June 1, 2017), <https://www.npr.org/sections/thetwo-way/2017/06/01/530748899/watch-live-trump-announces-decision-on-paris-climate-agreement>.

Paris Climate Agreement cannot be completed until the day after the 2020 election,⁶² participation in global efforts to combat climate change will likely decrease before then, as this administration declines to implement other climate change priorities, as discussed in this article. President Trump's withdrawal from the Climate Agreement stands in stark contrast to the other G20 member countries reaffirmation of their commitments. In July 2017, the other nineteen-member countries of the G20 reaffirmed their commitment to the goals of the Paris Climate Agreement, including financial support for developing countries, with the G20 Hamburg Climate and Energy Action Plan for Growth.⁶³

Each country sets its own goals in the Paris Climate Agreement,⁶⁴ contrary to the impression given by President Trump that other countries were trying to take advantage of the United States.⁶⁵ Despite President Trump's assertions, China and India are already ahead of schedule in implementing practices to achieve their self-declared goals.⁶⁶ President Trump's assumption that 197 countries are going to renegotiate the accord to make it less burdensome to the United States is unrealistic. Leaders of Germany, France, and Italy emphasize that the Paris Climate Agreement will not be renegotiated and that they have committed their countries to carbon reduction.⁶⁷

In an effort to avoid severe consequences to the United States, some major leaders of industry tried to persuade President Trump to stay in the Paris Climate Agreement. Twenty-four major CEOs published an open letter to President Trump in the *Wall Street Journal* and *New York Times*, emphasizing that exiting the Paris Climate Agreement threatens American competitiveness, raises the risk of negative trade implications, and could actually hurt their ability to create jobs.⁶⁸ Other countries will

⁶² Brad Plumer, *What to Expect as the U.S. Leaves Paris Climate Accord*, N.Y. TIMES (June 1, 2017), <https://www.nytimes.com/2017/06/01/climate/us-paris-accord-what-happens-next.html>.

⁶³ European Commission Statement ST/17/1960, G20 Leaders' Declaration: Shaping an Interconnected World (July 8, 2017).

⁶⁴ Paris Climate Agreement, *supra* note 57.

⁶⁵ President Donald Trump, Statement on the Paris Climate Accord (June 1, 2017), <https://www.whitehouse.gov/the-press-office/2017/06/01/statement-president-trump-paris-climate-accord>).

⁶⁶ Jon Greenberg, *Fact-checking Donald Trump's Statement Withdrawing from the Paris Climate Agreement*, POLITIFACT (June 1, 2017), <http://www.politifact.com/truth-o-meter/article/2017/jun/01/fact-checking-donald-trumps-statement-withdrawing-/>.

⁶⁷ Jonathan Watts & Katy Connolly, *World Leaders React After Trump Rejects Climate Deal*, GUARDIAN, June 1, 2017, <https://www.theguardian.com/environment/2017/jun/01/trump-withdraw-paris-climate-deal-world-leaders-react>.

⁶⁸ *Business Support for the Paris Agreement*, CENTER FOR CLIMATE AND ENERGY SOLUTIONS, <https://www.c2es.org/international/business-support-paris-agreement> (last visited Mar. 27, 2018) (describing C2ES open letter to President Trump urging him to stay in the Paris Climate Accord, signed by CEOs of Adobe, Apple, Blue Cross Blue Shield of Massachusetts, Danfoss, Facebook,

take a leadership role in developing alternative energy technology, lessening the opportunity for green-sector jobs in America. Secretary of State Rex Tillerson, Pope Francis, G7 leaders, and the President's daughter Ivanka Trump were among those who attempted to convince Trump of the importance of keeping a seat at the table and remaining in the international climate change agreement.⁶⁹

"Climate change is real. Industry must now lead and not depend on government," tweeted General Electric CEO Jeff Immelt. CEOs such as Apple's Tim Cook and Microsoft president Brad Smith tried to convince President Trump that leaving the Paris Climate Agreement was bad for business. In reaction to President Trump's decision to withdraw the United States from the Paris Climate Agreement, Elon Musk, Tesla and Space X CEO, and Robert Iger, Disney CEO, resigned from the president's advisory council.⁷⁰ Even companies not normally viewed as environmental advocates, such as Monsanto, PG&E, and Dow Chemical CEO Andrew Liveris tried to convince Trump not to exit the Paris Climate Agreement, believing that it is better to have a seat at the table.⁷¹ On the same day that Trump announced his withdrawal decision, 62.3% of the shareholders of ExxonMobil voted to require climate change reporting by the company, with major investors BlackRock, State Street Global Advisors, and Vanguard Group all voting for the climate report.⁷²

The governors of California, New York, Washington, Massachusetts, Vermont, Connecticut, and Rhode Island reasserted their states'

Gap, Inc., Google, The Hartford, Hewlett Packard Enterprise, Ingersoll Rand, Intel Corporation, Johnson Controls, Levi Strauss & Co., Mars Incorporated, Microsoft, Morgan Stanley, National Grid, PG&E Corporation, Royal DM, Salesforce, Schneider Electric, Tiffany & Co., Unilever, and VF Corporation, and published in the New York Times and Wall Street Journal on multiple occasions in May and June of 2017).

⁶⁹ Jena McGregor, *'Climate Change is Real': CEOs Share their Disappointment Over Trump's Paris Accord Exit*, WASH. POST (June 1, 2017), https://www.washingtonpost.com/news/on-leadership/wp/2017/06/01/ceos-make-final-pleas-to-trump-to-stay-in-paris-climate-agreement/?utm_term=.31c35f6c6af4; Michael Shear & Coral Davenport, *World Leaders Increase Pressure on Trump to Stay in the Paris Accord*, N.Y. TIMES (May 26, 2017), <https://www.nytimes.com/2017/05/26/world/europe/paris-climate-agreement-trump-g7.html>; Curt Mills, *Tillerson: Vatican Urged U.S. to Keep Paris Deal*, U.S. NEWS AND WORLD REPORT (May 24, 2017), <https://www.usnews.com/news/national-news/articles/2017-05-24/rex-tillerson-says-vatican-urged-us-to-keep-paris-climate-agreement>.

⁷⁰ McGregor, *supra* note 69.

⁷¹ Evan Halper, *Trump's vow to scrap the Paris climate change accord faces skepticism from corporations and GOP moderates*, L.A. TIMES (Feb. 15, 2017), <http://www.latimes.com/politics/la-na-pol-trump-paris-accord-20170215-story.html>; Kevin Lui, *Top CEOs are in a Last Ditch Bid to Persuade Trump to Stick with the Paris Climate Deal*, FORTUNE (Jun. 1, 2017), <http://fortune.com/2017/06/01/apple-google-facebook-trump-stay-paris-accord/>.

⁷² Eric Rosenbaum, *A Big Climate Change Vote Against Exxon Mobil, with Some Heavyweight Investors Behind It*, CNBC (May 31, 2017), <http://www.cnbc.com/2017/05/31/index-giant-vanguard-does-about-face-on-big-investing-position-report.html>.

commitment to meeting the United States' climate agreement targets, despite President Trump's intent to withdraw federal support for the Paris Agreement.⁷³ California is trying to reach 1990 emission levels by 2020. The Climate Action Reserve is active in operating the California Environmental Quality Act's voluntary GHG Mitigation Registry, which encourages participation by companies and organizations in establishing projects that have permanent emissions reductions. This registry is especially active in extending California's cap-and-trade program, having issued \$100 million in offset credits⁷⁴ and playing a role in issuing the first credits under its Mexico Forest Protocol.⁷⁵ The State Air Resources Board's authority to create a state cap-and-trade program under California's Global Warming Solutions Act⁷⁶ has been up held in a consolidated lawsuit.⁷⁷

Just as environmentalists criticize President Trump for pulling out of the Paris Climate Agreement, they were critical of President George W. Bush for withdrawing the United States from the Kyoto Accord on Climate Change,⁷⁸ the predecessor to the Paris Climate Agreement. Although President Bill Clinton signed the Kyoto Accord in 1998, there were not sufficient votes to pass the treaty in the Senate, so Clinton never submitted it for ratification. Presidents Bush and Trump thought such deals would hurt the United States' economy and cause energy prices to rise.⁷⁹ Their administrations were heavily criticized by scientists, environmentalists, and many leaders of industry for their efforts to downplay the importance of climate change.⁸⁰ President Trump's withdrawal from the Paris Climate Agreement and general posture

⁷³ James Conca, *The Paris Agreement: As Trump Pulls Out, Governors Jump In*, FORBES (June 4, 2017), <https://www.forbes.com/sites/jamesconca/2017/06/04/the-paris-agreement-as-trump-pulls-out-governors-jump-in/#4d41ef635c57>.

⁷⁴ Participants in the California Cap and Trade Program can use tradeable offset credits for up to eight percent of their compliance requirements associated with reduction or removal of GHG emissions. The California Air Resources Board oversees the program. See CALIFORNIA AIR RESOURCES BOARD, CALIFORNIA AIR RESOURCES BOARD OFFSET CREDIT REGULATORY CONFORMANCE AND INVALIDATION GUIDANCE (Feb. 2015).

⁷⁵ *Climate Action News*, CLIMATE ACTION RESERVE NEWSLETTER (Jan. 2018), <http://www.climateactionreserve.org/news-and-events/newsletter/>.

⁷⁶ California Global Warming Solutions Act, CAL. HEALTH & SAFETY CODE §§ 38500-38599 (2006).

⁷⁷ Cal. Chamber of Commerce v. State Air Res. Bd., 10 Cal. App. 5th 604 (2017).

⁷⁸ Peter Baker, *16 Years Later, Bush's Climate Pact Exit Holds Lessons for Trump*, N.Y. TIMES (Jun. 4, 2017), <https://www.nytimes.com/2017/06/04/us/politics/trump-paris-accord-bush-kyoto.html>.

⁷⁹ Riley Beggin, *The Last Time a US President Dumped a Global Climate Deal*, ABC NEWS (June 1, 2017), <http://abcnews.go.com/Politics/time-us-president-dumped-global-climate-deal/story?id=47771005>.

⁸⁰ Suzanne Goldenberg, *The Worst of Times: Bush's Environmental Legacy Examined*, THE GUARDIAN (Jan. 16, 2009), www.theguardian.com/politics/2009/jan/16/greenpolitics-georgebush.

toward climate change will effectively relinquish the leadership role of the United States, not only in the area of countering climate change, but in other spheres of influence on the international stage. A poll by the Pew Research Center in thirty-seven countries showed a significant decline in approval ratings for the United States during the Trump administration, with the belief that President Trump would “do the right thing” at only twenty-two percent.⁸¹ Foreign leaders, affronted by President Trump’s isolationist policies and continuing tendency to insult allies, are reformulating alliances to bypass the United States.⁸²

III. PROMOTION OF ENERGY INDEPENDENCE WITH DIMINISHED ENVIRONMENTAL PROTECTION

The Trump administration prioritizes economic growth in the energy sector over mitigating the effects of climate change. In his first 100 days, President Trump issued thirty-three executive orders,⁸³ twenty-eight memoranda,⁸⁴ and thirty proclamations.⁸⁵ President Trump signed more executive orders in the first 100 days than any president since Harry Truman.⁸⁶ Six of his executive orders, two of his memoranda, and four of the Congressional Review Act (“CRA”)⁸⁷ resolutions have had a direct

⁸¹ Confidence in the U.S. leadership went from sixty-four percent under President Obama to twenty-two percent with President Trump, with overall approval ratings of the United States falling to forty-nine percent, see *America’s Global Standing Plummets under Donald Trump*, THE ECONOMIST (June 27, 2017), <https://www.economist.com/blogs/graphicdetail/2017/06/daily-chart-19>.

⁸² Eliot Cohen, *How Trump is Ending the American Era*, THE ATLANTIC (Oct. 2017), <https://www.theatlantic.com/magazine/archive/2017/10/is-trump-ending-the-american-era/537888/>.

⁸³ See FEDERAL REGISTER, 2017 DONALD TRUMP EXECUTIVE ORDERS, <https://www.federalregister.gov/executive-orders/donald-trump/2017> (last visited Mar. 27, 2018) (listing orders to date).

⁸⁴ See THE WHITE HOUSE, EXEC. OFFICE OF THE PRESIDENT, PRESIDENTIAL ACTIONS, <https://www.whitehouse.gov/briefing-room/presidential-actions/presidential-memoranda> (last visited Mar. 27, 2018).

⁸⁵ See *id.*

⁸⁶ Andrew Rudalevige, *Trump May Have ‘the Most Executive Orders’ Since Truman. But What Did They Accomplish?*, WASH. POST (Apr. 28, 2017), https://www.washingtonpost.com/news/monkey-cage/wp/2017/04/28/trump-may-have-the-most-executive-orders-since-truman-but-what-did-they-accomplish/?utm_term=.0a234a883558.

⁸⁷ Congressional Review Act, 5 U.S.C. §§ 801–808 (1996). The CRA allows Congress to review “major” regulations published in the Federal Register and received by Congress in the past sixty legislative days. When this overlaps a new session of Congress, regulations in the carryover period are treated as if they were received by Congress on the fifteenth day of the new legislative session (fifteenth legislative day of the House or fifteenth session day of the Senate). From the date the regulation was deemed to be received by Congress, Congress has sixty days to consider and adopt a joint resolution of disapproval of the rule—going back to June 13, 2016 for this session. Presidential signature is then required.

impact on environmental, energy, or conservation policy, reversing Obama-era orders and policies.⁸⁸

A. President Trump's Executive Order on Promotion of Energy Independence

President Trump's Executive Order on Promoting Energy Independence and Economic Growth ("Energy Independence Order") was motivated by his desire to reverse environmental rules to avoid, "regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation."⁸⁹ President Trump's Energy Independence Order: (1) revokes, rescinds or suspends several prior climate change and GHG directives and documents, while disbanding the Interagency Working Group on Social Cost of Greenhouse Gasses ("IWG"),⁹⁰ (2) lifts the moratorium on coal leases on federal lands,⁹¹ (3) authorizes immediate review, suspension, revision or rescission of the Clean Power Plan,⁹² and (4) instructs the head of each agency to make immediate review of all agency actions that potentially "burden" the development of domestic energy resources.⁹³ The obstructive "burden" could include significant costs in "siting, permitting, production, utilization, transmission, or delivery of energy resources."⁹⁴ Section 2 of the Energy Independence Order gives priority to four components of the energy sector: oil, natural gas, coal, and nuclear.

To implement this order, Energy Secretary Rick Perry proposed subsidizing aging coal and nuclear facilities to delay the retirement of their generators. The Federal Energy Regulatory Commission ("FERC")

⁸⁸ Disapproving the rule submitted by the Department of the Interior known as the Stream Protection Rule, H.R.J. Res. 38, 115th Cong. (2017) (enacted) (codified Pub. L. No. 115-6); Providing for congressional disapproval under chapter 8 of title 5, United States Code, of a rule submitted by the Securities and Exchange Commission relating to "Disclosure of Payments by Resource Extraction Issuers", H.R.J. Res. 41, 115th Cong. (2017) (codified Pub. L. No. 115-4); Disapproving the rule submitted by the Department of the Interior relating to Bureau of Land Management regulations that establish the procedures used to prepare, revise, or amend land use plans pursuant to the Federal Land Policy and Management Act of 1976, H.R.J. Res. 44, 115th Cong. (2017) (codified Pub. L. No. 115-12); Providing for congressional disapproval under chapter 8 of title 5, United States Code, of the final rule of the Department of the Interior relating to "Non-Subsistence Take of Wildlife, and Public Participation and Closure Procedures, on National Wildlife Refuges in Alaska", H.R.J. Res 69, 115th Cong. (2017) (codified Pub. L. No. 115-20).

⁸⁹ Exec. Order No. 13,783, Promoting Energy Independence and Economic Growth, 82 Fed. Reg. 16,093 (Mar. 31, 2017).

⁹⁰ *Id.* §§ 3, 5.

⁹¹ *Id.* § 6.

⁹² *Id.* § 4.

⁹³ *Id.* § 2.

⁹⁴ *Id.* § 2(b).

unanimously rejected Secretary Perry's proposal. In so ruling, FERC rejected the argument that these plants were necessary for the long-term resiliency of the electric grid.⁹⁵ Most utility companies had opposed Perry's plan.⁹⁶

In response to the Energy Independence Order, the Bureau of Land Management ("BLM") issued an Instruction Memorandum "to streamline the leasing process to alleviate unnecessary impediments and burdens, to expedite the offering of lands for lease,"⁹⁷ superseding the 2010 guidance.⁹⁸ It alleviates the Master Leasing Plans and "duplicative layers of NEPA review" by requiring use of existing NEPA documents, ESA and NHPA lease stipulations, without requiring additional "coordination," site visits or further public comment (eliminating the previous thirty-day public review and comment period).⁹⁹ Parcel review for specific lease sales are to be limited to six months and the auction process will not be halted if protests regarding parcels have not been resolved.¹⁰⁰ Public land offered for lease has increased significantly, with the number of acres offered for oil and gas lease sale auctions increasing six times to 11,859,396 in 2017, compared to 1,946,953 in 2016.¹⁰¹

President Trump's Energy Independence Order rescinds prior presidential actions centered on a climate change agenda, including Obama's administration Executive Order 13,653 on Preparing the United States for Impacts of Climate Change, the President's Climate Action Plan, promulgated in 2013, and Climate Action Plan Strategy to Reduce Methane Emissions Report, promulgated in 2014, as well as three other Presidential Memoranda on climate change from the Obama administration.¹⁰² Leasing federal land for fossil fuel extraction now has

⁹⁵ FED. ENERGY REGULATORY COMM'N, 162 F.E.R.C. ¶ 61,012, ORDER TERMINATING RULEMAKING PROCEEDING, INITIATING NEW PROCEEDINGS, & ESTABLISHING ADDITIONAL PROCEDURES RE GRID RELIABILITY & RESILIENCE PRICING UNDER RM18-1 ET AL. (Jan. 8, 2018).

⁹⁶ Brad Plumer, *Rick Perry's Plan to Rescue Struggling Coal and Nuclear Plants is Rejected*, N.Y. TIMES (Jan. 8, 2018), <https://www.nytimes.com/2018/01/08/climate/trump-coal-nuclear.html>.

⁹⁷ U.S. DEP'T INTERIOR, BUREAU OF LAND MANAGEMENT, IM 2018-034, UPDATING OIL AND GAS LEASING REFORM – LAND USE PLANNING AND LEASE PARCEL REVIEWS (Jan. 31, 2018).

⁹⁸ U.S. DEP'T INTERIOR, BUREAU OF LAND MANAGEMENT, IM 2010-117, OIL AND GAS LEASING REFORM LAND USE PLANNING AND LEASE PARCEL REVIEWS (May 17, 2010).

⁹⁹ U.S. DEP'T OF INTERIOR, IM 2018-034, *supra* note 97.

¹⁰⁰ *Id.* (reducing the protest period from thirty to ten days).

¹⁰¹ Acres Offered for Lease and Acres Sold, Calendar Years 2009-2017, Table 11, Bureau of Land Management, https://www.blm.gov/sites/blm.gov/files/Table%20_11_Acreage_Offered_at_Competitive_Lease_Sale_Auctions_Since_January_1_2009.pdf.

¹⁰² Exec. Order No. 13,783, § 3 (revoking Exec. Order No. 13,653 on Preparing the United States for the Impacts of Climate Change (Nov. 1, 2013)); Presidential Memorandum on Power Sector Carbon Pollution Standards (June 25, 2013); Presidential Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment

priority over environmental concerns related to fossil fuel's contribution to climate change.

B. Expedited Review of Infrastructure Projects

In the first week of his presidency, Trump issued an Executive Order on Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects.¹⁰³ The stated purpose was to strengthen our economic platform and create jobs. It was specifically aimed at streamlining and speeding up environmental reviews to facilitate projects associated with “the U.S. electric grid and telecommunications systems and repairing and upgrading critical port facilities, airports, pipelines, bridges, and highways.”¹⁰⁴ Projects specifically encouraged by President Trump’s executive memoranda include expediting approval for the Keystone XL Pipeline¹⁰⁵ and the Dakota Access Pipeline.¹⁰⁶ Pursuant to this order, the Chairman of the White House Council on Environmental Quality (“CEQ”) has thirty days to determine whether a request qualifies as a “high priority” infrastructure project.¹⁰⁷ When that determination is made, it triggers “expedited procedures and deadlines for completion of environmental reviews and approvals for such projects.”¹⁰⁸ President Trump’s Executive Order 13,807 requires expedited environmental reviews with infrastructure projects, during which the average time to complete the Environmental Impact Statement (“EIS”) process is to be reduced to two years from the notice of intent to prepare the EIS.¹⁰⁹ Historically, the average time to prepare an EIS was 3.4 years, with fifty-

(Nov. 3, 2015); Presidential Memorandum on Climate Change and National Security (Sept. 21, 2016); President’s Climate Action Plan, Report of the Executive Office of the President (June 2013); and Climate Action Plan Strategy to Reduce Methane Emissions, The Report of the Executive Office of the President (Mar. 2014); Presidential Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment (Nov. 3, 2015); and Presidential Memorandum on Climate Change and National Security (Sept. 21, 2016).

¹⁰³ Exec. Order No. 13,766, Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects, 82 Fed. Reg. 8657 (Jan. 30, 2017).

¹⁰⁴ *Id.* § 1.

¹⁰⁵ Presidential Memorandum Regarding Construction of the Keystone XL Pipeline (Jan. 24, 2017) [hereinafter *Keystone XL Memorandum*].

¹⁰⁶ Construction of the Dakota Access Pipeline, Memorandum for the Secretary of the Army, 82 Fed. Reg. 8661 (Jan. 30, 2017).

¹⁰⁷ Exec. Order No. 13,766, § 2.

¹⁰⁸ *Id.* § 3.

¹⁰⁹ Exec. Order No. 13,807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects, 82 Fed. Reg. 40, 463, 40,464 (Aug. 24, 2017); U.S. Dep’t of Interior, Secretarial Order No. 3355 (July 6, 2017) (limiting the NEPA review of onshore and offshore oil and gas leasing permits to one year), <https://www.doi.gov/pressreleases/zinke-signs-secretarial-order-streamline-process-federal-onshore-oil-and-gas-leasing>.

one days being the shortest timeframe in a eighteen-year review of 2,236 final EISs of fifty-three agencies.¹¹⁰ In comparison to the historic average, the Trump administration's "expedited procedures" appear arbitrary and do not facilitate genuine consideration of environmental impacts. The promotion of such energy sector projects now appears to have a greater weight than insuring a process to protect environmental water and air quality.

1. *Keystone XL Pipeline*

The Keystone XL Pipeline project involves the construction of an 875-mile pipeline from Morgan, Montana to Steele City, Nebraska that would deliver up to 830,000 barrels per day of crude oil from the western Canadian Sedimentary Basin.¹¹¹ Keystone XL was granted a permit in 2008, after which it applied for a permit to expand the route. After the issuance of the 2011 EIS, changes to the route were made to minimize perceived environmental concerns, including avoidance of the Sand Hills region and villages of Clarks and Western, Nebraska (moving further away from water wellhead protection areas).¹¹² Tribal consultation included sixty-seven of eighty-four affected tribes;¹¹³ however, there was a major protest against the project in Washington, D.C. on November 6, 2011.¹¹⁴ During the preparation of the Supplemental EIS, the Department of State considered climate change analysis, impact on wildlife, endangered species, wetlands, water and air quality, the impact on the lifestyle of people in the area, and the likelihood of oil spills. The Final Supplemental EIS was issued in January of 2014.¹¹⁵ The concerns it raised regarding spills and other environmental issues associated with the pipeline resulted in the rejection of the permit in 2015 by John Kerry, then Secretary of State under the Obama administration.¹¹⁶

¹¹⁰ Piet deWitt & Carole A. deWitt, *How Long Does it Take to Prepare an Environmental Impact Statement?*, 10 ENVTL. PRAC. 164, 164-174 (2008).

¹¹¹ U.S. DEPT. OF STATE, BUREAU OF OCEANS & INT'L ENVTL. & SCI. AFFAIRS, FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE KEYSTONE XL PROJECT ES-1 (Jan. 4, 2014) [hereinafter KEYSTONE SEIS].

¹¹² *Id.*

¹¹³ *Id.* at ES-4.14.1.

¹¹⁴ *Thousands in D.C. Protest Pipeline*, CBS NEWS (Nov. 6, 2011), <http://www.cbsnews.com/news/thousands-in-dc-protest-pipeline/>.

¹¹⁵ KEYSTONE SEIS, *supra* note 111.

¹¹⁶ Notice of a Decision to Deny a Presidential Permit to TransCanada Keystone Pipeline LP for the Proposed Keystone XL Pipeline, 80 Fed. Reg. 76,611 (Dec. 9, 2015) (the permit was issued by the Secretary of State rather than the Secretary of EPA because the pipeline crosses an international border with Canada).

President Trump's Memorandum Regarding Construction of the Keystone XL Pipeline¹¹⁷ invited TransCanada Keystone Pipeline, L.P. to re-submit its application for expeditious review and directed his Secretary of State to make a final decision on issuance of the permit within 60 days. President Trump ordered reanalysis of the existing 2014 Supplemental EIS, as an effort to satisfy the National Environmental Policy Act ("NEPA") and the Endangered Species Act ("ESA") consultation requirements.¹¹⁸ In addition, the Army Corps of Engineers and the Assistant Secretary of the Army for Civil Works were instructed to utilize Nationwide Permit 12 under the Clean Water Act ("CWA") section 404(e) to allow the pipeline to cross water bodies.¹¹⁹ The Secretary of the Interior, the BLM and the Fish and Wildlife Service ("FWS") were to (a) expedite steps to review Migratory Bird Treaty Act considerations,¹²⁰ and (b) acquire grants of right-of-way and temporary use permits.¹²¹

The Under Secretary of State for Political Affairs, Thomas Shannon, Jr., issued the permit for the Keystone XL pipeline on March 23, 2017.¹²² While agency decision-makers are not required to prioritize environmental concerns over all other factors, they are required to balance environmental and nonenvironmental considerations in developing "preferred alternatives" and a "proposed action" with the EIS.¹²³ President Trump's memorandum presumptively concluded that other priorities would prevail before any "re-review" of the Supplemental EIS had occurred.

One of the key benefactors of the expedited permitting for the Keystone XL pipeline is Koch Industries Inc., which imports and refines twenty-five percent of Canadian oil sands imported to the United States. Koch Industries' Flint Hills Resources Canada operates the crude oil terminal at the starting point of the Keystone XL pipeline in Hardisty, Alberta and Koch Exploration Canada, LP focuses on oil sands exploration.¹²⁴ The Koch brothers' pro-petroleum, pro-pipeline expansion, anti-regulatory advocacy may be influenced in part by the fact that Koch Industries was fined \$30 million in 2000 for violation of the

¹¹⁷ Keystone XL Memorandum, *supra* note 105.

¹¹⁸ *Id.* § 3(a).

¹¹⁹ *Id.* § 3(b).

¹²⁰ Migratory Bird Treaty Act, 16 U.S.C. § 703 (1918).

¹²¹ Keystone XL Memorandum, *supra* note 105, at § 3(c).

¹²² Notice of Issuance of a Presidential Permit to TransCanada for Keystone XL Pipeline L.P., 82 Fed. Reg. 16,467 (Apr. 4, 2017) [hereinafter Permit for the Keystone Pipeline].

¹²³ See *NEPA Forty Most Asked Questions*, FWS, https://www.fws.gov/r9esnepa/NEPA_Handbook/40_Asked_Questions.pdf (last visited Mar. 27, 2018).

¹²⁴ Sasson, *supra* note 60.

CWA after there were 300 oil spills in six states from their pipelines and facilities.¹²⁵

Canadian pipeline regulators found 21 violations of safety regulations by the TransCanada company in the first year of operation of Keystone I.¹²⁶ Whistle blowers report that the company has a history of ignoring its own quality control inspectors, cutting corners on safety, fudging pressure testing, and using low grade steel which is subject to cracking and is known for having bad welds.¹²⁷ When the Canadian government was considering its approval of Keystone I pipeline through the Canadian wilderness, groups such as the National Resources Defense Council warned of the dangers to fisheries, forests, and oceans from extraction and transport of tar sands oil, including risks to the habitat of salmon, spirit bear, grizzlies, migratory birds, whales, orca, and lifestyle of First Nations tribes. Three hundred bird species breed in or migrate through the habitat where the extraction will occur. The mountainous landscape and water resources are also vulnerable.¹²⁸

The Keystone pipeline (and its related segments) will carry carbon-heavy crude oil from the tar sands of Canada to the Gulf of Mexico. The tar sands oil is one of the “planet’s most environmentally destructive energy sources,”¹²⁹ because it is higher in carbon content than traditional light oil and its petroleum coke (“petcoke”) byproduct emission of more CO₂ than conventional coal.¹³⁰ A bitumen oil spill is much more difficult to clean up because of the dense, sticky residue it leaves behind on rocks

¹²⁵ John Fialka, *Koch Industries’ \$30 Million Fine is Biggest-Ever Pollution Penalty*, WALL STREET J. (Jan. 14, 2000).

¹²⁶ Mike Souzan, *Feds Recorded 100 Pipeline Spills and Accidents in Last Two Years*, POSTMEDIA NEWS (July 5, 2011), <http://www.canada.com/business/Feds+recorded+pipeline+spills+accidents+last+years/5053005/story.html>.

¹²⁷ Anthony Swift, *TransCanada’s Record Presents a Strong Case for Rejecting Keystone XL Tar Sands Pipeline (Again)*, NRDC (Nov. 2, 2012), <https://www.nrdc.org/experts/anthony-swift/transcanadas-record-presents-strong-case-rejecting-keystone-xl-tar-sands>.

¹²⁸ NAT’L RES. DEF. COUNCIL, PIPELINE AND TANKER TROUBLE: THE IMPACT TO BRITISH COLUMBIA’S COMMUNITIES, RIVERS AND PACIFIC COASTLINE FROM TAR SANDS OIL TRANSPORT 2-7 (Nov. 2011), <https://www.nrdc.org/sites/default/files/PipelineandTankerTrouble.pdf>.

¹²⁹ Mike Ludwig, *Indigenous and Environmental Groups Sue to Block Rump’s Keystone XL Permit*, TRUTHOUT (Mar. 31, 2017), <http://www.truth-out.org/news/item/40056-indigenous-and-environmental-groups-sue-to-block-trump-s-keystone-xl-permit>.

¹³⁰ Tar sands bitumen is a semi-solid hydrocarbon that contains twenty-four percent more CO₂ per barrel than conventional light oil. During the refining process, fifteen to thirty percent of the carbon is converted into a coal-like solid fuel called petroleum coke or “petcoke”. Petcoke emits 5 to 10 percent more CO₂ than coal per unit of energy produced. A ton of petcoke yields on average 53.6% more CO₂ than a ton of coal. Lorne Stockman, *Why Canadian Tar Sands are the Most Environmentally Destructive Project on Earth*, INDIGENOUS ENVTL. NETWORK, <http://www.ienearth.org/why-canadian-tar-sands-are-the-most-environmentally-destructive-project-on-earth/> (last visited Mar. 27, 2018).

and landscape; not to mention that it poses deadly consequences for animals whose wings or fur encounter it.¹³¹

The United States Pipeline and Hazardous Materials Administration regulators found sixty-two probable deficiencies in TransCanada's operation of the Keystone Pipeline¹³² and sent a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order letter to the company in 2015.¹³³ In November 2017, related major pipeline, the Keystone I, spilled 210,000 gallons of tar sands oil in South Dakota farmlands, the third spill in that state,¹³⁴ causing safety concerns to escalate. Nevertheless, the Nebraska Public Service Commission approved the Keystone XL project just days after the South Dakota spill, but authorized an alternate route through its state rather than the route preferred by TransCanada.¹³⁵ The commission was not allowed to consider the safety concerns because those were linked to interstate oil transport within the exclusive jurisdiction of federal regulators under the federal Pipeline Safety Act.¹³⁶ According to Nebraska law, the decision was to be based solely on the location of the route or siting, irrespective of safety considerations.¹³⁷ Safety considerations should not be viewed as an "undue burden" on interstate commerce and the law needs to be changed to allow such considerations.

The 2017 permit for the Keystone Pipeline recognizes that the permittee is responsible for obtaining any necessary right-of-way grants of easements.¹³⁸ An additional roadblock to the completion of the pipeline is its unpopularity with landowners in Nebraska, who do not want to grant easement rights for fear of contaminating local agricultural land and water resources. Nearly one hundred landowners in Nebraska challenged actions by TransCanada to obtain pipeline easements under TransCanada's preferred route. Despite a 2016 court ruling requiring

¹³¹ NAT'L RES. DEF. COUNCIL, *supra* note 128.

¹³² Mike De Souza, *TransCanada Failed to Operate Keystone Safely, U.S. Regulator Alleges*, NAT'L OBSERVER (Dec. 11, 2015), <https://www.nationalobserver.com/2015/12/11/news/transcanada-failed-operate-keystone-safely-us-regulator-alleges>.

¹³³ Notice of Probable Violation Proposed Civil Penalty and Proposed Compliance Order, Pipeline and Hazardous Materials Administration, Pipeline and Hazardous Materials Safety Administration (Nov. 20, 2015), https://primis.phmsa.dot.gov/comm/reports/enforce/documents/320155010/320155010_NOPV%20PCP%20PCO_11202015_text.pdf.

¹³⁴ Anthony Swift, *Keystone I Tar Sands Pipeline Spills 210,000 Gallons*, NRDC (Nov. 16, 2017), <https://www.nrdc.org/experts/anthony-swift/keystone-i-tar-sands-pipeline-spills-210000-gallons>.

¹³⁵ Mitch Smith, *Nebraska Allows Keystone XL Pipeline, But Picks a Different Path*, N.Y. TIMES (Nov. 20, 2017), <https://www.nytimes.com/2017/11/20/us/nebraska-pipeline-keystone-xl.html> (noting the three to two approval of the Keystone XL project).

¹³⁶ Pipeline Safety Act, 49 U.S.C. § 60101 et seq. (1994).

¹³⁷ See Major Oil Pipeline Siting Act, NEB. REV. STAT. § 57-1402 (2011).

¹³⁸ Permit for the Keystone Pipeline, *supra* note 122, at Art. 8 § 1.

TransCanada to pay the legal fees and costs of nineteen landowners who have fought eminent domain proceedings, the company is resisting such payments.¹³⁹ The company will now have to negotiate new easements along the longer alternate route.

Climate advocates and members of the Indian Native Rights movement have voiced strong opposition to fossil fuel infrastructure projects, such as the Keystone XL pipeline and the Dakota Access pipeline. Pipeline proponents argue that they transport oil and gas more safely than trains or trucks can, but environmentalists reply that pipelines construction, leaks, and spills may contaminate drinking water.¹⁴⁰ Not only is there a danger to groundwater, but wetlands along the path of the pipeline are disturbed, especially where there are multiple river crossings.¹⁴¹ The Executive Director of the Indigenous Environmental Network (“IGN”), Tom Goldtooth, admonished that:

For too long, the U.S. government has pushed around Indigenous peoples and undervalued our inherent rights, sovereignty, culture and our responsibilities as guardians of Mother Earth and all life, while fueling catastrophic extreme weather and climate change with an addiction to fossil fuels. The time has come to keep fossil fuels in the ground and shut down risky extreme energy projects like the tar sands that are poisoning our families, wildlife, water sources and destroying our climate.¹⁴²

The IGN and the North Coast Rivers Alliance filed a lawsuit challenging the Keystone XL permit, claiming the Department of State, Department of Interior, and the FWS are endangering their groundwater and have violated the ESA, the Migratory Bird Treaty Act, the Bald Eagle and Golden Eagle Protection Act, as well as EIS requirements of NEPA and the Administrative Procedure Act (“APA”).¹⁴³ Six environmental

¹³⁹ *Judge Orders TransCanada to Pay Landowners’ Legal Fees*, HOLT COUNTY INDEP. (July 6, 2016), http://www.holtindependent.com/news/judge-orders-transcanada-to-pay-landowners-legal-fees/article_9e5bf4c4-43a3-11e6-8999-8789378ca78a.html.

¹⁴⁰ See KEYSTONE SEIS, *supra* note 111, at ES 5.4.3. See also Rebecca Harrington, *Trump Executive Orders, Memorandum, Proclamations and Presidential Action Guide*, BUS. INSIDER (May 3, 2017), <http://www.businessinsider.com/trump-executive-orders-memorandum-proclamations-presidential-action-guide-2017-1/#3-presidential-memoranda-january-24-approving-pipelines-54>.

¹⁴¹ Julia Aplan Hitz, *What are the Keystone XL Risks to Water Resources?*, COLUM. U., EARTH INST. (Oct. 10, 2011), <http://blogs.ei.columbia.edu/2011/10/10/what-are-the-keystonexl-pipeline-risks-to-water-resources/>.

¹⁴² *Native Americans and Environmental Groups File Lawsuit to Overturn President Trump’s Keystone XL Pipeline Permit*, INDIGENOUS ENVTL. NETWORK (Mar. 29, 2017), <http://www.ienearth.org/native-american-and-environmental-groups-file-lawsuit-to-overturn-president-trumps-keystone-xl-pipeline-permit/>.

¹⁴³ *Indigenous Envtl. Network v. Dept. of State*, No. 4:17-cv-00029-BMM, 2017 WL 5632435 (Dist. Mont. Mar. 27, 2017) (surviving a motion to dismiss).

NGOs and Native American groups filed lawsuits challenging the Keystone XL Pipeline approval in federal district court in Montana, arguing that the three-year-old Supplemental EIS is out of date and that the APA was violated by the arbitrary reversal of the Obama administration's denial of the Keystone XL Pipeline permit.¹⁴⁴

2. *Dakota Access Pipeline*

Native American groups also have led the fight against the Dakota Access pipeline, a 1,200-mile pipeline from Bakken oil fields in the Dakotas to Illinois, which is slated to cross the Missouri River and the Standing Rock Sioux reservation. Native Americans camped out in freezing cold weather to protest the potential damage to their water supply after a route change brought the pipeline's crossing under the Missouri River and Lake Oahe (the primary water source for the reservation).¹⁴⁵

Although water contamination has not yet occurred, there have already been two leaks on the Dakota Access Pipeline in March of 2017. Due to a faulty flange at the pipeline terminal in Watford City, North Dakota, eighty-four gallons were leaked. Twenty gallons were leaked in Mercer County due to an above ground valve with a manufacturing defect. While both leaks were quickly contained, they underscored environmentalists' fears.¹⁴⁶ Concerns also have been raised regarding the proximity of pipelines to houses. After a different natural gas pipeline leaked gas into a basement and caused a home to explode in Colorado, the state is debating how far pipelines should be setback from residential property. The Colorado Oil & Gas Conservation Commission, in consultation with members of the energy industry, revised regulations to include a 500-foot setback in urban areas.¹⁴⁷ Similar concerns could be raised regarding the Dakota Access Pipeline.

After President Trump's Memorandum Regarding Construction of the Dakota Access Pipeline,¹⁴⁸ the United States Army Corp of Engineers conducted an expedited approval of a thirty-year easement for the Dakota

¹⁴⁴ *Northern Plains Resource Council v. Shannon, Jr.*, 2017 WL 5630319 (D. Mont. Mar. 30, 2017).

¹⁴⁵ Phil McKenna, *2016: How Dakota Pipeline Protest Became a Native American Cry for Justice*, INSIDER CLIMATE NEWS (Dec. 27, 2016), <https://insideclimatenews.org/news/22122016/standing-rock-dakota-access-pipeline-native-american-protest-environmental-justice>.

¹⁴⁶ Josh Morgan, *Leaks found on Dakota Access Pipeline system*, CBS (May 22, 2017), <https://www.cbsnews.com/news/more-leaks-found-along-dakota-access-pipeline/>.

¹⁴⁷ Leigh Paterson & Jordan Wirfs-Brock, *When Oil and Gas Moves in Next Door*, INSIDE ENERGY (Aug. 22, 2017), <http://insideenergy.org/2017/08/22/when-oil-and-gas-moves-in-next-door/>.

¹⁴⁸ Dakota Pipeline Memorandum, 82 Fed. Reg. 8661.

Access pipeline.¹⁴⁹ The Standing Rock Sioux Tribe asserted three lines of attack in challenging the pipeline in its lawsuit against the Corps. In *Standing Rock I*, the District Court for the District of Columbia rejected the argument that clearing and grading of the land violated cultural and historical rights.¹⁵⁰ In response to President Trump's Memorandum, the Army Corps of Engineers filed notice on February 7, 2017, that it was granting the easement and terminating its intent to conduct a new EIS (recommended by EPA in 2016).¹⁵¹ In *Standing Rock II*, the same court rejected a challenge based on the Religious Freedom Restoration Act.¹⁵² In *Standing Rock III* the tribe asserted negative environmental impact. Native American tribes have proclaimed that they have treaty rights to the land and water that the pipeline will cross and that the tribe's fishing and hunting rights are necessary to the subsistence living of some of its tribe members. The plaintiffs asserted Army Corps of Engineers erred in its analysis of the environmental impact of the pipeline crossing at Lake Oahe, in violation of NEPA requirements. On June 14, 2017, the District Court for the District of Columbia issued a memorandum opinion that held that the Corps, "did not adequately consider the impacts of an oil spill on fishing rights, hunting rights, or environmental justice, or the degree to which the pipeline's effects are likely to be highly controversial," but reserved the question of whether to issue an injunction for a future hearing.¹⁵³ In that decision, the court remanded the case to the Army Corp of Engineers for reconsideration and further analysis.¹⁵⁴ In October of 2017, the court declined to order the stoppage of oil flow or shutdown of the pipeline during the Corps' further analysis.¹⁵⁵ In December, the court ordered a coordinated final spill response plan, bi-monthly reports from Dakota Access, and a third-party compliance audit to be completed by April 1, 2018.¹⁵⁶

¹⁴⁹ Juliet Eilperin & Brady Dennis, *Trump Administration to Approve Final Permit for Dakota Access Pipeline*, WASH. POST (Feb. 7, 2017), www.washingtonpost.com/news/energy-environment/wp/2017/02/07/trump-administration-to-approve-final-permit-for-dakota-access-pipeline/?utm_term=.1089c2953085.7, 2017.

¹⁵⁰ *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock I)*, 205 F. Supp. 3d 4, 7 (D.D.C. 2016).

¹⁵¹ *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock III)*, No 1:16-cv-1534-JEB (D.D.C. Feb. 9, 2017).

¹⁵² *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock II)*, 2017 W.L. 908538 at *1 (D.D.C. Mar. 7, 2017).

¹⁵³ *Id.* at *2.

¹⁵⁴ *Standing Rock III*, 255 F. Supp. 3d 101 (D.D.C. June 14, 2017).

¹⁵⁵ *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock IV)*, 2017 W.L. 4564714 (D.D.C. Oct. 11, 2017).

¹⁵⁶ *Standing Rock IV*, No. 1:16-cv-0-01534-JEB (D.D.C. Dec. 4, 2017).

In response to this lawsuit, protests, and disruptions of their business activities and property, Energy Transfer Equity, L.P. and Energy Transfer Partners, L.P. (partial owners of the Dakota Access Pipeline) have sued Greenpeace, Banktrack and Earth First!, alleging that they conspired in a pattern of racketeering activities, funded Standing Rock “terrorist” protests, recklessly publicized lies, and fabricated environmental claims.¹⁵⁷ The Center for Constitutional Rights and Earth First! Journal, in turn, have argued that the goal of the pipeline owners is suppression of First Amendment rights of the people involved in the Earth First! movement, and the Center filed a Motion for Sanctions against the energy firms and attorneys for misuse of the legal system.¹⁵⁸

C. Offshore Drilling for Oil Exploration & Environmental Risks

1. Outer Continental Shelf Lands Act & Environmental Risks with Offshore Drilling

The Outer Continental Shelf Lands Act (“OCSLA”)¹⁵⁹ establishes policy for the management and exploration of oil and natural gas in the Outer Continental Shelf, including protection of the marine and coastal environment, promotion of shore protection, and restoration of coastal beach and wetlands, as well as the creation of an oil spill liability fund.¹⁶⁰ Oil reserves along the continental shelf of the United States include approximately 73.69 billion barrels off the Gulf of Mexico, 50 billion off the Alaskan coast, 13.07 billion off the Pacific coast, and 11.39 billion off the Atlantic coast.¹⁶¹

President Obama used his presidential authority to place land in a protective zone,¹⁶² under OCSLA § 12(a) authority to withdraw from disposition any of the unleased lands of the outer Continental Shelf.¹⁶³ A

¹⁵⁷ Energy Transfer Equity, L.P. v. Greenpeace, No. 1:17-cv-00173-CSM (D.N. Dakota Aug. 8, 2017).

¹⁵⁸ Energy Transfer Equity, Motion for Sanctions (D.N. Dakota Jan. 10, 2018). See *Energy Transfer Equity, et al. v. Greenpeace, Earth First! et al.*, CENTER FOR CONSTITUTIONAL RIGHTS, <https://ccrjustice.org/home/what-we-do/our-cases/energy-transfer-equity-et-al-v-greenpeace-earth-first-et-al> (last visited Mar. 30, 2018).

¹⁵⁹ 43 U.S.C. § 1331 et seq. (1953).

¹⁶⁰ *Id.* § 1331.

¹⁶¹ Tom DiChristopher, *Obama Invokes 1953 Law to Indefinitely Block Drilling in Arctic and Atlantic Oceans*, CNBC (Dec. 20, 2016), <http://www.cnbc.com/2016/12/20/obama-expected-to-invoke-1953-law-to-block-offshore-drilling.html?view=story&%24DEVICE%24=native-android-mobile>.

¹⁶² 43 U.S.C. § 1341(a).

¹⁶³ Memorandum from President Barack Obama on Withdrawal of Certain Portions of the United States Arctic Outer Continental Shelf from Mineral Leasing (Dec. 20, 2016) [hereinafter Obama Memorandum on Arctic OCS], <https://obamawhitehouse.archives.gov/the-press-office/2016/12/20/>

report of the Coast Guard-led Arctic Executive Steering Committee Task Force on Oil Spill Response recognized the ecological sensitivity of the Beaufort Sea Planning Area and Chukchi Sea Planning Area of Alaskan waters. President Obama stated that he was issuing the December 20, 2016 order to withdraw from leasing areas of the Arctic Outer Continental Shelf:

[C]onsistent with principles of responsible public stewardship entrusted to this office, with due consideration of (1) the important, irreplaceable values of the Chukchi Sea and portions of the Beaufort Sea for marine mammals, other wildlife, wildlife habitat, scientific research, and Alaska Native subsistence use; (2) the vulnerability of these ecosystems to an oil spill; and (3) the unique logistical, operational, safety, and scientific challenges and risks of oil extraction and spill response in these Arctic waters.¹⁶⁴

This Obama Presidential Order was preceded by a July 2016 rule change, issued by the Safety and Environmental Enforcement Bureau and Ocean Energy Management Bureau, that limited oil exploration in the Arctic.¹⁶⁵

In the Executive Order Implementing an America-First Offshore Energy Strategy,¹⁶⁶ President Trump directed his Secretary of Interior, Ryan Zinke, to review offshore oil drilling policies for the outer-continental shelf. Secretary Zinke's follow up Secretarial Order limits NEPA review to one year and 150 pages to streamline the process for issuing oil and gas leasing permits.¹⁶⁷ President Trump capped off his first 100 days on April 28, 2017 by reversing President Obama's Arctic Outer Continental Shelf Presidential Memorandum that had established a ban on leasing certain offshore lands for exploration development or production of mineral rights.¹⁶⁸ Since no president has ever attempted to use the authority to remove land protected under OCSLA, the League of

presidential-memorandum-withdrawal-certain-portions-united-states-arctic (pursuant to OCSLA § 12(a)).

¹⁶⁴ *Id.* See also Memorandum from President Barak Obama on Withdrawal of Certain Areas Off Atlantic Coast on the Outer Continental Shelf from Mineral Leasing (Dec. 20, 2016), <http://www.the-president.us/16668.html>.

¹⁶⁵ Cook Inlet Planning Area Outer Continental Shelf Oil and Gas Lease Sale 244, 82 Fed. Reg. 23,291 (May 22 2017). See also Oil and Gas and Sulfur Operations on the Outer Continental Shelf-Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf, 81 Fed. Reg. 46,477 (July 15, 2016).

¹⁶⁶ Exec. Order No. 13,795, Implementing an America-First Offshore Energy Strategy, 82 Fed. Reg. 20,815 (May 3, 2017).

¹⁶⁷ See Secretarial Order No. 3355, *supra* note 109.

¹⁶⁸ Obama Memorandum on Arctic OCS, *supra* note 163 (withdrawal of Certain Portions of the United State Arctic Outer Continental Shelf from Mineral Leasing).

Conservation Voters has challenged President Trump's authority under OCSLA and the constitution to reopen lands that have been withdrawn from production.¹⁶⁹

Secretary Zinke issued a five-year Draft Proposed Program for 2019-2024 that would open up ninety percent of the Outer Continental Shelf ("OSC") for oil and gas exploration (compared with the six percent currently available according to the Department of Interior website). The proposed program would make available potentially forty-seven leases, including three in the Chukchi Sea and three in the Beaufort Sea.¹⁷⁰ The Notice of Intent to prepare the Draft Programmatic EIS was open for sixty days beginning January 16, 2018.¹⁷¹ Oceana released a new economic analysis which concludes that, "the Trump administration's offshore drilling plan threatens more than 2.6 million jobs and nearly \$180 billion in GDP for only two years'-worth of oil and just over one year's-worth of gas at current consumption rates."¹⁷²

Mayors of 190 coastal municipalities oppose the Trump administration decision to open up offshore drilling with resolutions.¹⁷³ Many governors also oppose the offshore drilling policy, including the governors of Florida, South Carolina, North Carolina, Virginia, Maryland, Delaware, New Jersey, Washington, and Oregon. Secretary Zinke announced that Florida will be exempt from offshore drilling because Governor Scott (a potential Senate candidate) expressed concerns regarding coastal tourism and Florida's "unique" situation. Other state governors would like a similar courtesy extended to their states.¹⁷⁴

¹⁶⁹ League of Conservation Voters v. Trump, No. 3:17-cv-00101 (D. Alaska May 3, 2017).

¹⁷⁰ Press Release, U.S. Dep't of Interior, Secretary Zinke Announces Plan for Unleashing America's Offshore Oil and Gas Potential (Jan. 4, 2018), <https://www.doi.gov/pressreleases/secretary-zinke-announces-plan-unleashing-americas-offshore-oil-and-gas-potential>.

¹⁷¹ Notice of Availability of the 2019-2024 Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program and Notice of Intent to Prepare a Programmatic Environmental Impact Statement, 83 Fed. Reg. 829 (Jan. 8, 2018).

¹⁷² Press Release, Oceana, *Clean Coast Economies Along Atlantic, Pacific and Eastern Gulf Risked for Only Two Years'-Worth of Oil and One Year's-Worth of Gas* (Mar. 7, 2018), <http://usa.oceana.org/press-releases/new-economic-analysis-finds-trump-administrations-offshore-drilling-plan-threatens-26>.

¹⁷³ *Grassroots Opposition to Offshore Drilling and Exploration in the Atlantic Ocean and Eastern Gulf of Mexico*, OCEANA, <http://usa.oceana.org/climate-and-energy/grassroots-opposition-offshore-drilling-and-exploration-atlantic-ocean-and> (last visited Mar. 30, 2018).

¹⁷⁴ Hiroka Tabuchi, *Trump Administration Drops Florida from Offshore Drilling Plan*, N.Y. TIMES (Jan. 9, 2018), <https://www.nytimes.com/2018/01/09/climate/trump-florida-offshore-drilling.html>; Ledyard King, *More States Want to be Exempted from Drilling*, USA TODAY (Jan. 11, 2017), <https://www.usatoday.com/story/news/politics/2018/01/10/after-trump-administration-excludes-florida-offshore-drilling-other-coastal-states-seek-similar-reli/1019966001/>.

While President Trump's offshore energy strategy is aimed at encouraging new exploration of oil reserves, Royal Dutch Shell stopped drilling in the Chukchi Sea in 2015 after spending \$7 billion in unsuccessful oil exploration. ConocoPhillips, Statoil, Chevron, BP, and Exxon have all generally suspended offshore drilling in the Arctic area, having deemed it unprofitable.¹⁷⁵ In 2008, the Interior Department withdrew several sales in Alaskan waters due to low demand.¹⁷⁶ In 2016, a sale for Gulf waters oil leases, only one percent of the waters offered were bought, even though royalty rates were lowered.¹⁷⁷ However, the Department of Interior's Bureau of Ocean Energy Management completed sales for oil and gas leases in the Cook Inlet in June of 2017.¹⁷⁸ The Bureau of Safety and Environmental Enforcement within the Department of Interior issued a permit November 28, 2017, to allow Eni U.S. Operating Co. to drill exploratory wells in the Beaufort Sea,¹⁷⁹ the very area President Obama had tried to protect because of the potential devastation to marine wildlife.

Environmentally sensitive areas on and offshore are vulnerable. Opening up drilling in Arctic National Wildlife Refuge ("ANWR") is also a priority of the Trump administration and one that has been a battle ground in the energy versus environment debate since the 1970s. It has been closed to drilling since 1980, in part to protect caribou and polar bears and their habitat. On November 28, 2017, the Senate Budget Committee reported out Senator Lisa Murkowski's bill that would allow oil and natural gas drilling in at least two locations within Alaska's pristine ANWR.¹⁸⁰ The final version of the 2017 tax reform bill¹⁸¹

¹⁷⁵ Chester Dawson, *Exxon Mobil, BP Suspend Canadian Exploratory Drilling Program in Beaufort Sea*, WALL STREET J. (June 26, 2015), <https://www.wsj.com/articles/exxon-mobil-bp-suspend-canadian-arctic-exploratory-drilling-program-in-beaufort-sea-1435348381>.

¹⁷⁶ Patrick Parenteau, *Will Obama's Offshore Drilling Plan be Trumped?*, THE CONVERSATION (Jan. 2, 2017), <http://theconversation.com/will-obamas-offshore-drilling-ban-be-trumped-70125>.

¹⁷⁷ Mark Hand, *Interior Secretary Zinke's Secret National Monuments Comes under Legal Attack*, THINK PROGRESS (Aug. 25, 2017), <https://thinkprogress.org/commerce-dept-promotes-offshore-drilling-ddf877a5fd5a/>.

¹⁷⁸ Cook Inlet Lease Sale 244, 89 Fed. Reg. 23,291.

¹⁷⁹ *BSEE Approves New Drilling Operations in Arctic*, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT (Nov. 28, 2017), <https://www.bsee.gov/newsroom/latest-news/statements-and-releases/press-releases/bsee-approves-new-drilling-operations-in>. See

Lorraine Crow, *Oil Exploration Approved by Trump Administration as ANWR Drilling Bill Moves Forward*, ECOWATCH (Nov. 29, 2017), <https://www.ecowatch.com/arctic-oil-anwr-drilling-2513482646.html>; Chris D'Angelo, *Trump Administration Greenlights New Oil Drilling Operations in Arctic Waters*, HUFFINGTON POST (Nov. 28, 2017), https://www.huffingtonpost.com/entry/spy-island-arctic-drilling_us_5a1dd740e4b0d724fed450bb.

¹⁸⁰ D'Angelo, *supra* note 179.

¹⁸¹ An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018 ("Tax Cuts and Jobs Act"), Pub. L. No 115-97, §§ 20001(b)(2)(A) and (B) (Dec. 22, 2017).

included opening up 1.5 million acres of ANWR to oil drilling, thereby securing the votes of Alaskan Senators Murkowski and Sullivan.¹⁸² Alaskan Governor William Walker also supports Trump's Executive Order Implementing an America-First Offshore Energy Strategy and opening up ANWR.¹⁸³ While the decision to open up ANWR for drilling was praised by many energy first groups,¹⁸⁴ there are grave concerns by environmentalists who remember the consequences of the 1989 Exxon Valdez oil spill and 2010 BP Deepwater Horizon oil spill. Information about offshore oil drilling safety will not be forthcoming, since the Trump administration shelved the NASEM study related to such safety.¹⁸⁵

The BP Deepwater Horizon oil spill in 2010 resulted in over five million barrels of oil in the Gulf of Mexico, significantly impacting wetlands, endangered species, and fishing industries. BP compounded the severe health hazard posed to human and marine life by using Corexit dispersants to break up oil slicks.¹⁸⁶ The devastating effects on marine animals and birds continues years after our nation's worst oil spill.¹⁸⁷ BP and the United States Justice Department settled the dispute for \$4.525 billion. That settlement included a \$1.256 billion criminal fine, the largest in United States' history, and a \$525 million settlement with the Securities and Exchange Commission. In addition, \$2.4 billion went to the National Fish and Wildlife Foundation and \$1 billion to the United

¹⁸² Ben Wolfgang, *Drilling in Section of ANWR Included in Final GOP Tax-Reform Package*, WASH. TIMES (Dec. 17, 2017), <https://www.washingtontimes.com/news/2017/dec/17/drilling-in-section-of-anwr-included-in-final-gop/>.

¹⁸³ Press Release, Alaska Office of the Governor, Governor Walker Issues Statement on Reversal of Arctic OCS Withdrawal (Apr. 28, 2017), <https://gov.alaska.gov/newsroom/2017/04/governor-walker-issues-statement-on-reversal-of-arctic-ocs-withdrawal/>.

¹⁸⁴ *Ebell Reacts to Tax Bill Passage, ANWR Oil Production*, COMPETITIVE ENTERPRISE INST. (Dec. 20, 2017), <https://cei.org/content/ebell-reacts-tax-bill-passage-anwr-oil-production>.

¹⁸⁵ Michael Halpern, *Bottling Up Science*, 35 ENVTL. FORUM (Mar.-Apr. 2018), at 39.

¹⁸⁶ Dahr Jamail, *Gulf Health Problems Blamed on Dispersed Oil*, TRUTHOUT (Aug. 12, 2010), <http://www.truth-out.org/gulf-health-problems-blamed-dispersed-oil62277> (the resulting smaller oil molecules have been ingested by marine life, with shrimp in the area being found with oil pouches and dolphins have hemorrhaged to death. Serious illness of people working with the dispersant has been reported).

¹⁸⁷ *Five Years and Counting Gulf Wildlife in Aftermath of Deep Water Horizon Disaster*, http://www.nwf.org/~media/PDFs/water/2015/Gulf-Wildlife-In-the-Aftermath-of-the-Deepwater-Horizon-Disaster_Five-Years-and-Counting.pdf (last visited May 20, 2017). Exposure to oil has resulted in abnormal developments in many species of fish, significantly impacting the coastal shrimp and Atlantic Bluefin tuna industries. An estimated thirty-two percent of laughing gulls died as a result of the spill and at least 27,000 Kemp's Ridley sea turtles (an endangered species) were killed. Bottlenose dolphins were dying at four times historic rates four years after the oil spills and long-term impact on the wetlands and fisheries is still being studied. NAT'L WILDLIFE FED'N, FIVE YEARS AND COUNTING GULF WILDLIFE IN AFTERMATH OF DEEP WATER HORIZON DISASTER (May 20, 2017), http://www.nwf.org/~media/PDFs/water/2015/Gulf-Wildlife-In-the-Aftermath-of-the-Deepwater-Horizon-Disaster_Five-Years-and-Counting.pdf.

States Coast Guard to help reimburse cleanup efforts.¹⁸⁸ The BP oil spill occurred when a blowout preventer failed. In 2016, regulations were adopted to require an independent audit to verify that the devices would function in actual use.¹⁸⁹ The Trump administration has issued a proposed rule to abolish that requirement, deeming it to be an undue burden on the oil and gas operators.¹⁹⁰

The 1989 Exxon Valdez oil spill off the coast of Prince William Sound in Alaska resulted in devastating loss of wildlife. It is estimated that 250,000 seabirds, 2,800 sea otters, 300 harbor seals, 250 bald eagles, and 22 killer whales died, and billions of salmon and herring eggs were destroyed as a result of this oil spill.¹⁹¹ Financial ramifications included \$2.1 billion in cleanup costs, in addition to \$900 million in fines and over \$303 million in private actions. Punitive damages were reduced by the Supreme Court's interpretation of maritime common law as late as 2008.¹⁹² Although there was a congressional ban on offshore drilling along the coastlines since 1982, and George H.W. Bush issued a 1990 presidential moratorium on oil drilling in the Aleutian Basin after the Exxon Valdez spill, his son, George W. Bush, reversed the ban in 2008. Under pressure from George W. Bush, Congress also let the congressional moratorium expire.¹⁹³

2. Letter of Authorization for Incidental Taking of Marine Mammals

Before drilling, a company must seek a Letter of Authorization for Incidental Taking of marine mammals. NOAA traditionally recommends that requests be made eighteen months in advance of the start date of a project. The proposed Letter of Authorization must be published in the Federal Register, with a thirty-day comment period on the application and a second thirty to sixty-day comment period on the proposed rule.¹⁹⁴ President Trump's Executive Order 13,795 seeks to streamline the permitting process by expediting all stages of Seismic Survey permit applications, Incident Harassment Authorization, and Letters of

¹⁸⁸ Chris Isidore, Charles Riley & Terry Frieden, *BP to Pay Record Penalty for Gulf Oil Spill*, CNN (Nov. 15, 2012), <http://money.cnn.com/2012/11/15/news/bp-oil-spill-settlement/index.html>.

¹⁸⁹ Production Safety System Rule, 30 C.F.R. § 250 (2016).

¹⁹⁰ Oil and Gas and Sulphur Operations on the Outer Continental Shelf-Oil and Gas Production Safety Systems-Revisions, 82 Fed. Reg. 61,703 (Dec. 29, 2017).

¹⁹¹ *Questions and Answers About the Spill*, EXXON VALDEZ OIL SPILL TRUSTEES COUNCIL, <http://www.evostc.state.ak.us/%3FFA=facts.QA> (last visited Mar. 27, 2018).

¹⁹² *Exxon Shipping Co. v. Baker*, 554 U.S. 471 (2008).

¹⁹³ *Background on Offshore Drilling and Moratoriums*, U.S. SENATE (Mar. 14, 2018), http://www.dpc.senate.gov/files_energybill/background_offshore.pdf.

¹⁹⁴ See *Incidental Take Authorizations Under the Marine Mammal Protection Act*, NOAA FISHERIES (Jan. 18, 2018), <https://www.fisheries.noaa.gov/node/23111>.

Authorization under OCSLA and the Marine Mammal Protection Act (“MMPA”).¹⁹⁵ Trump’s order to expedite review is likely to lessen genuine consideration of environmental impacts and obfuscate prior agreements, discussed below, to limit the circumstances where such sonar was permissible.

Oil companies need a Letter of Authorization to survey a coastal region with seismic air gun blasting. Such blasts can harm marine mammals and other species hundreds of miles outside of the initial blast area, impairing hearing, balance, reproduction, and ultimately survival. Oceana, an alliance of fishing families, opposes such seismic blasting as it can decrease catch rate by fifty percent or more in the affected area.¹⁹⁶ The National Marine Fishery Studies from 1995-2000 revealed that cetaceans should not be exposed to underwater noise levels exceeding 180 dB and suffered Level B harassment at 160 dB that disrupted behavioral patterns, including breathing, nursing, breeding, feeding, sheltering and migration.¹⁹⁷ Similar concerns have been raised with military sonar that jeopardize dolphins and whales in permit requests, since slow rolling sound waves from military sonar emitting 235 decibels can be deafening or rupture lungs at more than 300 miles away.¹⁹⁸ NGO lawsuits have had mixed results in attempting to limit such Navy testing.¹⁹⁹

¹⁹⁵ Exec. Order No. 13,795, § 9.

¹⁹⁶ See Mike Gaworecki, *Trump to Aim Oil-seeking Airgun Blasts on Atlantic Whales, Dolphins*, Environmentalists Against War on the Planet and All Its People (Sept. 16, 2017), <http://www.envirosagainstar.org/know/read.php?itemid=19807>; *Citizen Call To Action*, CLEAN OCEAN ACTION, <http://www.cleanoceanaction.org/index.php?id=814> (last visited Mar. 30, 2018). See also, Helen Scales, *Atlantic Seismic tests for Oil: Marine Animals at Risk?*, NATIONAL GEOGRAPHIC (Mar. 1, 2014), <https://news.nationalgeographic.com/news/energy/2014/02/140228-atlantic-seismic-whales-mammals/> (noting that fish eggs and larvae can be killed by intense noise).

¹⁹⁷ See Takes of Marine Mammals Incidental to Specified Activities; Marine Geophysical Survey in the Pacific Ocean Off Costa Rica, April Through May, 2011, Fed. Reg. 6,430, 6,438 (Feb. 4, 2011).

¹⁹⁸ See Brenda Peterson, *Killing with Sound: What Happens when Whales Stop Singing*, HUFFINGTON POST (Apr. 24, 2013), https://www.huffingtonpost.com/brenda-peterson/killing-with-sound_b_2744864.html. See also John Slocum, *Does Military Sonar Kill Marine Wildlife?*, SCI. AM., <https://www.scientificamerican.com/article/does-military-sonar-kill/> (last visited Mar. 27, 2018).

¹⁹⁹ See *Winter v. Nat’l Res. Def. Council*, 555 U.S. 7 (2008) (holding that the importance of training of Navy sailors outweighed the harm to thirty-seven marine mammals species in Southern California coastal waters); *Nat’l Res. Def. Council v. Pritzker*, 828 F.3d 1125 (9th Cir. 2016) (holding that the National Marine Fisheries Service failed to adopt mitigating measures that could reduce the effects of LFA). *But see* Virginia Morell, *U.S. Navy to Limit Sonar Testing to Protect Whales*, SCI. MAG. (Sept. 16, 2015), <http://www.sciencemag.org/news/2015/09/us-navy-limit-sonar-testing-protect-whales> (discussing the Navy’s agreement to limit its sonar testing and use of explosives off of designated areas of the Southern California coast and Hawaii).

Any changes in the regulation of offshore drilling should carefully consider minimizing environmental impacts.²⁰⁰ With the pro-energy emphasis of the Trump administration and its expediting of environmental hurdles, however, it is unlikely that preventative measures will be adopted or that there will be major fines similar to the BP enforcement action in the wake of environmental disasters. Environmental concerns need to be taken more seriously considering the gravity of damage to wildlife, sea mammals, water quality, and jobs posed by oil spills and certain techniques of oil exploration. These concerns extend beyond the tourist industry's sight line to contaminated fish stock, affecting the fishing industry and consumers.

D. Renewable Energy in Jeopardy

While President Trump's Executive Order Implementing an America-First Offshore Energy Strategy primarily focuses on oil drilling, it also includes offshore energy activities such as "wind, oil, natural gas, methane hydrates, and any other sources that the Secretary of Commerce deems appropriate."²⁰¹ The first United States offshore wind farm began off the Rhode Island coast in December of 2016.²⁰² Even seventy-three percent of Trump voters believe that the United States should use more renewable energy (solar, wind, and geothermal) and seventy-one percent support additional funding for clean energy research, according to a Yale University poll.²⁰³ Alternative energy sources, however, are not receiving priority under the Trump administration.

President Trump appointed Daniel Simmons as Acting Secretary to lead the Department of Energy's Office of Energy Efficiency and Renewable Energy ("EERE") to oversee wind and solar energy, despite the fact that he has spent his career with the Koch-affiliated Institute for Energy Research, denouncing renewable energy alternatives, wind subsidies, loan guarantees for solar projects, and even energy efficient light bulbs.²⁰⁴ In 2018, the Trump administration announced a thirty

²⁰⁰ See INT'L ASS'N OF DRILLING CONTRACTORS, FEDERAL REGULATOR ACTIONS IMPACTING OFFSHORE DRILLING (July 25, 2017), <http://www.iadc.org/wp-content/uploads/2018/01/20171231-regulations-summary.pdf> (listing regulatory actions).

²⁰¹ Exec. Order No. 13,795.

²⁰² Tatiana Schlossberg, *America's First Offshore Wind Farm Spins to Life*, N.Y. TIMES (Dec. 14, 2017), <https://www.nytimes.com/2016/12/14/science/wind-power-block-island.html>.

²⁰³ YALE PROGRAM ON CLIMATE CHANGE COMMUNICATION, *supra* note 41.

²⁰⁴ *Trump Picks Renewable Energy Hater to Run Renewable Energy Office*, KOCH VS. CLEAN (May 5, 2017), <http://www.kochvs-clean.com/trump-picks-renewable-energy-hater-run-renewable-energy-office/>; Ben Jervy, *Trump Taps Renewable Energy Antagonist to Run Renewable Energy Office*, DESMOG (May 9, 2017), <https://www.desmogblog.com/2017/05/06/trump-taps-renewable-energy-antagonist-run-renewable-energy-office>.

percent tariff on solar panel and solar cells, which is likely to result in an increase in costs of \$600 for an average homeowner wishing to have solar panels installed.²⁰⁵ Although some predict that this will undercut production of solar panels in the United States, Chinese investments in renewable energy in the United States could actually benefit.²⁰⁶ Hopefully, state and local government efforts to encourage clean energy alternatives will offset some of the Trump administration's efforts to discourage renewable energy development, as long as the Trump administration does not pre-empt states' ability to do so.

In addition, Secretary Perry is eliminating the Office of International Climate and Technology which provides technical advice to the developing world regarding renewable energy and the reduction of GHGs emissions.²⁰⁷ This, again, reflects the Trump administration's minimization of risks associated with climate change and austerity toward aid to impoverished foreign countries, whose people may be victims of climate change consequences.

Even though Texas greatly expanded its wind and solar production when Secretary of Energy Rick Perry was its Governor, he has been tasked with the Trump administration's refocus on coal, oil, and nuclear energy, instead of promoting renewable energy or a balance.²⁰⁸ Perry questioned whether, "increased reliance on renewable energy sources like wind and solar might make the grid unreliable given that they only work when the sun is shining and the wind is blowing, creating national security concerns."²⁰⁹

²⁰⁵ *How the 2018 U.S. Solar Tariff will Impact the Price You Pay*, ENERGY SAGE, <https://news.energysage.com/2018-us-solar-tariff-impact-prices/> (last visited Apr. 7, 2018).

²⁰⁶ *See id.*

²⁰⁷ Steve Cohen, *Trump's Attack on Renewable Energy*, COLUM. U., EARTH INST. (June 19, 2017), <http://blogs.ei.columbia.edu/2017/06/19/trumps-attack-on-renewable-energy/>.

²⁰⁸ *See* Rmuse, *Opinion: After Leading the Nation in Renewable Energy, Rick Perry Targets Solar and Wind Power*, POLITICUS USA (Apr. 23, 2017), <http://www.politicususa.com/2017/04/23/leading-nation-renewable-energy-rick-perry-targets-solar-wind-power.html>.

²⁰⁹ Cohen, *supra* note 207. *See also* Jeff Brady, *Coal, Nuclear Power Would Benefit From Energy Department's Power Grid Study*, NPR (Aug. 24, 2017), <http://www.npr.org/2017/08/24/545722857/coal-nuclear-power-would-benefit-from-energy-departments-power-grid-study> (discussing Perry's internal Dept. of Energy report that raises the grid stability question about natural gas, as well as solar and wind produced energy).

E. Rescission of Fracking Rule and Methane Waste Rule

1. Fracking Rule

The United States is now the leading nation in natural gas and oil production,²¹⁰ with oil production at a forty-seven year high in November of 2017.²¹¹ An increase in hydraulic fracturing has been the main reason for the increase.²¹²

Hydraulic fracturing (“fracking”) has been used since the 1950s to stimulate production from oil and gas wells, but there are numerous environmental risks associated with extracting and burning on the scale of oil energy and natural gas companies today.²¹³ These risks have become apparent as fracking has increased in the past twenty-five years.²¹⁴ Hazards arise from exposure to the hazardous chemicals injected, spilled, and flared. Methane gas (a GHG strongly associated with global warming) is emitted during the initial stages, separation phase and use of the gas as an energy source; it poses a danger of explosions at the well fracking site. It also poses risks to groundwater and wells in the vicinity.²¹⁵ Fracking requires a large volume of water,²¹⁶ three to six million gallons per well,²¹⁷ competing with scarce water resources in western states.²¹⁸ There is also the risk of increased frequency of

²¹⁰ Jack Anderson, *EIA: U.S. Retains Title of World's Top Oil and Natural Gas Producer for Fifth Straight Year*, ENERGY IN DEPTH (June 7, 2017), <https://www.energyindepth.org/eia-u-s-retains-title-worlds-top-oil-natural-gas-producer-fifth-straight-year/>.

²¹¹ Jessica Resnick-Ault, *U.S. Production Hit Record High in November: EIA*, REUTERS (Feb. 28, 2018), https://www.reuters.com/article/us-usa-oil-production/u-s-crude-oil-production-hit-record-high-in-november-eia-idUSKCN1GC2PB_.

²¹² *Id.*

²¹³ Joe Hoffman, *Potential Health and Environmental Effects of Hydrofracking in Williston Basin, Montana, Geology and Human Health* (2012), https://serc.carleton.edu/NAGTWorkshops/health/case_studies/hydrofracking_w.html.

²¹⁴ Katie Huffling, *Hidden Health Risks of Fracking*, BALTIMORE SUN (July 19, 2012), <http://www.baltimoresun.com/news/opinion/oped/bs-ed-fracking-nurses-20120719-story.html>.

²¹⁵ Samantha Page, *A Fireball Exploded in This Man's Face, and Now He is Suing the Nearby Fracking Operation*, THINK PROGRESS (Aug. 12, 2015), <https://thinkprogress.org/a-fireball-exploded-in-this-mans-face-and-now-he-s-suing-the-nearby-fracking-operation-470ba4dc4928/>.

²¹⁶ See James Conca, *Thanks to Fracking, Earthquake Hazards in Parts of Oklahoma Now Comparable to California*, FORBES (Sept. 7, 2016), <https://www.forbes.com/sites/jamesconca/2016/09/07/the-connection-between-earthquakes-and-fracking/> (discussing that the water is mixed with chemicals and forced into the earth under high pressure to fracture the rocks encasing the gas energy source).

²¹⁷ Mark Koba, *Fracking or Drinking Water? That may Become the Choice*, CNBC (Sept. 12, 2014), <https://www.cnbc.com/2014/09/12/fracking-for-oil-requires-water-that-may-be-needed-as-drinking-water.html>.

²¹⁸ Neela Banerjee, *Limited Water Presents Challenge for Natural Gas Fracking*, L.A. TIMES (Sept. 2, 2014), <http://www.latimes.com/nation/la-na-fracking-water-20140903-story.html> (recognizing that thirty-eight percent of shale resources are in arid regions or areas with high levels of water stress).

earthquakes, associated with the high-pressure injection of waste water during the backend of the fracking process.²¹⁹

Individuals in close proximity to the fracking wells are exposed to benzene and other chemical particulates that are associated with respiratory ailments, including increased asthma. The endocrine disrupting chemicals in surface water and water waste have been associated with a forty percent increased chance of premature births, learning disabilities, and diabetes.²²⁰ A recent Princeton University Study concluded that infants whose mothers lived within one kilometer of a fracking site had a twenty-five percent greater risk of low birth weights (under 5.5 pounds), which increase the risk of infant mortality, asthma, ADHD, and learning difficulties.²²¹

The Department of Interior's BLM issued the Oil and Gas: Hydraulic Fracturing on Federal and Indian Lands Rule ("Fracking Rule")²²² in 2015 to minimize the risk of water contamination through the hydraulic fracturing practice which involves injecting a mixture of chemicals and water at high pressure into underground rock formations. Key features of the rule included: BLM approval was required before conducting fracking;²²³ Records must be maintained regarding monitoring of the annulus pressure during fracking;²²⁴ Water sources must be disclosed;²²⁵ Well locations must be disclosed to prevent unplanned surges of pressurized fluids ("frack hits");²²⁶ Standards were set for the construction of wells, with casing supported with adequate surrounding cement;²²⁷ Recovered fracking fluids were to be stored in above-ground rigid tanks and companies were to have an approved plan for permanent disposal;²²⁸

²¹⁹ Conca, *supra* note 216, and describing Ellsworth's U.S. Geological Survey reporting dramatic increase in earthquakes in Midwest coinciding with fracking boom, *Natural Gas Fracking*, ENVIRONMENTAL HEALTH CENTER, Dallas, <https://www.ehcd.com/natural-gas-fracking/> (last visited Mar. 31, 2018); Andrzej Kijko & Surina Esterhuyse, *Fracking and Earthquakes – Weighing the Dangers in South Africa*, PHY ORG (Dec. 20, 2017), <https://phys.org/news/2017-12-fracking-earthquakesweighing-dangers-south-africa.html>.

²²⁰ Judy Stone, *Fracking is Dangerous to Your Health—Here's Why*, FORBES (Feb. 23, 2017), <https://www.forbes.com/sites/judystone/2017/02/23/fracking-is-dangerous-to-your-health-heres-why/#417c90c95945>.

²²¹ B. Rose Kelly, *Hydraulic Fracturing Negatively Impacts Infant Health*, PRINCETON NEWS (Dec. 13, 2017), <https://www.princeton.edu/news/2017/12/13/hydraulic-fracturing-negatively-impacts-infant-health>.

²²² Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands ("Fracking Rule"), 80 Fed. Reg. 16,128 (Mar. 26, 2015) (codified 43 C.F.R. Part 3160).

²²³ *Id.* at 16,138.

²²⁴ *Id.* at 16,158.

²²⁵ *Id.* at 16,152.

²²⁶ *Id.* at 16,154.

²²⁷ *Id.* at 16,155.

²²⁸ *Id.* at 16,162.

Companies were required to disclose chemicals used in fracking unless they can prove trade secret protections.²²⁹

Wyoming District Judge Scott Skavdahl stayed implementation of the rule in June 2016, holding that the BLM “lacked Congressional authority to promulgate the regulations.”²³⁰ Under the Trump administration, the Department of Justice withdrew from the Tenth Circuit appeal of the stay and final order.²³¹ Pursuant to President Trump’s Energy Independence Order 13783, Secretary of Interior Zinke directed the BLM to rewrite or rescind the 2015 rule on hydraulic fracturing on public land.²³² Citing “administrative burdens and compliance costs that are not justified,” the BLM closed out 2017 by publishing its rule to rescind the Fracking Rule on federal and Indian lands.²³³ The BLM also cited federal regulation as an unnecessary duplication since thirty-two states with federal leases have laws or regulations addressing hydraulic fracturing operations.²³⁴ The BLM decision was lauded by the Petroleum Association of America and the Western Energy Alliance.²³⁵

While EPA Administrator Scott Pruitt served as Attorney General of Oklahoma, he was heavily supported by the oil and gas industry,²³⁶ so policies of both EPA and Interior are apt to reflect a denial of the impact of fracking on earth movement, water use, and water pollution, as the Trump policies focus on reducing restraints on energy extraction industries.

²²⁹ *Id.* at 16,166.

²³⁰ *State of Wyoming v. U.S. Dep’t of Interior*, No. 2:15-CV-043-SWS (D. Wy. 2016).

²³¹ Juliet Eilperin, *Interior Dept. to Withdraw Obama-era Fracking Rule, Filings Reveal*, WASH. POST (Mar. 15, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/03/15/interior-department-to-withdraw-obama-era-fracking-rule-filings-reveal/?utm_term=.0a1047b1e1c1.

²³² Lorraine Chow, *Trump Administration to Kill Fracking Rule on Public Lands*, ECOWATCH (May 14, 2017), <http://www.ecowatch.com/trump-fracking-public-lands-2316672382.html>.

²³³ Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands; Rescission of a 2015 Rule, 82 Fed. Reg. 61,924 (Dec. 29, 2017).

²³⁴ *Id.* at 61,925.

²³⁵ Mead Gruver, *Trump Administration Rescinding Fracking Rules on Government Land*, CHI. TRIB. (Dec. 28, 2017), <http://www.chicagotribune.com/news/nationworld/politics/ct-trump-oil-gas-drilling-rules-20171228-story.html>; Timothy Cama, *Trump to Repeal Obama Fracking Rule*, THE HILL (Dec. 28, 2017), <http://thehill.com/policy/energy-environment/366704-trump-to-repeal-obama-fracking-rule>.

²³⁶ Robinson Meyer, *Trump’s EPA Pick is Skeptical of More Than Just Climate Change?*, THE ATLANTIC (Jan. 18, 2017), <https://www.theatlantic.com/science/archive/2016/12/trumps-epa-pick-is-skeptical-of-more-than-just-climate-change/509960/>.

2. Methane Waste Rule

Methane has between twenty-three to one hundred times the heat absorption capacity as carbon dioxide.²³⁷ When compared to methane emission from conventional gas, shale gas obtained through hydraulic fracking produces four times as much methane during its life cycle from initial drilling to storage to delivery to use as an energy source. Higher emissions are especially evident during the flowback period following high-volume fracking.²³⁸ Multiple energy sources generate methane, including coal mining, which contributes thirty-three percent of human-generated methane emissions worldwide.²³⁹

The Methane Waste Rule survived CRA congressional scrutiny after Senators McCain, Graham, and Collins sided with Democrats in voting against its repeal.²⁴⁰ However, President Trump rescinded President Obama's 2014 Climate Action Plan Strategy to Reduce Methane Emissions.²⁴¹ President Trump's Energy Independence Order also includes a section ordering review of the regulatory impact of accounting for the social costs of methane, carbon, and nitrous oxide by requiring a comparison of costs and benefits.²⁴² The order also disbands an Interagency Working Group on Social Cost of Greenhouse Gases, and withdraws several of its social cost analysis documents²⁴³ that used modeling decision tools to monetize the impact of increases in carbon or methane emissions with changes in factors such as property damage from increased flood risk, agricultural productivity, human health.²⁴⁴ In all likelihood, this part of the order is aimed at downplaying the impact of methane, carbon, and nitrous oxide on endangerment to health and the environment.

²³⁷ Global Mitigation of Non-CO2 Greenhouse Gases, EPA, <https://www.epa.gov/global-mitigation-non-co2-greenhouse-gases/global-mitigation-non-co2-greenhouse-gases-coal-mining> (last visited March 31, 2018); Robert Howarth, Methane Emissions and Climatic Warming Risk from Hydraulic Fracturing and Shale Gas Development: Implications for Policy, 2015 ENERGY & EMISSION CONTROL TECH. J. 45, 45 (Oct. 8, 2015).

²³⁸ *Id.* at 46.

²³⁹ *Main Sources of Methane Emission*, WHAT'S YOUR IMPACT, <https://whatsyourimpact.org/greenhouse-gases/methane-emissions> (last visited Apr. 7, 2018).

²⁴⁰ H.R.J. Res. 36, 115th Cong. (2017). *See also* Juliet Eilperin & Chelsea Harvey, *Senate Unexpectedly Rejects Bid to Repeal Obama-era Environmental Regulation*, WASH. POST (May 10, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/05/10/senates-poised-to-repeal-a-final-obama-era-rule-as-soon-as-wednesday/?utm_term=.a126715ed7d8.

²⁴¹ Exec. Order No. 13,783, § 3.

²⁴² *Id.*

²⁴³ *Id.*

²⁴⁴ INTERAGENCY WORKING GROUP ON SOCIAL COST OF GREENHOUSE GASES, TECHNICAL UPDATE OF THE SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12,866 (Aug. 2016).

The Methane Waste Rule²⁴⁵ requires certain natural gas producers to reduce natural gas wastes from venting, flaring and leaks during the production process, as a measure aimed at reducing this GHGs. The rule became effective on August 2, 2016. Regulated entities are required to conduct an “initial monitoring survey” to identify leaks by June 3, 2017 and repair them within thirty days.²⁴⁶

In response to the Energy Independence Order, EPA administrator Scott Pruitt has attempted to stay the implementation of the Methane Waste Rule. On June 5, 2017, Scott Pruitt imposed a 90-day moratorium (retroactive to June 2, 2017)²⁴⁷ on the implementation of the Methane Waste Rule.²⁴⁸ The stay on implementation was extended to two years on June 16, 2017 with the filing of a notice of proposed rulemaking to reexamine the entire rule and alternative “equivalent” means for compliance, with a short timeline for comments.²⁴⁹ The District Court for the District of Columbia (in a two to one decision) held that the EPA’s suspension of the rule was “arbitrary [and] capricious”²⁵⁰ and that a delay had the effect of making a change in the regulation without following APA rules.²⁵¹ The court emphasized that “an agency issuing a legislative rule is itself bound by the rule until that rule is amended or revoked” and “may not alter [such a rule] without notice and comment” under the APA

²⁴⁵ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources (“Methane Rule”), 81 Fed. Reg. 35,823 (June 3, 2016) (codified 40 C.F.R. § 60).

²⁴⁶ 40 C.F.R. § 60.5397a(f).

²⁴⁷ The retroactive application of the stay was aimed at obviating any civil or criminal penalties for noncompliance. *See* 42 U.S.C. § 7413(b)-(d).

²⁴⁸ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Grant of Reconsideration and Partial Stay of the Methane Waste Rule, 82 Fed. Reg. 25,730, 25,731-33 (June 5, 2017). Relying on CAA section 307(d)(7)(B), EPA granted reconsideration on four aspects of the methane rule: (1) the decision to regulate low-production wells, (2) the process for proving compliance by “alternative means,” (3) the requirement that a professional engineer certify proper design of vent systems, and (4) the decision to exempt pneumatic pumps from regulation only if a professional engineer certified that it was “technically infeasible” to route such pumps “to a control device or a process.” The notice retroactively stayed “the effectiveness of the fugitive emissions requirements, the standards for pneumatic pumps at well sites, and the certification by a professional engineer” for ninety days “pending reconsideration.”

²⁴⁹ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Stay of Certain Requirements, Notice of Proposed Rule Making, 82 Fed. Reg. 27,645 (June 16, 2017) (to “look broadly at the entire 2016 Rule” during “the reconsideration proceeding”).

²⁵⁰ *See* Administrative Proceedings and Judicial Review standards, 42 U.S.C. (d)(9)(A).

²⁵¹ *Clean Air Council v. Pruitt*, 862 F.3d 1, 6 (D.C. Cir. 2017) (recognizing that while an agency’s decision to grant a petition to reconsider a regulation is not reviewable final agency action, an agency’s final decision to implement a stay of an existing regulation is reviewable). *See also* Lisa Friedman, *Court Blocks E.P.A. Effort to Suspend Obama-Era Methane Rule*, N.Y. TIMES (July 3, 2017), <https://www.nytimes.com/2017/07/03/climate/court-blocks-epa-effort-to-suspend-obama-era-methane-rule.html>.

regulatory process.²⁵² The EPA also filed a proposed rule on December 8, 2018 to suspend certain requirements of the Methane Waste Rule until January 17, 2019, including venting, flaring and gas capturing requirements, while considering “market-based incentives” (i.e., royalty obligations) to address inappropriate levels of flaring.²⁵³ On February 22, 2018, the U.S. District Court for Northern California issued an order enjoining the postponement of implementation of the Methane Waste Rule, so the original Obama rule as promulgated is in effect.²⁵⁴ On that date, BLM filed its proposed revisions to the Methane Waste Rule in the Federal Register “to reduce unnecessary compliance burdens,” with a comment period extending until April 23, 2018.²⁵⁵

IV. COAL MINING: ENVIRONMENTAL IMPACT VERSUS REVIVAL OF ENERGY RESOURCE

A. Background on Coal Leasing on Federal Lands & Trump’s Executive Order Promoting Coal Leases

The BLM administers 306 coal leases in eleven states, producing over 4.3 billion tons of coal in the past ten years.²⁵⁶ Coal on federal lands generates forty-one percent of the nation’s annual production and fourteen percent of the nation’s electricity.²⁵⁷ The Powder River Basin in Montana (the primary source for United States coal on federal land) contributed ten percent of GHG emissions in 2014, according to findings by the Wilderness Society and Center for American Progress.²⁵⁸

²⁵² *Clean Air Council*, 862 F.3d 1.

²⁵³ Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements, 82 Fed. Reg 58,050 (Jan. 8, 2018). *See also* Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements, 82 Fed. Reg. 46,458 (Oct. 5, 2017); U.S. Dep’t of Interior, Secretarial Order No. 3349 (Mar. 2017) (ordering reconsideration of the Methane Waste Rule, pursuant to Exec. Order No. 13,783).

²⁵⁴ *Methane and Waste Prevention Rule*, BLM, <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/methane-and-waste-prevention-rule> (last visited Apr. 7, 2018).

²⁵⁵ Waste Prevention, Production Subject to Royalties and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg 7924 (Feb. 22, 2018).

²⁵⁶ Notice of Intent to Prepare a Programmatic Environmental Impact Statement to Review the Federal Coal Program and To Conduct Public Scoping Meeting, 81 Fed. Reg. 17,720, 17,721 (Mar. 30, 2017).

²⁵⁷ *Id.*

²⁵⁸ *See* Juliet Eilperin & Chris Mooney, *Obama’s Interior Dept. Calls for Major Changes to ‘Modernize’ Federal Coal Program*, WASH. POST (Jan. 11, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/01/11/outgoing-obama-interior-department-calls-for-major-reform-of-federal-coal-program/?utm_term=.ded21430574c.

In 2016, the Obama administration halted new coal leases on federal lands, ordering a three-year Programmatic EIS review to be completed as a prerequisite to lifting the moratorium, with concerns over the contribution to climate change.²⁵⁹ Emissions from coal-fired power plants have been linked to global warming, with carbon dioxide emissions from coal combustion representing forty-four percent of 2012 CO₂ emissions worldwide, even though coal constituted only 29% of the total energy supply.²⁶⁰ Methane from coal mining constitutes eight to ten percent of human-generated methane emissions worldwide.²⁶¹

President Trump's Executive Order Promoting Energy Independence and Economic Growth ends the moratorium on coal leases on federal land.²⁶² Pursuant to President Trump's executive order,²⁶³ Secretary of the Interior Zinke issued two secretarial orders. Secretarial Order 3348 lifts the moratorium on new coal leases on federal lands and "paused" work on the Programmatic EIS. It posits that "the public interest is not served by halting the federal coal program for an extended time."²⁶⁴ Secretarial Order 3349 reexamines climate change policies guidance "to better balance conservation strategies and policies with the equally legitimate need of creating jobs for hardworking American families."²⁶⁵ In retrospect, Zinke is not the first Secretary of Interior to substantially promote coal leases, drilling in wilderness areas, and other energy policies over environmental concerns; President Reagan's Secretary of the Interior, James Watt, and his EPA director, Anne McGill Gorsuch Burford,²⁶⁶ also fostered such policies.²⁶⁷

²⁵⁹ 81 Fed. Reg. 17,720. This Obama Administration action also ordered a review of royalties for coal extraction paid by mining companies to the United States government, with the implication that the royalties paid should be higher.

²⁶⁰ INTERNATIONAL ENERGY AGENCY, RECENT TRENDS IN CO₂ EMISSIONS FROM FUEL COMBUSTION 5 (2014 ed.), https://www.iea.org/media/statistics/topics/emissions/CO2_Emissions_Overview.pdf.

²⁶¹ *Id.*

²⁶² Exec. Order No. 13,783 § 2.

²⁶³ *Id.*

²⁶⁴ U.S. Dep't of Interior, Secretarial Order No. 3348, Concerning the Federal Coal Moratorium (Mar. 29, 2017).

²⁶⁵ U.S. Dep't of Interior, Secretarial Order No. 3346, Concerning Energy Independence (Mar. 29, 2017).

²⁶⁶ Ann Gorsuch Burford was the mother of Neil Gorsuch, the newest member of the United States Supreme Court.

²⁶⁷ Amanda Little, *A Look Back at Reagan's Environmental Record*, GRIST (June 11, 2004), <http://grist.org/article/griscom-reagan/> (quoting Greg Wetstone, chief environment council at the House Energy and Commerce Committee during the G.W. Bush administration (and subsequently director of advocacy at the Natural Resources Defense Council) as saying: "Never has America seen two more intensely controversial and blatantly anti-environmental political appointees than Watt and Gorsuch.").

In response to the recent opening of coal leases on federal land, four attorneys general from California, New Mexico, New York and Washington filed a suit in Great Falls, Montana,²⁶⁸ arguing that the policy reversal was “arbitrary and capricious,” because it was made without considering the environmental effects or insuring that the program provides fair market value for the publicly owned coal.²⁶⁹ The attorneys general also argue that the policy will have negative effects on climate change, citing “adverse impacts such as increased heat waves and greater air pollution, more frequent and intense storms and associated flooding, reduced snowpack and water supplies, increased wildfires, and sea level rise.”²⁷⁰ Similar arguments have been made in a citizen suit by several NGOs, including Citizens for Clean Energy, Defenders of Wildlife, and the Sierra Club.²⁷¹ However, the State of Wyoming is seeking to prevent disruption of coal leases.²⁷² A bill has been introduced in the Wyoming state legislature to ban the state utilities from using solar and wind as sources.²⁷³

B. Coal Production Methods & Coal Ash Disposal Linked to Water Contamination

Disposal methods associated with coal mining and acid mine drainage run-off have been linked to the contamination of creeks and rivers.²⁷⁴ Under a process called mountaintop removal mining, coal companies in Central Appalachia (especially West Virginia, Virginia, and Kentucky) dump mountaintop “excess spoil” rock debris into the valleys, leading to contamination of streams and waterways with toxic heavy metals. These “valley fills” jeopardize surface-water chemistry, which in turn impacts

²⁶⁸ *California v. Zinke*, No. cv-17-42-GF-BBM (D. Mont. May 9, 2017).

²⁶⁹ See Matt Voz, *States Sue over Trump Decision to Restart Coal Lease Program*, ASSOCIATED PRESS, May 9, 2017. See also Eilperin & Mooney, *supra* note 258 (recognizing that the coal companies pay a royalty rate of 12.5% for coal taken from surface mines, compared to an 18.75% royalty for oil and gas from offshore drilling).

²⁷⁰ Eva Byron, *State AGs Sue Feds over Restart of Coal-Leasing Program*, COURTHOUSE NEWS (May 9, 2017), <https://www.courthousenews.com/state-ags-sue-feds-restart-coal-leasing-program/>.

²⁷¹ *Citizens for Clean Energy v. Dep’t of Interior*, No. CV-17-30-GF-BMM, 2017 U.S. Dist. LEXIS 82234 (D. Mont. May 30, 2017).

²⁷² Press Release, Montana Dept. of Justice, Montana Attorney General Tim Fox Defends Coal Lease Decision, Intervenes in Lawsuit (June 29, 2017), <https://dojmt.gov/montana-attorney-general-tim-fox-defends-coal-lease-decision-intervenes-lawsuit/>.

²⁷³ Paul Rauber, *Wyoming Tries to Prop up Coal by Banning Clean Energy*, SIERRA CLUB (May 19, 2017) <http://www.sierraclub.org/sierra/green-life/wyoming-tries-prop-coal-banning-clean-energy>.

²⁷⁴ See, e.g., Fracking Rule, 80 Fed. Reg. 16,128.

drinking water safety²⁷⁵ and aquatic fauna. Other Trump administration decisions, such as the rescission of the Waters of the United States (“WOTUS”) Rule,²⁷⁶ mean less protection of wetlands that are vital to filtering out contaminants before they reach the main streams.²⁷⁷ In addition to the pollution of waterways, mining beneath streams can cause “subsidence,” which is the cracking of the stream bed and drying up streams.²⁷⁸ If streams dry up, the habitat for aquatic species is lost, as well as a source of drinking water for people, livestock, and forest animals. To address such problems, EPA issued a 2011 water quality standard under the CWA for surface mining in the Appalachian region that was intended to serve as guidance to protect water quality from the dangers and impacts of mountaintop mining.²⁷⁹

Under the Trump Administration, the Interior Department has ordered the National Academies of Sciences, Engineering and Medicine (“NASEM”) to cease its study of health risks for Appalachian Mountain residents that live near surface coal mining sites.²⁸⁰ As a consequence, the implementation measures aimed at protecting water quality and health are in jeopardy and it will be difficult to substantiate the increased risk without follow up studies.

The coal industry also instituted an expensive public relations campaign to pressure EPA not to list coal ash as a hazardous waste. Over 112 million pounds of coal ash were deposited in slurry ponds in 2010, a nine percent increase from the previous year. EPA identified 1,161 coal ash impounds nationwide, with forty-six percent of recent impoundments

²⁷⁵ Brad Plumer, *Why Trump Just Killed a Rule Restricting Coal Companies from Dumping Waste in Streams*, VOX (Apr. 28, 2017), <http://www.vox.com/2017/2/2/14488448/stream-protection-rule>.

²⁷⁶ Clean Water Rule: Definition of “Waters of the United States”, 80 Fed. Reg. 37,053 (June 29, 2015).

²⁷⁷ *Wetlands*, MO. DEP’T. NATURAL RESOURCES, <https://dnr.mo.gov/geology/wrc/wetlands.htm> (last visited Mar. 27, 2018).

²⁷⁸ Reid Frazier, *Congress axed a rule to protect streams from coal pollution. Here’s what that means for Pennsylvania*, NPR (Feb. 19, 2017), <https://stateimpact.npr.org/pennsylvania/2017/02/14/congress-axed-a-rule-to-protect-streams-from-coal-pollution-heres-what-that-means-for-pennsylvania/> (also noting that Pennsylvania state records indicate that from 2008 to 2013, thirty-nine miles of streams and 855 wells, springs and ponds were adversely affected; the executive director of the Pennsylvania Coal Alliance, Rachel Gleason, feared that the rule might be applied to “longwall” mining, typically used in Pennsylvania).

²⁷⁹ U.S. ENVTL. PROTECTION AGENCY, MEMORANDUM REGARDING IMPROVING EPA REVIEW OF APPALACHIAN SURFACE COAL MINING OPERATIONS (July 21, 2011).

²⁸⁰ Darryl Fears, *Trump Administration Halted a Study of Mountaintop Coal Mining’s Health Effects*, WASH. POST (Aug. 21, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/08/21/trump-administration-halted-a-study-of-mountaintop-coal-minings-health-effects/?utm_term=.f72fd9f004dc.

being unlined.²⁸¹ This contributed to the concern that runoff and seepage from such coal ash piles would contaminate nearby waterways. The coal ash impoundment wall at a Tennessee Valley Authority coal plant in Kingston, Tennessee broke, spilling over one billion gallons of coal ash slurry, contaminating rivers and land.²⁸² This 2009 Superfund site prompted development of a new coal ash disposal regulation.

The current Coal Combustion Residuals (“CCR”) rule went into effect on October 19, 2015. It regulates the management and disposal of coal ash generated by electric utilities and independent power producers pursuant to subtitle D of the Resource Conservation and Recovery Act (“RCRA”).²⁸³ New and existing landfills and surface impoundments must implement groundwater protection and monitoring, including requirements for lining surface impoundments. Unlined facilities and those with groundwater contamination above the regulated protection standard must stop receiving CCR wastes, adopt corrective action, and either retrofit or close in most circumstances. The rule governs location, design, and operating criteria, as well as record keeping for all lateral expansions of facilities.²⁸⁴ The CCR rule, challenged by both industry and environmentalists, was consolidated in *Utility Solid Waste Activities* case, which had oral arguments on November 20, 2017.²⁸⁵

On September 14, 2017, EPA granted petitions from the *Utility Solid Waste Activities Group* and the *AES Puerto Rico LLP* to reconsider provisions related to the definition of what constitutes “beneficial use” of CCR; EPA will also reconsider the prohibition of alternative ways of compliance for ground water contamination, regulation of inactive surface impoundments, and on-site storage practices.²⁸⁶ Reconsideration was granted in part because of the December 2016 enactment of the *Water Infrastructure for Improvements to the Nation Act* (“WIIN”),²⁸⁷ which grants the States authority to operate RCRA subtitle D operating permit programs that satisfy the 2015 EPA protective standards or successor regulations.

²⁸¹ Thomas McGarity, *EPA at Helm’s Deep: Surviving the Fourth Attack on Environmental Law*, 24 *FORDHAM ENVTL. L. REV.* 205, 233 (2013).

²⁸² *Coal Ash Rule*, ENVIRONMENTAL LAW AT HARVARD, <http://environment.law.harvard.edu/2017/12/coal-ash-rule/> (last visited Apr. 15, 2018).

²⁸³ 42 U.S.C. § 6901 et seq.; Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg 21,310 (Apr. 17, 2015).

²⁸⁴ 80 Fed. Reg 21,310.

²⁸⁵ *Utility Solid Waste Activities v. EPA*, No. 15-01219 (D.C. Cir. Nov. 20, 2017) (consolidation of seven cases challenging CCR rule).

²⁸⁶ News Release, EPA, EPA to Reconsider Certain Coal Ash Rule Provisions (Sept. 14, 2017), <https://www.epa.gov/newsreleases/epa-reconsider-certain-coal-ash-rule-provisions>.

²⁸⁷ *Water Infrastructure for Improvements for the Nation Act*, Pub. L. No 114-322 (2016).

In the first of two anticipated revisions, Pruitt's March 2018 proposed rule would grant greater flexibility to states in tailoring permit programs to their individual needs for coal CCRs.²⁸⁸ States could establish alternative risk-based groundwater protection standards, and create alternative requirements for how facilities respond to and remediate releases from landfills and surface impounds.²⁸⁹ It would also provide greater flexibility in determining locations for CCR landfills or surface impoundments.²⁹⁰ It would allow states flexibility on when they take corrective action rather than forcing the CCR facility to stop receiving coal and allow for use of the coal ash during the closure process.²⁹¹ It is also proposing modifying monitoring requirements.²⁹² Administrator Pruitt estimates that the proposed rule would save regulated facilities between \$31 to \$100 million per year.²⁹³ Such flexibility, however, may pose greater risk to pollution of interstate waterways.

C. Stream Protection Rule (2016) – History and Demise

The Surface Mining Control and Reclamation Act of 1977 (“SMCRA”) prohibits mining companies from causing material damage to the environment to the extent that it is technologically and economically feasible to prevent it.²⁹⁴ The law covers regulation of active surface mines and the reclamation of abandoned mines. One of the purposes of the act is to “assure that the rights of surface landowners and other persons with a legal interest in the land or appurtenances thereto are fully protected from such operations.”²⁹⁵ In 1979, the Department of Interior issued its initial “stream buffer zone rule” to create buffer zones of 100 feet to protect streams from the adverse effects of sedimentation

²⁸⁸ Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Amendments to the National Minimum Criteria (Phase One); Proposed Rule, 83 Fed. Reg. 11,584 (Mar. 15, 2018); News Release, EPA, EPA Proposes First of Two Rules to Amend Coal Ash Disposal Regulations, Saving Up To \$100M Per Year in Compliance Costs, (Mar. 1, 2018), <https://www.epa.gov/newsreleases/epa-proposes-first-two-rules-amend-coal-ash-disposal-regulations-saving-100m-year>.

²⁸⁹ *Id.*; News Release, EPA, *supra* note 286.

²⁹⁰ 83 Fed. Reg. 11,584.

²⁹¹ *Id.*

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ Surface Mining Control and Reclamation Act (“SMCRA”), 30 U.S.C. §§ 1201–1328 (1977) (as amended in 1990, 1992, and 2006). *See also* Hodel v. Va. Surface Mining & Reclamation Ass’n Inc, 452 U.S. 264, 276–77 (1981) (upholding SMCRA as constitutional under the commerce clause).

²⁹⁵ 30 U.S.C. § 1202(b).

and gross disturbance of stream channel.²⁹⁶ In 1983, it amended the rule, deleting the requirement to restore the original stream channel.”²⁹⁷

The George W. Bush Administration amended the rule to provide for a permitting process under the CWA, even where avoiding disturbance of the stream is not reasonably possible.²⁹⁸ The District Court of the District of Columbia vacated the 2008 Bush rule on two grounds. First, the Office of Surface Mining Reclamation and Enforcement (“OSM”) failed to consider recent impacts of coal mining. Second, the OSM failed to consult with the FWS, as required pursuant to Endangered Species Act (“ESA”) § 7(a), regarding the impact of the change in criteria on endangered species and critical habitat.²⁹⁹ In response to the court decision, a Bush Executive Order changed the interpretation of “any discretionary action,” so that agencies without express discretionary authority to consider and protect wildlife would not have to comply with ESA § 7(a) consultation, removing the environmental review of the FWS on federal projects involving mining, logging, and road building.³⁰⁰

President Obama’s early memorandum (entitled “Scientific Integrity”) compelled agencies to resume the long-standing practice of consultation with FWS (or the National Marine Fisheries Service (“NMFS”)), while his administration worked to reverse the Bush rule.³⁰¹ Of course, the key reason for the ESA § 7(a) consultation requirement with the FWS or NMFS is that the other agencies may lack seasoned scientists to evaluate the impact of projects on endangered species and habitat.³⁰² A subsequent Obama executive order emphasized that regulatory decisions should be

²⁹⁶ See 30 C.F.R. §§ 816.57, 817.57 (2009) (regarding what additional performance standards apply to mining activities conducted in or through a perennial or intermittent stream on the surface of land within 100 feet of a perennial or intermittent stream) and Statement of Joseph Pizarchik, Director of Office of Surface Mining and Enforcement Before the U.S. Senate Committee on Environment and Publics Works, Stream Protection Rule, Dept. of Interior (Feb. 3, 2016), <https://www.doi.gov/oc/stream-protection-rule-1> (describing the history of the rule).

²⁹⁷ Stream Buffer Zone Rule, 48 Fed. Reg. 30,312 (June 30, 1983).

²⁹⁸ Excess Spoil, Coal Mine Waste, and Buffers for Perennial and Intermittent Streams, 73 Fed. Reg. 75,813, 75,814 (Dec. 12, 2008) (to amend 30 C.F.R. Parts 780, 784, 816, and 817) (vacated).

²⁹⁹ Nat’l Parks Conservation Ass’n v. Jewell, 62 F. Supp. 3d 7, 2014 U.S. Dist. LEXIS 152383, at *13-14 (D.D.C. 2014).

³⁰⁰ Interagency Cooperation Under the Endangered Species Act, 76 Fed. Reg. 76,272 (Dec. 16, 2008). The G.W. Bush administration also gave economic activity equal priority with preserving the forests’ ecological health and required forest management plan to focus on the overall health of the forest rather than on counting and preserving the population of endangered species; an EIS was no longer required to accompany the management plan.

³⁰¹ Memorandum from President Barak Obama on Scientific Integrity for Heads of Executive Departments, and Agencies (Mar. 9, 2009), <https://www.gpo.gov/fdsys/pkg/CFR-2010-title3-vol1/pdf/CFR-2010-title3-vol1-other-id210.pdf>.

³⁰² See *Endangered Species Consultation Handbook*, U.S. FISH AND WILDLIFE SERVICE AND NATIONAL MARINE FISHERIES SERVICE (March 1998), https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf.

based on the best available science.³⁰³ One would expect the Trump administration to be more in line with the Bush administration regarding species protection and consultation, as indicated by the BLM Instruction Memorandum negating the need for coordination and new EIS for land leases.³⁰⁴

It took seven years during the Obama administration to develop the Stream Protection Rule, which was promulgated under authority of the 1977 SMCRA.³⁰⁵ The OSM examined thousands of documents, studying the interrelationship of coal mining and ecosystems. After following the APA notice and comment requirements and seeking industry and community input, the OSM issued its Stream Protection Rule on December 19, 2016.³⁰⁶ The rule went into effect 30 days later, on the last day of the Obama presidency. In issuing the Stream Protection Rule, the OSM stated that the new rule was aimed at improving the balance between environmental protection and the nation's need for coal as an energy source. It was intended to provide better protection for water supplies, groundwater quality, and protection of fish and wildlife from adverse effects of coal mining. The rule restricted coal companies from dumping mining wastes into streams and waterways and required that they assist in the monitoring and clean up. It required a baseline assessment of ecosystems and required coal companies to monitor affected streams and develop a plan to restore damaged waterways. This was a prerequisite to receiving a permit for new surface or underground mining activities. Companies were required to demonstrate that their operation would avoid causing damage to the "hydrological balance" of waterways (a controversial term). Although environmentalists believed that the rule did not go far enough, it was deemed to provide more protection than prior rules and the implementation of the rule was estimated to improve protection of 6,000 miles of streams and 50,000 acres of forest.³⁰⁷

However, the coal industry viewed the Stream Protection Rule as an overly broad attempt to make coal mining economically infeasible. Fearing that the Stream Protection Rule would "regulate the coal mining industry right out of business," Southeast Ohio GOP Congressman Bill Johnson introduced House Joint Resolution 38,³⁰⁸ under the

³⁰³ Exec. Order No. 13,563, Improving Regulations and Regulatory Review, 76 Fed. Reg. 3821 (Jan. 21, 2009).

³⁰⁴ U.S. DEP'T OF INTERIOR, IM 2018-034, *supra* note 97.

³⁰⁵ 30 U.S.C. §§ 1201-1328 (1977).

³⁰⁶ Stream Protection Rule, 81 Fed. Reg. 93,066 (Dec. 20, 2016) (was to be codified at 30 C.F.R. Parts 700-827).

³⁰⁷ Plumer, *supra* note 275.

³⁰⁸ H.R.J. Res. 38, 115th Cong. (2017) (codified Pub. L. No. 115-5).

Congressional Review Act (“CRA”) to “disapprove” the Obama era Stream Protection Rule.³⁰⁹ President Trump signed the adopted CRA House Joint Resolution 38 to “end the war on coal” and bring back coal jobs.³¹⁰

The CRA³¹¹ was enacted in 1996 as part of the Small Business Regulatory Enforcement Fairness Act (“SBREFA”).³¹² Pursuant to the CRA, Congress has 60 days to review “major rules” after they have been published in the Federal Register or submitted to Congress;³¹³ and the period is extended at the end of a congressional session with a “carryover period” to the next congressional session.³¹⁴ “Major rules” include rules that will have a \$100 million annual effect on the economy or a significant adverse effect on productivity, employment, or competition of United States-based businesses or a major cost impact on government agencies.³¹⁵ Particularly problematic to constitutional checks and balances are the provisions of the CRA prohibiting future regulations “in substantially the same form.”³¹⁶

In 2017, Congress used the CRA to “disapprove” of fourteen regulations of the Obama administration that were finalized after June 13, 2016, four of which involved environmental protections.³¹⁷ The regulation with the strongest link to the energy sector was this now

³⁰⁹ 81 Fed. Reg. 93,066.

³¹⁰ Press Release, The White House, Exec. Office of the President, President Trump: Putting Coal Country Back to Work (Feb. 16, 2017), <https://www.whitehouse.gov/the-press-office/2017/02/16/president-trump-putting-coal-country-back-work>.

³¹¹ 5 U.S.C. § 801-808.

³¹² 5 U.S.C. § 601 et seq. (1996).

³¹³ 5 U.S.C. § 802(a).

³¹⁴ *Id.* § 801(d)(1).

³¹⁵ *See id.* § 804 (2) (defining “major rule” as any rule that the Administrator of the Office of Information and Regulatory Affairs of the Office of Management and Budget finds is likely to result in “(A) an annual effect on the economy of \$100,000,000 or more; (B) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or (C) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets.”) This definition of “major rule” is traced back to President Reagan’s Executive Order 12291 that required all new “major” regulations, exceeding \$100 million, to be subject to Regulatory Impact Analysis (“RIA”), a form of cost-benefit analysis. Exec. Order No. 12,291, 46 Fed. Reg. 13,193 (Feb. 19, 1981). *See also* Regulations from the Executive in Need of Scrutiny (“REINS”) Act of 2017, H.R. 26, 115th Cong. (2017) (proposed but not adopted) (requiring cost-offsets and a congressional joint resolution to approve new “major” regulations).

³¹⁶ 5 U.S.C. § 801(b)(2) (discussed in *Center for Biological Diversity v. Zinke*, No. 3:17-cv-00091-JWS (D. Alaska Apr. 20, 2017)).

³¹⁷ Clyde Crews, Jr., *Net Neutrality and Senate Democrat’s Renewed Love for the Congressional Review Act*, FORBES (Jan. 18, 2018), <https://www.forbes.com/sites/waynecrews/2018/01/18/net-neutrality-and-senate-democrats-renewed-love-for-the-congressional-review-act/#5eebc02f1f5b>.

“disapproved” Stream Protection Rule which had required coal companies to clean up and monitor streams they had polluted.³¹⁸

D. Good Jobs? Mine Safety and Worker Benefit Concerns

What is the likelihood that these “good” coal jobs will be revived? According to a White House press release, over 600 coal mines closed from 2009 to 2015.³¹⁹ Correlated with a decline in coal production nationwide, coal mining jobs declined from 850,000 in the 1920s³²⁰ to 51,795 by the end of 2016, with a loss of 35,064 jobs since 2009.³²¹ The most recent data from the United States Energy Information Administration’s also showed an 18.8% decline in coal production and an 8.4% decline in United States’ consumption from 2015 to 2016.³²² There is no doubt that the coal industry is at a crisis point. The demand for coal has been reduced by cheaper natural gas, state renewable energy standards, and federal environmental regulations—including the once anticipated implementation of the Clean Power Plan.³²³

Brazil is the largest importer of United States “met coal,” which it uses primarily in the production of steel. The steel is then primarily sold to the United States as part of the \$90 billion dollars in trade between the two countries. In response to President Trump’s recent twenty-five percent tariff on steel, Brazil is threatening a World Trade Organization case against the United States. The tariff also may cause Brazil to look elsewhere for a coal source, which in turn could lead to the loss of more coal jobs in the United States.³²⁴

Twenty-two gigawatts of coal capacity were shut down in 2017, accelerating the loss of coal jobs.³²⁵ Fearing that the loss of coal-fired and nuclear power plants could jeopardize the national power grid, Secretary Perry proposed new rules to guarantee financial returns of plants that maintain at least ninety days of fuel on site in an attempt to forestall

³¹⁸ 81 Fed. Reg. at 93,066.

³¹⁹ Press Release, The White House, *supra* note 310.

³²⁰ *Mine Wars: The Struggle for Coal Miners’ Health Care and Pension Benefits Comes to a Head*, CONVERSATION (Apr. 27, 2017), <https://www.rawstory.com/2017/04/mine-wars-the-struggle-for-coal-miners-health-care-and-pension-benefits-comes-to-a-head/>.

³²¹ Annual Coal Report, U.S. ENERGY INFORMATION ADMINISTRATION (Nov. 15, 2017), <https://www.eia.gov/coal/annual/>.

³²² *Id.*

³²³ *Business Support for the Paris Agreement*, *supra* note 68.

³²⁴ Philip Reeves, *Brazil Reacts to Trump’s Steel Tariffs*, NPR (Mar. 9, 2018), <https://www.npr.org/2018/03/09/592196607/brazil-reacts-to-trumps-steel-tariffs>.

³²⁵ Energy Innovation, *Utilities Closed Nearly 30 Coal Plants In 2017 Because Of Economics. Here Are The 6 Most Important*, ENERGY COLLECTIVE (Dec. 21, 2017), <http://www.theenergycollective.com/energy-innovation-llc/2418633/utilities-closed-nearly-30-coal-plants-2017-economics-6-important>.

retirement and closure of these plants.³²⁶ Despite the fact that four of the five commissioners were Trump appointees, FERC recently unanimously rejected Secretary Perry's plan to subsidize coal plants, citing its reluctance to shield coal from competitive forces that have kept energy costs lower.³²⁷ Commissioner Richard Glick's January 8, 2018 concurring opinion recognized that:

The Proposed Rule had little, if anything, to do with resilience, and was instead aimed at subsidizing certain uncompetitive electric generation technologies There is no evidence in the record to suggest that temporarily delaying the retirement of uncompetitive coal and nuclear generators would meaningfully improve the resilience of the grid. Rather, the record demonstrates that, if a threat to grid resilience exists, the threat lies mostly with the transmission and distribution systems, where virtually all significant disruptions occur.³²⁸

In light of the growing trend toward using natural gas in power plants and biofuels, and the use of solar and wind power, there is no guarantee that the coal jobs will come back. However, scientists question whether natural gas is more environmentally favorable than coal, considering the methane associated with burning natural gas, and the potential pollution associated with its extraction.³²⁹ In addition, the repeal of rules such as the Stream Protection Rule may actually diminish higher paying jobs associated with environmental compliance, some of which create employment for former mine workers.³³⁰

Coal jobs have always exposed workers to serious health impacts, such as black lung disease, and coal unions have long fought uphill battles to acquire and maintain health and pension benefits. How to improve mine safety and provide health care benefits for miners has itself been controversial and the subject of several legislative proposals. The Affordable Care Act ("ACA") provides black lung disease benefits to coal workers; however these benefits would vanish with a repeal of the

³²⁶ Plumer, *supra* note 96. See also Robinson Meyer, *Perry Wants to Bail Out Coal Industry*, THE ATLANTIC (Oct. 13, 2017), <https://www.theatlantic.com/science/archive/2017/10/rick-perrys-plan-to-bail-out-the-coal-industry/542892/>.

³²⁷ FED. ENERGY REGULATORY COMM'N, 162 F.E.R.C. ¶ 61,012, ORDER TERMINATING RULEMAKING PROCEEDING, INITIATING NEW PROCEEDINGS, & ESTABLISHING ADDITIONAL PROCEDURES RE GRID RELIABILITY & RESILIENCE PRICING UNDER RM18-1 ET AL. (Jan. 8, 2018).

³²⁸ *Id.* (Commissioner Richard Glick, concurring).

³²⁹ Adam Dove, *Is Replacing Coal with Natural Gas Actually good for the Climate?*, PHYSORG (Nov. 7, 2016), <https://phys.org/news/2016-11-coal-natural-gas-good-climate.html>.

³³⁰ Glynis Board, *In Coal Country, Environmental Regulations Are Creating Jobs*, Ohio Valley Resource, NPR (Apr. 13, 2017), <https://www.npr.org/2017/04/13/522607589/in-coal-country-environmental-regulations-are-creating-jobs>.

ACA.³³¹ There is no guarantee that a proposal to replace the ACA would address the miners' imminent danger of losing health care and pension benefits. A temporary fix, however, was included in the April 30, 2017 fiscal spending agreement,³³² wherein the federal government and mining companies (even those in bankruptcy) will continue to fund health care benefits; however, the agreement did not address the pension fund crisis. United Mineworkers for America president Cecil Roberts urges passage of the Mine Safety Protection Act as a more permanent solution.³³³ The proposed Robert C. Byrd Mine Safety Protection Act of 2017 seeks to improve mine safety and miner's health.³³⁴ Whether the Trump administration would support this legislation depends on whether President Trump sees this as an impediment to "job creation" and contrary to his broader deregulatory agenda.

Part of the debate is over the appropriate response and the scope of a 1946 commitment. After President Truman temporarily imposed wage and price controls on the nation's coal mine industry, conflict between workers and management was settled with the Krug-Lewis Agreement, through which health and pension benefits were established for coal industry workers.³³⁵ As health benefits of coal miners were set to expire in 2017, United Mine Workers Union health and pension trust funds reached a structural deficit and many of largest coal companies declared bankruptcy, discarding their obligations to former workers. The Miners Protection Act of 2017,³³⁶ introduced by Democratic Senator Joe Manchin of West Virginia, would make up the deficit in both the health care and pension funds by using money from a fund that was supposed to be dedicated to cleaning up abandoned mines. The Congressional Budget Office previously estimated that funding for a ten year period would require \$1.7 to \$2.3 billion for the pension trust fund³³⁷ and \$2.2 billion

³³¹ Kara Loft, *Obamacare Repeal Threatens A Health Benefit Popular in Coal Country*, NPR (Jan. 24, 2017), <http://www.npr.org/sections/health-shots/2017/01/24/510668899/obamacare-repeal-threatens-a-health-benefit-popular-in-coal-country>. See also SBREFA, 5 U.S.C. § 601 et seq.

³³² Consolidated Appropriations Act, Div. M, Title I, H.R. 244, 115 Cong. (2017).

³³³ See Valerie Volcovici, *Coal Miners Health Benefit Deal Reached*, REUTERS (May 1, 2017), <https://www.usnews.com/news/us/articles/2017-05-01/us-congress-secures-health-benefits-for-coal-miners>.

³³⁴ Robert C. Byrd Mine Safety Protection Act, S. 854, 115th Cong. (2017) (referred to the Committee on Health, Education, Labor, and Pensions on Apr. 5, 2017).

³³⁵ President Harry S. Truman, Statement by the President Endorsing a Plan for Negotiations Between Coal Miners and Operators (Nov. 15, 1946) (as reported in Gerhard Peters and John T. Woolley, THE AMERICAN PRESIDENCY PROJECT, <http://www.presidency.ucsb.edu/ws/?pid=12548> (last visited Mar. 27, 2018)).

³³⁶ The Miners Protection Act of 2017, S. 175, 115th Cong. (2017) (referred to the Subcommittee on Energy and Mineral Resources on Feb. 10, 2017).

³³⁷ Congressional Budget Office Cost Estimate for Coal Accountability and Retired Employee Act of 2010, H.R. 5479 (Sept. 20, 2010).

for health care.³³⁸ Senate Majority Leader Mitch McConnell of Kentucky opposes bailing out the pension fund.³³⁹ Cognizant of the water quality problems that persist when there is inadequate funding for cleanup and restoration, environmentalists oppose diversion of funds from the Abandoned Mine Reclamation Fund³⁴⁰ dedicated to cleaning up abandoned mines and improving water quality.³⁴¹

V. THE ANTIQUITIES ACT: DIMINISHING FEDERAL PROTECTION OF HISTORICAL AND SCIENTIFICALLY SIGNIFICANT LAND IN FAVOR OF ENERGY EXTRACTION

The Antiquities Act of 1906 allows for presidential designation of national monuments to preserve objects of historical or scientific interest on federal lands or lands withdrawn into federal ownership.³⁴² Such designation helps protect natural resources and natural beauty and preserve habitat for endangered species. The National Landscape Conservation System was created as part of the Omnibus Public Land Management Act of 2009 to “conserve, protect and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific value for the benefit of current and future generations,” and it included each area designated as a national monument.³⁴³

There are substantial oil and gas reserves on land protected from development by the Antiquities Act.³⁴⁴ This serves as a motivation for President Trump’s Executive Order on the Review of Designations under the Antiquities Act.³⁴⁵ If he can reduce the size of Antiquities Act monument designations, it will free-up tracks of land for energy development. If energy firms can lease the land they can frustrate efforts to conserve it, even if they are not drilling on a particular plot.

³³⁸ Simon Haeder, *Mine Wars: The Struggle for Coal Miners’ Health Care and Pension Benefits Comes to a Head*, RAW STORY (Apr. 27, 2017), <https://www.rawstory.com/2017/04/mine-wars-the-struggle-for-coal-miners-health-care-and-pension-benefits-comes-to-a-head/>.

³³⁹ *Id.*

³⁴⁰ 30 U.S. Code § 1231. See The Miners Protection Act of 2017, S. 175, 115th Cong. (2017); Proposed Miners Protection Act of 2017, H.R. 179, 115th Cong. (2017) (indicating that the funds will be taken from the Abandoned Mine Reclamation Fund).

³⁴¹ *Abandoned Mine Reclamation Program*, U.S. DEP’T OF INTERIOR, <https://useiti.doi.gov/how-it-works/aml-reclamation-program/> (last visited Mar. 27, 2018).

³⁴² Antiquities Act, 54 U.S.C. §§ 301-320 (1906).

³⁴³ Omnibus Public Land Management Act, 16 U.S.C. 7202(a) (2009).

³⁴⁴ Jacob Eisenberg, *Zinke’s Monument Review: Another Gift to Oil, Gas, and Coal*, NAT’L RESOURCES DEF. COUNCIL (Oct. 4, 2017), <https://www.nrdc.org/experts/jacob-eisenberg/zinkes-monument-review-another-gift-oil-gas-and-coal>.

³⁴⁵ Exec. Order No. 13,792, Review of Designations Under the Antiquities Act, 82 Fed. Reg. 20,429 (May 1, 2017).

Interior Secretary Zinke has made it clear that he is committed to “responsible development of coal, oil, gas, and renewable energy on federal and Tribal lands” and that “energy on public lands has been more of a missed opportunity.”³⁴⁶ The focus is to increase leases for extraction of oil, gas, and minerals by releasing the land or sea from federal developmental restraints—such as those on monuments designated under the Antiquities Act. Pursuant to that goal, Zinke’s Secretarial Order 3348 lifts a 2016 moratorium on new coal leases on federal land.³⁴⁷ Zinke’s new Royalty Policy Committee is to advise him on the fair market value of federal and Indian mineral and energy leases and the revenue from them.³⁴⁸ The attack on public land protection is backed by the Koch network, Americans for Prosperity, the Heritage Foundation, and the Sutherland Institute in Utah, one of fossil fuel industries’ strong advocates.³⁴⁹ Eighteen of Interior Secretary Zinke’s twenty-one political appointees have come from the energy extraction industry.³⁵⁰

The Trump Executive Order on the Review of Designations Under the Antiquities Act³⁵¹ specifies that reservation of land under the Act shall “not exceed ‘the smallest area compatible with the proper care and management of the objects to be protected.’”³⁵² It focuses on reducing the “substantial impact on the management of Federal lands and the use and enjoyment of neighboring lands.”³⁵³ The order calls on the Secretary of Interior to expedite review of all designations made since January 1, 1996.³⁵⁴

Twenty-seven monuments were initially under review, with twenty-one under consideration for reduction or rescission, prompting 2.8 million public comments.³⁵⁵ The most vulnerable of those monuments are Grand Staircase-Escalante, Utah, established in 1996; Organ Mountains-Desert Peaks, New Mexico, established in 2014; Katahdin Woods and Waters, Maine, established in 2016; Papahānaumokuākea, established in

³⁴⁶ Press Release, U.S. Dep’t of Interior, *supra* note 170.

³⁴⁷ U.S. Dep’t of Interior, Secretarial Order No. 3348, *supra* note 264.

³⁴⁸ Press Release, U.S. Dep’t of Interior, *supra* note 170.

³⁴⁹ Eisenberg, *supra* note 344.

³⁵⁰ Tay Wiles, *Amid Monument Review, a Pro-Energy Interior Emerges*, HIGH COUNTRY NEWS (Aug. 1, 2017), <http://www.hcn.org/articles/interiors-energy-priorities-undergird-sweeping-monuments-review>.

³⁵¹ Exec. Order No. 13,792, § 1.

³⁵² *Id.* § 2(i).

³⁵³ *Id.* § 1

³⁵⁴ *Id.* § 2(d) and (e).

³⁵⁵ Michelle Nijhuis, *After Bears Ears and Grand Staircase-Escalante, Where will Trump’s War on Public Lands End?*, NEW YORKER (Dec. 6, 2017), <https://www.newyorker.com/tech/elements/after-bears-ears-and-grand-staircase-escalante-where-will-trumps-war-on-public-lands-end>.

Hawaii, 2006 and expanded into Pacific Ocean, in 2016; and Bears Ear, Utah, established in 2016.³⁵⁶ These monuments are targeted in large part because oil, gas, and coal resources are within or around their boundaries.³⁵⁷ Secretary Zinke's August 2017 Memo to President Trump recommends reductions in scope for ten monuments and suggests changing the way existing monuments are managed to balance the BLM's multi-purpose mission³⁵⁸ and his plans are to open the land up to logging, commercial fishing, mining, and drilling in protected areas.³⁵⁹

President Trump strategically selected 1996 as the look-back date for reviewing monuments. That was the year Grand Staircase-Escalante was declared a national monument by the Clinton administration.³⁶⁰ This initial designation prevented a proposed coal mine from opening, prompting the United States government to repurchase existing leases.³⁶¹ The United States Geological Survey and Utah Geological Survey estimate that the Kaiparowits Plateau alone contains sixty-two billion tons of coal in the Grand Staircase,³⁶² which, if mined, would jeopardize artifacts. The Kaiparowits Plateau is at the heart of the majestic Grand Staircase and the location where fossils from twenty-one dinosaur species were found.³⁶³ The Grand Staircase-Escalante Monument was acknowledged as the best record of cretaceous terrestrial fossils of many

³⁵⁶ Lisa Friedman, Nadja Popovich & Matt McCann, *Twenty-seven Monuments are Under Review. Here are Five to Watch*, N.Y. TIMES (Aug. 16, 2017), <https://www.nytimes.com/interactive/2017/08/11/climate/doi-monument-review-five-to-watch.html>.

³⁵⁷ Memorandum from Larry Garahana, *Cursory Review of the Mineral Potential/Occurrence within the Bears Ear National Monument*, Bureau of Land Management, Utah State Office Jan. 31, 2017, <https://assets.documentcloud.org/documents/4391967/National-Monuments-a-Look-at-the-Debate-From.pdf>; Leigh Paterson, *Oil and Gas Eyes Fringes of Bears Ears*, INSIDE ENERGY (Sept. 1, 2017), <http://insideenergy.org/2017/09/01/oil-gas-eyes-bears-ears-fringes> (including maps of mineral locations).

³⁵⁸ Memorandum from Secretary of Interior Ryan Zinke to the President, *Final Report Summarizing Findings of Designations under the Review Antiquities Act* (Aug. 24, 2017), at 4, 7.

³⁵⁹ Jenny Rolland, *The National Monuments Slashed by Trump will Officially be Open to Mining on Friday*,

THINK PROGRESS (Feb. 1, 2018), <https://thinkprogress.org/trump-national-monuments-mining-bc92ca54db29/>.

³⁶⁰ Presidential Proclamation No. 6920, *Establishment of the Grand Staircase-Escalante National Monument*, 61 Fed. Reg. 50,223 (Sept. 18, 1996).

³⁶¹ *Id.* See also Eisenberg, *supra* note 344.

³⁶² *Grand Staircase-Escalante National Monument -Summary of the Coal Resources of Kaiparowits Plateau and Its Value*, UTAH GEOLOGICAL SURVEY (Oct. 9, 1996), <http://files.geology.utah.gov/online/c/c-93/gsekcoal.htm>. See Laris Karklis, Bonnie Berkowitz, & Tim Meko, *Areas Cut Out of Utah Monuments are Rich in Oil, Coal, Uranium*, WASH. POST (Dec. 7, 2017), https://www.washingtonpost.com/graphics/2017/national/utah-monuments/?utm_term=.7cc86e999cf0.

³⁶³ Nijhuis, *supra* note 355.

species, including turtles, mammals, and fish, historic petroglyphs and also contains Mormon wagon routes.³⁶⁴

To facilitate those coal and oil interests, however, President Trump announced December 4, 2017, that he is reducing the Grand Staircase-Escalante Monument from 1.86 million acres to 997,490 acres, which will be divided into three separate monuments: Grand Staircase National Monument, Escalante Canyons National Monument, and the Kaiparowits National Monument.³⁶⁵ Even some of the land added to the monument by Congress in 2009 was stripped of protection with President Trump's decision, despite his questionable authority to do so.³⁶⁶ The Society for Vertebrate Paleontology has announced its intention to bring a lawsuit to challenge President Trump's decision.³⁶⁷ Under the Trump-Zinke plan, much of the newly unprotected land will now be available for coal and hard rock mining.

Ten named plaintiff environmental groups are seeking injunctive relief to prevent President Trump from dismantling of the Grand-Staircase-Escalante Monument.³⁶⁸ They challenge his decision as (1) violating separation of powers and the authority of Congress to dispose of property of the United, (2) exceeding authority delegated by Congress, which did not include rescission of previously declared monuments, (3) violating the "take care" clause of the Constitution, (4) failing to follow terms and purpose of the Antiquities Act and thus acting in an ultra-vires manner, and (5) acting in an arbitrary and capricious manner in conjunction with BLM action.³⁶⁹

Special attention also has been focused on the Bears Ears National Monument in Southeast Utah, which was proclaimed a national monument late in the Obama administration to protect its brilliantly colored, beautiful landscape, with its "deep sandstone canyons, desert

³⁶⁴ *Id.*

³⁶⁵ See Richard Gonzolas, Kirk Siezler & Colin Dwyer, *Trump Orders Largest Monument Reduction in U.S. History*, NPR (Dec. 4, 2017), <https://www.npr.org/sections/thetwo-way/2017/12/04/567803476/trump-dramatically-shrinks-2-utah-national-monuments>. See also Juliet Eilperin, *Trump to Cut Bears Ears National Monument by 85 Percent, Grand Staircase-Escalante by Half, Documents Show*, WASH. POST (Nov. 30, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/11/30/trump-to-cut-bears-ears-national-monument-by-85-percent-grand-staircase-escalante-by-half-documents-show/?utm_term=.6a2e2021d3d6; Eisenberg, *supra* note 344.

³⁶⁶ Complaint at 33-37, *The Wilderness Soc'y v. Trump*, No. 1:17-cv-02587 (D.D.C. Dec. 4, 2017).

³⁶⁷ P. David Polly et al., *Why SVP is Suing Over Monument Reductions*, SOC'Y FOR VERTEBRATE PALEONTOLOGY (Dec. 4, 2017), <http://vertpaleo.org/Society-News/SVP-Paleo-News/Society-News,-Press-Releases/Grand-Staircase-Escalante-and-Bears-Ears-National.aspx>.

³⁶⁸ Complaint at 8-20, *Wilderness Soc'y*, No. 1:17-cv-02587.

³⁶⁹ *Id.* at 50-57.

mesas, and meadow mountaintops.”³⁷⁰ The designation provides critical habitat protection for seventy-seven plants and animal species, including the desert tortoise, in an Area of Critical Environmental Concern (designated by the BLM). Although most of the area had been federal land since 1986, Bears Ears Monument was created in 2016 at the request of five Native American Indian tribes, whose representatives serve on the Monument Advisory Committee to protect ancestral burial grounds and the natural beauty. To the Navajo, Hopi, Ute, Uintah Ouray, and Zuni, the site is sacred.³⁷¹

Oil and coal reserves are in close proximity to the Bears Ears monument. In his June 10, 2017 memorandum to the President, Secretary Zinke recommended a reduction of the 1,351,894 acres of Bears Ears to the “smallest area compatible” with the purpose and co-management of some of the area with Native American Indian tribes.³⁷² On December 4, 2017, President Trump announced that he was shrinking Bears Ears by nearly eighty-five percent and dividing the original monument designation into two smaller monuments: Indian Creek National Monument and Shash Jaa National Monument.³⁷³ This means the loss of critical habitat protection for plants and animals, as well as diminution of areas that the Native American tribes view as sacred and historic pictographs, petroglyphs and cliff dwellings.³⁷⁴

Most Native American tribes oppose shrinking the size of the monument, which includes Navajo tribal burial grounds, and intend to fight the changes in court.³⁷⁵ The Diné Bikéyah is a Native-American not-for-profit organization that works with these tribes to preserve and conserve cultural resources and sacred sites; it has sued to enjoin the Trump administration from stripping the site of its protected status.³⁷⁶ A coalition of plaintiffs has brought suit in Washington D.C. to challenge President Trump’s decision to reduce the size of Bears Ears. In addition to the Utah Diné Bikéyah, the plaintiffs include the Society for Vertebrate Paleontology, the National Trust for Historic Preservation, Patagonia

³⁷⁰ Presidential Proclamation 9558, Establishment of Bears Ear National Monument (Dec. 28, 2016), <https://obamawhitehouse.archives.gov/the-press-office/2016/12/28/proclamation-establishment-bears-ears-national-monument>.

³⁷¹ *Sacred Bears Ears and Gold Butte Designated as National Monuments*, INDIAN COUNTRY TODAY (Dec. 28, 2016), <https://indiancountrymedianetwork.com/history/sacred-places/sacred-bears-ears-gold-butte-designated-national-monuments/>.

³⁷² Memorandum from Secretary of Interior Ryan Zinke to the President, Interim Report Pursuant to Executive Order 13792 (June 10, 2017).

³⁷³ Eilperin, *supra* note 365.

³⁷⁴ Complaint at 55, *Diné Bikéyah v. Trump*, No. 1:17-cv-02605 (D.D.C. Dec. 6, 2017).

³⁷⁵ See Gonzolas, Siezler & Dwyer, *supra* note 365.

³⁷⁶ *Diné Bikéyah*, No. 1:17-cv-02605, 6-7.

Works, Archaeology Southwest, the Conservation Lands Foundation, Access Fund, and Friends of Cedar Mesa.³⁷⁷

Prior to the decision to substantially reduce the size of the Bears Ears monument, the Department of Interior decided to allow a short window (initially fifteen days) for comments to address concerns of the state, tribal, and local governments, as well as other stakeholders.³⁷⁸ Despite the fact that Utah citizens by a 9-to-1 margin wanted the larger designation left as originally designated,³⁷⁹ the Utah legislature drafted a resolution signed by the governor that called for the rescission of the Bears Ear monument designation, noting that sixty-six percent of Utah land is under control of the federal government.³⁸⁰ The Sutherland Institute (backed by the fossil fuel industry) was instrumental in lobbying for that vote.³⁸¹ State representative Michael Noel explained in an interview that he favored reducing the size and restrictions on the land use to allow improvement and expansion of roads, cell towers, and management of vegetation and grasses for cattle grazing, which Native American tribes need for their livelihood.³⁸²

The Western Energy Alliance filed suit against Secretary Zinke to seek an order to compel the Secretary to issue more oil and gas leases sales; after President Trump's decision to reduce the size of Bears Ear and Grand Staircase-Escalante, the United States Court of Appeals for the Tenth Circuit denied conservation groups the right to intervene in the lawsuit.³⁸³

An examination of actions by recent administrations provides context for the President Trump's efforts reduce the scope or eliminate monument

³⁷⁷ *Diné Bikéyah*, No. 1:17-cv-02605. See also *SVP Files Second Lawsuit Against Bears Ears Reduction*, SOC'Y FOR VERTEBRATE PALEONTOLOGY (Dec. 7, 2017), <http://vertpaleo.org/Society-News/SVP-Paleo-News/Society-News,-Press-Releases/SVP-files-second-lawsuit-against-Bears-Ears-reduct.aspx>.

³⁷⁸ Kathryn Tripple, *Bears Ears National Monument: Unprecedented Surveys of Boundary Lines and Executive Authority*, TRENDS, AM. BAR ASS'N (Sept./Oct. 2017), https://www.americanbar.org/groups/environment_energy_resources/publications/trends/2017-2018/september-october-2017/bears-ears-national-monument.html (noting that Presidential action under the Antiquities Act is not subject to notice and comment requirements, but the Dept. of Interior created a 15 day comment period and extension, which garnered 76,000 comments, but also questioning presidential authority to reduce monument size).

³⁷⁹ Nathan Fish, *Zinke calls for 'Right-sizing' Bears Ears in Review of Antiquities Act*, CRONKITE NEWS (June 12, 2017), <https://cronkitenews.azpbs.org/2017/06/12/zinke-calls-for-right-sizing-bears-ears-in-review-of-antiquities-act/>.

³⁸⁰ Concurrent Resolution Urging President to Rescind Bears Ear National Monument Designation, H.C. Res. 11 2017 General Session (Utah 2017).

³⁸¹ Eisenberg, *supra* note 344.

³⁸² Lulu Garcia-Navarro, *Trump Announces Shrinking Utah National Monument*, NPR (Dec. 3, 2017), <https://www.npr.org/2017/12/03/568133062/trump-to-announce-shrinking-utah-national-monuments>.

³⁸³ *Western Energy Alliance v. Zinke*, No. 17-2005 (10th Cir. Dec. 18, 2017).

protection status. President Obama designated or expanded 554 million acres of land as protected national monuments through thirty-four uses of this presidential authority by Executive Order, more than any other president—a legacy environmentalists applaud.³⁸⁴ President George W. Bush designated three areas of the Pacific Ocean as national monuments, encompassing 195,000 square miles, expanding the Monterey Bay National Marine Sanctuary and protecting nearly 140,000 square miles of coral reef ecosystems as the Papahānaumokuākea Marine National Monument.³⁸⁵ Additionally, that administration added fifteen new National Wildlife Refuges.³⁸⁶ However, the Bush environmental legacy is mixed. That administration also advocated opening the Tongas National Forest and Arctic National Wildlife Refuge (“ANWR”) in Alaska to oil drilling.³⁸⁷ It had been closed to drilling since 1980, in part to protect caribou and polar bears and their habitat.³⁸⁸ Opening up drilling in ANWR is a priority of the Trump administration, accomplished in part with the 2017 tax bill.³⁸⁹

Decades earlier, the organization Republicans for Environmental Protection praised President Reagan for his wilderness preservation actions.³⁹⁰ Reagan signed thirty-eight bills to add 10.6 million acres of forests, mountains, deserts and wetlands to the National Wilderness Preservation System.³⁹¹ He signed the Coastal Barrier Resource Act,³⁹² the congressional response to administration attempts to open the continental shelf to oil drilling, which prohibited federal funding of development in the protected area.³⁹³ The cleanup of Chesapeake Bay

³⁸⁴ Dana Varinsky & Skye Gould, *This Map Shows Every Piece of Land Obama has Protected During His Presidency*, BUS. INSIDER (Jan. 9, 2017), <http://www.businessinsider.com/map-of-land-obama-has-protected-2017-1>.

³⁸⁵ *Environment*, THE WHITEHOUSE, PRESIDENT GEORGE W. BUSH, <https://georgewbush-whitehouse.archives.gov/infocus/environment/> (last visited Mar. 27, 2018).

³⁸⁶ *Id.*

³⁸⁷ David Helvarg, *Bush: The Environmental Record*, EARTH ISLAND J. (Winter 2005), http://www.earthisland.org/journal/index.php/eij/article/bush_the_environmental_record/.

³⁸⁸ Jason Dearen & Jill Colvin, *Experts: Long Road Ahead for Trump Offshore Drilling Order*, WASH. POST (Apr. 28, 2017), https://www.washingtonpost.com/politics/trump-to-sign-order-aimed-at-expanding-offshore-drilling/2017/04/27/984c9af4-2bae-11e7-9081-f5405f56d3e4_story.html?utm_term=.f9349de8dd79.

³⁸⁹ See Tax Cuts and Jobs Act, *supra* note 181 (includes opening up a portion of ANWR to oil drilling).

³⁹⁰ Little, *supra* note 267.

³⁹¹ *Id.* See generally, Michael E. Kraft & Norman J. Vig, *Environmental Policy in the Reagan Presidency*, 99:3 POL. SCI. QUART. 415, 417 (1984).

³⁹² 16 U.S.C. § 3501 (1982).

³⁹³ Gary Dreyzin, *The Environment Under a Trump Presidency: Looking Ahead by Looking Back to Reagan Administration*, GEO. ENVTL. L. REV. (Nov. 28, 2016), <https://gelr.org/2016/11/28/the-environment-under-a-trump-presidency-looking-ahead-by-looking-back-to-the-reagan-administration/>; Dearen & Colvin, *supra* note 388.

became a priority for President Reagan, who highlighted it in his 1983 State of the Union Address and who endorsed the \$52 million cleanup funding.³⁹⁴ While the George W. Bush administration lowered the amount of funding, the Trump budget proposal would eliminate further funding for further cleanup of the Chesapeake Bay, as well as the Great Lakes Restoration Initiative.³⁹⁵ The Trump administration has also recommended defunding the Narragansett Bay Estuary Program, the sponsor of the conference at which Pruitt would not allow EPA scientists to speak about climate change.³⁹⁶

Presidential review of monument designations of prior Presidents is highly unusual. Presidents have expanded or diminished the size of the land tracts on only eighteen occasions, primarily to adjust right-of-ways.³⁹⁷ Mount Olympus National Monument was decreased in acreage three times by Presidents, but eventually Congress redesignated it as a national park in 1938. The Bandelier National Monument in New Mexico, for example, was established by President Woodrow Wilson and later expanded by Presidents Hoover, Eisenhower and Kennedy.³⁹⁸ President Kennedy added lands that “possess unusual scenic character together with geologic and topographic features,” but he also withdrew from this monument land “with limited archeological values.”³⁹⁹ President Trump’s order threatening large scale reductions or rescission of prior monument designations, however, is highly unusual. Consequently, when President Trump attempts to withdraw a national monument or substantially modify its boundaries, he should continue to expect lawsuits that will challenge his authority to do so under the Antiquities Act.

The Antiquities Act grants the president authority to *designate* objects of historic or scientific interest and reserve tracts of federal land by designating them as national monuments.⁴⁰⁰ The law does not expressly

³⁹⁴ Alison Muscatine & Sandra Sugawara, *Chesapeake Bay Emerges as Reagan’s Environmental Cause*, WASH. POST (Oct. 7, 1984), https://www.washingtonpost.com/archive/politics/1984/10/07/chesapeake-bay-emerges-as-reagans-environmental-cause/bbb69c10-b953-4364-bedf-126232e62210/?utm_term=.b04dca3c71a8.

³⁹⁵ OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, AMERICA FIRST A BUDGET BLUEPRINT TO MAKE AMERICA GREAT AGAIN 43 (Mar. 13, 2017).

³⁹⁶ Lisa Friedman, *E.P.A. Cancels Talk on Climate Change by Agency Scientists*, N.Y. TIMES (Oct. 22, 2017), <https://www.nytimes.com/2017/10/22/climate/epa-scientists.html>.

³⁹⁷ Tripple, *supra* note 378; ALEXANDRA WYATT, CONG. RESEARCH SERV., R44687, ANTIQUITIES ACT: SCOPE AND AUTHORITY FOR MODIFICATION OF NATIONAL MONUMENTS 5 (Nov. 14, 2016).

³⁹⁸ *Id.*

³⁹⁹ Presidential Proclamation No. 3539, Revising the Boundaries of the Bandelier National Monument, New Mexico, 28 Fed. Reg. 5407 (May 27, 1963).

⁴⁰⁰ 54 U.S.C. §§ 320,301-320,303.

grant him authority to *abolish* monuments,⁴⁰¹ a point emphasized in the complaint challenging reduction of Bears Ears Monument. Challengers assert that Trump's Revocation Proclamation is an ultra vires act, in excess of the authority granted presidents under the Antiquities Act.⁴⁰² The 1938 opinion of Attorney General Homer Cummins reinforces this point:

A duty properly performed by the Executive under statutory authority has the validity and sanctity which belong to the statute itself, and, unless it be within the terms of the power conferred by that statute, the Executive can no more destroy his own authorized work, without some other legislative sanction, than any other person can. To assert such a principle is to claim for the Executive the power to repeal or alter an act of Congress at will.⁴⁰³

The Federal Land Policy and Management Act ("FLPMA") of 1976, specifically prohibits the Secretary of Interior from modifying or revoking any national monument designations under the Antiquities Act, with the House committee report emphasizing that it was reserving to Congress the authority to modify, revoke or withdraw national monuments.⁴⁰⁴ Congress created the National Landscape Conservation System in 2009, with the Grand Staircase-Escalante as a component of it. In addition, Congress has exchanged land and modified the boundaries, even bringing a coal field within its boundaries to protect the area.⁴⁰⁵

Representative Rob Bishop (R. Utah) proposes significant changes to the Antiquities Act in his bill, the National Monument Creation and Protection Act,⁴⁰⁶ which would significantly reduce the ability of presidents to create future monuments. For land tracts that exceed 5000 acres, an EIS would have to be done. For tracks ranging from 10,000 acres to 85,000 acres, the consent of the county, governor, and legislature of the affected state would be necessary for monuments exceeding 10,000 acres. Consent of private landowners would be required. Subsequent presidents would be granted authority to reduce the size of monuments.

⁴⁰¹ WYATT, *supra* note 397.

⁴⁰² Complaint at 1 and 66, *Diné Bikéyah*, No. 1:17-cv-02605. *See also* Tripple, *supra* note 378.

⁴⁰³ Proposed Abolishment of Castle Pinckney National Monument, 39 Op. Att'y Gen. 185, 187 (Sept. 26, 1938).

⁴⁰⁴ The Federal Land Policy and Management Act, 43 U.S.C. §1701 et seq. at Pub. L. No. 94-579 §204(j) (1976 as amended); WYATT, *supra* note 397, at 6 (citing H.R. REP. NO. 94-1163, at 9 (1976)).

⁴⁰⁵ *Grand Staircase Escalante Partners v. Trump*, No. 1:17-cv-02591 (TSC) at 15-16 (D.D.C. Jan. 20, 2018), <http://gsenm.org/wp-content/uploads/2018/01/Memorandum-Partial-Summary-Judgement.pdf>; *Nat'l Park Serv. Archaeology Program, Frequently Asked Questions*, NAT'L PARK SERV., <https://www.nps.gov/archeology/sites/antiquities/FAQs.doc> (last visited Nov. 14, 2016) (disabled during Trump administration).

⁴⁰⁶ National Monument Creation and Protection Act, H.R. 3990, 115th Cong. (2017).

In the future, the act could only be used to preserve “objects of antiquity.”⁴⁰⁷

In addition to advocating reduction in the amount of land protected under the Antiquities Act, President Trump has called for an eighty-four percent cut in funding for the Land and Water Conservation Fund (“LWCF”) and the authorization for the fund (created in 1965) will expire in 2018 if not renewed by Congress.⁴⁰⁸ The LWCF is vital to the support of historical and recreational sites and waterways throughout the United States. Although some of its funding was supposed to come from offshore drilling lease revenues, the money has been diverted to other uses.⁴⁰⁹

VI. REGULATION OF CLIMATE IMPACT OF GHGs UNDER THE CLEAN AIR ACT

A. EPA Authority to Regulate GHGs

The EPA is empowered to list categories of air pollution and establish emission standards through the Clean Air Act (“CAA”).⁴¹⁰ Since its inception in 1970, the EPA has developed regulations for six “traditional criteria pollutants,” under the National Ambient Air Quality Standards (“NAAQS”), all of which have been upheld on review by the Supreme Court.⁴¹¹ They are: fine particulate matter (“PM”),⁴¹² sulfur dioxide, nitrogen dioxide and nitrogen oxide, carbon monoxide, ozone and lead.⁴¹³

⁴⁰⁷ Brian Maffly, *Is the Antiquities Act Broken? Utah Congressman Thinks So*, SALT LAKE TRIB. (Oct. 24, 2017), <http://www.sltrib.com/news/environment/2017/10/24/is-the-antiquities-act-broken-utah-congressman-thinks-so/>.

⁴⁰⁸ *LWCF Four Letters You Should Know*, TR. FOR PUB. LAND, <https://www.tpl.org/lwcf#sm.0001tpaezr15uxehmyid1gqim22ah> (last visited Mar. 27, 2018).

⁴⁰⁹ *Id.*

⁴¹⁰ See 42 U.S.C. §§ 7411(c)(2), (d)(2) (authorizing the EPA to delegate implementation and enforcement authority to the States, while retaining power to inspect, monitor and impose administrative penalties and commence civil actions against polluters).

⁴¹¹ *Whitman v. Am. Trucking Ass’n*, 531 U.S. 457 (2001) (Unanimously holding that delegation of authority to EPA under the CAA does not permit EPA to consider implementation costs in setting NAAQS. States, however, can consider the most cost-effective way of implementing NAAQS when developing State Implementation Plans (“SIPs”) for compliance with the CAA.).

⁴¹² See *Study of U.S. Seniors Strengthens Link Between Air Pollution and Premature Death*, SCI. DAILY (June 28, 2017), <https://www.sciencedaily.com/releases/2017/06/170628183211.htm> (discussing a recent Harvard University study of the long-term effect of the current particulate matter standard of PM 2.5 on Americans over sixty-five concluded that 12,000 lives could be saved annually by reducing the standard by one microgram per cubic meter nationwide. Another 19,000 lives could be saved if the level of ozone was lowered one part per billion).

⁴¹³ *Criteria Air Pollutants*, EPA, <https://www.epa.gov/criteria-air-pollutants> (last visited Mar. 27, 2017).

In the 2007 case of *Massachusetts v. EPA*,⁴¹⁴ the Supreme Court recognized that the rulemaking authority of EPA extended to GHGs pursuant to CAA § 111, despite the EPA position under the Bush administration that it lacked such authority. The Court concluded that GHGs qualify as “air pollutant[s]” under the CAA.⁴¹⁵ In response, EPA issued a 2009 finding that CO₂ and other GHGs were linked to climate change and were harmful to human health and the environment, under what was called the “Endangerment Rule.”⁴¹⁶ President Obama issued a number of executive orders that recognized the importance of addressing climate change consequences,⁴¹⁷ but President Trump rescinded them.⁴¹⁸

In its attempt to comply with the *Massachusetts* directive, EPA has developed numerous rules addressing GHG issues, including standards for power plants under the Clean Power Plan discussed below, the oil and gas industry, and motor vehicles under the Tailpipe Rule⁴¹⁹ and Triggering Rule.⁴²⁰ The Clean Power Plan was subject to continuing court challenges during the Obama administration before President Trump announced his intention to dismantle the Clean Power Plan.

B. Clean Power Plan – Construction and Deconstruction

The EPA finalized GHG standards under the Clean Power Plan⁴²¹ for power plants in August 2015 and for oil and gas industry sources in June

⁴¹⁴ 549 U.S. 497 (2007). *C.f.* *American Electric Power Co., Inc. v. Connecticut*, 131 S. Ct. 2527 (2011) (deciding that the CAA authority to regulate GHGs displaced federal common law nuisance).

⁴¹⁵ *Massachusetts*, 549 U.S. at 528-29 (quoting 42 U.S.C. §7602(g)).

⁴¹⁶ EPA Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act Endangerment Finding (Endangerment Rule), 74 Fed. Reg. 66,496, 66,535 (Dec. 15, 2009). The Endangerment Rule still applies to the recognition of the link between GHGs and climate change, notwithstanding EPA Director Pruitt’s removal of climate change information from EPA website.

⁴¹⁷ Exec. Order No. 13,653, Preparing the United States for the Impacts of Climate Change, 78 Fed. Reg. 66,817 (Nov. 1, 2013); Power Sector Carbon Pollution Standards, 78 Fed. Reg. 39,533 (June 25, 2013); Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 80 Fed. Reg. 68,743 (Nov. 3, 2015); Memorandum from President Barak Obama on Climate Change and National Security (Sept. 21, 2016); EXEC. OFFICE OF THE PRESIDENT, THE PRESIDENT’S CLIMATE ACTION PLAN (June 2013); EXEC. OFFICE OF THE PRESIDENT, CLIMATE ACTION PLAN STRATEGY TO REDUCE METHANE EMISSIONS (Mar. 2014).

⁴¹⁸ Exec. Order No. 13,783.

⁴¹⁹ Control of Air Pollution From Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards, 79 Fed. Reg. 23,414 (April 28, 2014).

⁴²⁰ Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs (“Triggering Rule”), 75 Fed. Reg. 17,004 (Apr. 2, 2010).

⁴²¹ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (“Clean Power Plan”), 80 Fed. Reg. 64,661 (Oct. 23, 2015).

2016.⁴²² Under the Clean Power Plan,⁴²³ EPA directed the states to impose limits on carbon dioxide emissions for existing power plants. The existing source rule would not require the installation of carbon capture controls, but would reduce emissions through energy efficiencies, renewable power, and similar measures “outside the fence line” of the plant—and often outside the control of the plant operators.⁴²⁴ The final rule established a performance rate target, in units of pounds of CO₂ per net Megawatt-hour produced, for power plants in each state. It then provided the states with an option to establish market-based trading systems (i.e., cap-and-trade) to achieve those standards, or a trading system for low-to-zero emitting renewable energy credits (i.e., rate-and-trade) to address the denominator of the standard.⁴²⁵

The Clean Power Plan was finalized on the same day EPA issued its new source performance standards (“NSPS”) for GHGs from major sources in 2015.⁴²⁶ Under the final version of the later rule, coal-fired power plants constructed after February 2012 were required to install back-end control devices to capture and dispose of CO₂ emissions. It gave states flexibility in meeting the goals and minimizing costs of compliance.⁴²⁷ Under the “Tailoring Rule,”⁴²⁸ the EPA’s regulation of GHGs initially targeted the largest emitters, requiring power plants, refineries and large industrial plants to obtain New Source Review permits, with a phase-in period for smaller facilities emitting as low as 100 tons per year. These standards would attach when CAA permits were required for new and existing industrial facilities in attainment areas subject to regulation under NSR and PSD for CAA Title V Operating Permit programs.⁴²⁹

In *Utility Air Regulatory Group v. EPA*,⁴³⁰ the Supreme Court considered the four Obama administration rules (i.e., the Endangerment Finding, Tailpipe Rule, Tailoring Rule, and Triggering Rule) upheld by

⁴²² Oil & Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources (“Methane Rule”), 81 Fed. Reg. 35,823 (June 3, 2016) (codified 40 C.F.R. § 60).

⁴²³ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,661 (Dec. 22, 2015).

⁴²⁴ Interview with Dr. David Fraley, Director of Environmental Affairs for City Utilities of Springfield, Mo. 1981-2015 in Springfield, Mo. (May 16, 2017) (on file with author).

⁴²⁵ *Id.*

⁴²⁶ Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64509 (Oct. 23, 2015) (codified 40 C.F.R. §§ 60, 70, 71, and 98).

⁴²⁷ Fraley Interview, *supra* note 424.

⁴²⁸ Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,513 (June 3, 2010) (codified 40 C.F.R. §§ 51, 52, 70, 71) (revised 90 Fed. Reg. 26,183 (May 7, 2015)).

⁴²⁹ Fraley Interview, *supra* note 424.

⁴³⁰ 134 S.Ct. 2427 (2014).

the D.C. Circuit. In deciding these consolidated cases in 2014, the Supreme Court reiterated its position that EPA had CAA authority to regulate GHGs; however, the Court concluded that the EPA Administrator, Gina McCarthy, had exceeded that authority in substituting specific GHG emissions thresholds for stationary sources. EPA did not have discretion to require permits for only sources emitting 100,000 tons per year of CO₂, instead of the 100 tons specified by Congress. Stationary source emissions of GHGs alone could not trigger Title V permitting requirements or the CAA's prevention of significant deterioration ("PSD") requirements. The justices ruled that EPA could require PSD permits that included GHG provisions, but only for those sources that would have been subject to PSD review anyway because of their NAAQS emission levels (based on the six criteria pollutants).⁴³¹ Those "anyway" sources could only be required to comply with GHG Best Available Control Technology ("BACT")⁴³² if they emitted more than a *de minimis* amount of GHGs.

Meanwhile, President Trump's Energy Independence Order instructed EPA administrator to deconstruct the Clean Power Plan by suspending, revising and rescinding it "as soon as practicable."⁴³³ Although the executive order was signed at EPA headquarters, in the presence of oil and coal executives on March 28, 2017, there was an "accidental" press release from EPA asserting that "[w]alking away from the Clean Power Plan and other climate initiatives, including critical resiliency projects is not just irresponsible—it's irrational."⁴³⁴ While it is true that the coal and electric industries would likely experience job losses with the implementation of the Plan, the Clean Power Plan also provided for transition training and benefits for displaced workers. In addition, the Clean Power Plan could generate far more jobs than it would displace over the long term.⁴³⁵

⁴³¹ *Id.*

⁴³² 42 U.S.C. § 7411(a)(1) (defining the BACT "standard of performance" as "a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements)" through the application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant, applied to major sources under Title I, Part C).

⁴³³ Exec. Order No. 13,783, § 4.

⁴³⁴ Maya Kosoff, *E.P.A. Accidental Issues Press Release Slamming Trump's Climate Policy*, VANITY FAIR (Mar. 30, 2017), <http://www.vanityfair.com/news/2017/03/epa-accidentally-issues-press-release-slamming-trumps-climate-policy>.

⁴³⁵ See *The EPA's Clean Power Plan: How Unions and Allies Can Protect Affected Workers*, LABOR NETWORK FOR SUSTAINABILITY, <http://www.labor4sustainability.org/articles/the-epas-clean-power-plan-how-unions-and-allies-can-protect-affected-workers/> (last visited Mar. 27, 2018). See ANALYSIS GROUP, *EPA'S CLEAN POWER PLAN: STATES' TOOLS FOR REDUCING COSTS*

The four major actions related to the Clean Power Plan are suspended while the Trump administration seeks appropriate relief from the courts. Implementation is now stayed, with the D.C. Circuit granting the state petitioners' motion to hold in abeyance (initially for sixty days) the consolidated cases of *West Virginia v. EPA* from the April 28, 2017 date of its order.⁴³⁶ In November 2017, the case was still on hold, with EPA ordered to file status reports every thirty days.⁴³⁷ EPA's Administrator signed a Notice of Proposed Rulemaking to repeal the Clean Power Plan on October 10, 2017,⁴³⁸ with a public comment period extending until January 16, 2018.⁴³⁹ In language very critical of President Obama, an EPA news release denounced the Obama administration's cost-benefit analysis and the Obama era EPA's alleged overreach under the CAA.⁴⁴⁰ If Administrator Pruitt decides to withdraw the NSPS that sets minimum control requirements for major GHG sources such as CO₂ disposal, a new NSPS would have to be created pursuant to CAA § 111(b) before an alternative plan could be adopted, since the two are interlinked.⁴⁴¹

C. Mobile Sources of GHGs and CAFE Standards Challenged

The National Highway Traffic Safety Administration ("NHTSA") within the Department of Transportation ("DOT") has the primary responsibility for setting Corporate Average Fuel Economy ("CAFE") standards using fuel economy data derived from EPA testing. The 1975 Energy Policy Conservation Act ("EPCA")⁴⁴² and 2007 Energy Independence and Security Act ("EISA")⁴⁴³ gave NHTSA authority to prescribe fuel economy standards.⁴⁴⁴ The Secretary of Transportation is required to consult with the EPA Administrator before prescribing fuel

AND INCREASING BENEFITS TO CONSUMERS (July 2014), http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_epa_clean_power_plan_report.pdf.

⁴³⁶ *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Apr. 28, 2017).

⁴³⁷ Order, *West Virginia*, No. 15-1363 (D.C. Cir. Nov. 9, 2017) (ordering grant of sixty day abeyance). See also *Clean Power Plan Case Resources*, ENVTL. DEF. FUND, <https://www.edf.org/climate/clean-power-plan-case-resources> (last visited Mar. 27, 2018).

⁴³⁸ Repeal of Carbon Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48,035 (Oct. 16, 2017).

⁴³⁹ Repeal of Carbon Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 51,787 (Nov. 8, 2017) (extension of comment period).

⁴⁴⁰ News Release, EPA, EPA Takes Another Step to Advance President Trump's America First Strategy, Proposes Repeal of "Clean Power Plan" (Oct. 10, 2017), <https://www.epa.gov/newsreleases/epa-takes-another-step-advance-president-trumps-america-first-strategy-proposes-repeal>.

⁴⁴¹ See Jim Rubin & Derek Furstenwerth, *Trump Seeks to Uproot the Obama Climate Change Agenda, But Can he Succeed?*, 48 TRENDS, July-Aug. 2017, at 2.

⁴⁴² 42 U.S.C. § 620 (1975).

⁴⁴³ 42 U.S.C. § 17001 (2007).

⁴⁴⁴ 49 U.S.C. § 32,902(a).

economy standards,⁴⁴⁵ and EPA is to calculate the fuel economy of vehicles and test automakers' compliance with fuel economy standards.⁴⁴⁶ Since 1975, they have set standards on mobile source emissions (i.e., from light and heavy duty vehicles),⁴⁴⁷ adjusting the mileage standards downward periodically. Initially these standards controlled for emissions of NO_x, PM, and carbon monoxide ("CO").⁴⁴⁸

Title II of the CAA forms the basis for the EPA's authority to regulate GHGs emissions from new motor vehicles if the agency forms a judgment that such emissions contribute to climate change.⁴⁴⁹ In response to *Massachusetts*, the EPA concluded that there is "compelling" evidence supporting the "attribution of observed climate change to anthropogenic" emissions of GHGs (including carbon dioxide).⁴⁵⁰ The EPA further concluded that GHGs from motor vehicles cause air pollution "which may reasonably be anticipated to endanger public health or welfare" under the 2009 Endangerment Rule.⁴⁵¹ The corresponding Tailpipe Rule⁴⁵² found that such emissions contribute to climate change and endanger human health and the environment. The "Triggering Rule" reaffirmed the Johnson Memo finding that sources would not have to include GHGs in their PSD permits until the effective date of the Tailpipe Rule (the first day that model year 2012 autos could be marketed).⁴⁵³ That would be the "trigger" after which GHGs would be regulated under the CAA, thereby requiring their inclusion in BACT review.⁴⁵⁴ The authority of EPA to craft the tailoring and triggering rules was successfully challenged in coordinated cases in *Utility Air Regulatory Group*, discussed above.⁴⁵⁵

There were significant changes to the CAFE standards affecting heavy-duty diesel engines beginning with the 2004 model year and again in 2007. The 2007 standard was phased in over the period of 2007-2010 with the aim of reducing diesel emissions by ninety-five percent

⁴⁴⁵ *Id.* § 32,902(b).

⁴⁴⁶ *Id.* § 32,904.

⁴⁴⁷ *Clean Air Act 101 Module 2 Mobile Controls Sources*, EPA WEB ARCHIVE (Aug. 26, 2010), https://archive.epa.gov/apti/video/web/pdf/cleanair101module2mobilesourcesfinal_otaq_ogc_8-26-10.pdf.

⁴⁴⁸ *Id.* and Fraley Interview, *supra* note 424 (CO is the poisonous gas, not to be confused with carbon dioxide, CO₂, the greenhouse gas).

⁴⁴⁹ 42 U.S.C. § 7401.

⁴⁵⁰ Endangerment Rule, 74 Fed. Reg. 66,518.

⁴⁵¹ *Id.*

⁴⁵² Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule ("Tailpipe Rule"), 74 Fed. Reg. 25,323 (July 6, 2010) (codified 40 C.F.R. §§ 85, 600, 49 C.F.R. §§ 523, 531, 533, 536, 537).

⁴⁵³ Triggering Rule, 75 Fed. Reg. 17,004.

⁴⁵⁴ Fraley Interview, *supra* note 424.

⁴⁵⁵ 134 S.Ct. 2427 (2014).

compared to the previous 1998 standard. To meet the 2007 standards, diesel engines had to be equipped with exhaust pipe control equipment that was very sensitive to the presence of sulfur in the fuel under the clean diesel standard. The 2010 standards were even more stringent for nitrogen oxide emissions. Engine manufacturers experienced difficulty in meeting the new standards and were allowed to purchase a limited number of emission offsets.⁴⁵⁶

The federal government amended the CAA to preempt state standards to control emissions from motor vehicles. California was the only state that was granted a waiver from federal preemption under 42 U.S.C. § 7543(b) when EPA reconsidered the California Air Resources Board's request to allow California to retain its own state standards on January 21, 2009.⁴⁵⁷ It adopted its own vehicle emission standards prior to March 30, 2006.⁴⁵⁸ California subsequently passed the state's Global Warming Solutions Act in 2006,⁴⁵⁹ with the goal of reducing GHGs to 1990 levels by 2020, in part through the use of offsets.⁴⁶⁰ Other states may adopt California's standards,⁴⁶¹ and thirteen have done so.⁴⁶²

In response to *Massachusetts v. EPA*, the EPA decided to issue automotive emission standards under Title II of the CAA. The industry agreed to the national standards to avoid having to meet state-by-state standards during the bailout of the auto industry after the 2008 recession. EPA and DOT created a joint rule for emission and fuel economy standards for medium and heavy-duty vehicles in 2011,⁴⁶³ standards

⁴⁵⁶ U.S.: *Heavy-Duty Emissions*, TRANSPORT POLICY, http://transportpolicy.net/index.php?title=US:_Heavy-duty:_Emissions (last visited Mar. 27, 2018).

⁴⁵⁷ Decision Granting a Waiver of Clean Air Act Preemption, 74 Fed. Reg. 32,744 (July 8, 2009). *See also* California Motor Vehicle Pollution Control Standards; Reconsideration of Previous Denial of Waiver of Preemption, 74 Fed. Reg. 7040 (Feb. 12, 2009).

⁴⁵⁸ Pursuant to CAA, 42 U.S.C. 7543(a).

⁴⁵⁹ Global Warming Solutions Act of 2006, A.B. 32, 2005-2006 Sess. (Cal. 2006) (adding Division 25.5 to CAL. HEALTH & SAFETY CODE § 38500 relating to air pollution).

⁴⁶⁰ OFFICE OF ADMIN. LAW, RULEMAKING TO CONSIDER THE ADOPTION OF A PROPOSED CALIFORNIA CAP ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE MECHANISMS REGULATION, INCLUDING COMPLIANCE OFFSET PROTOCOLS (2011) (adopting Cap-and-Trade program through which the California Air Resources Board establishes caps on GHGs, allowing regulated entities to meet lower emissions through a combination of offsets and allowances). *See Compliance Offset Program*, CAL. AIR RESOURCES BD. (Mar. 28, 2018), <https://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm>.

⁴⁶¹ *Id.*

⁴⁶² Stephen Edelstein, *Which States Follow California's Emission and Zero-emission Vehicle Rules?*, GREEN CAR REPORTS (Mar. 7, 2017), https://www.greencarreports.com/news/1109217_which-states-follow-californias-emission-and-zero-emission-vehicle-rules.

⁴⁶³ Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium-and Heavy-Duty Engines and Vehicles, 76 Fed. Reg. 57,106 (Sept. 15, 2011).

which generally were supported by the trucking industry.⁴⁶⁴ New standards to cover model year 2017-2027 were finalized in 2016 to cover semi-trucks, large pickup trucks, vans, work trucks, and buses.⁴⁶⁵

The 2009 agreement between DOT and the auto industry also led to 2010 Light-Duty CAFE standards. EPA and NHTSA jointly issued the “Tailpipe Rule” to regulate light-duty vehicle emissions in 2010,⁴⁶⁶ which was revisited in October 2012.⁴⁶⁷ The 2012 GHG standards for cars and light trucks are scheduled to be phased in from model years 2017-2025.⁴⁶⁸ These standards would require the industry to deliver a fleet average of at least 54.5 mpg by 2025.⁴⁶⁹ EPA estimated that the model years 2022-2025 standards will reduce GHG emissions by 540 million metric tons and reduce oil consumption by 1.2 billion barrels over the lifetime of the regulated vehicles.⁴⁷⁰ EPA committed to a “Mid-Term Evaluation” to assess whether to strengthen, weaken, or retain those long-term standards. In the last days of the Obama presidency, EPA Administrator made a final determination to retain the model years 2022-2025 standards.⁴⁷¹

The Trump administration is taking significant steps to dismantle not only the Clean Power Plan, but also CAFE standards for motor vehicles. Mitch Bainwol, head of the Alliance of Automobile Manufacturers trade group, criticized 2025 fuel economy standards as too costly. In testimony delivered to the House Energy and Commerce Committee in 2016, he cited Trump administration figures that doubling average vehicle fuel

⁴⁶⁴ JAMES MCCARTHY, CONG. RESEARCH SERV., R44744, CLEAN AIR ACT ISSUES IN THE 115TH CONGRESS: IN BRIEF (Mar. 12, 2018).

⁴⁶⁵ Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium-and Heavy-Duty Engines and Vehicles-Phase, 81 Fed. Reg. 73,478, 73,482 (Oct. 25, 2016).

⁴⁶⁶ Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. 25,324 (May 7, 2010).

⁴⁶⁷ 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards (“Light Duty Standards”), 77 Fed. Reg. 62,623 (Oct. 15, 2012).

⁴⁶⁸ See EPA & NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION & CALIFORNIA AIR RESOURCES BOARD, INTERIM JOINT TECHNICAL ASSESSMENT REPORT: LIGHT DUTY VEHICLE GREENHOUSE GAS EMISSION STANDARDS AND FUEL ECONOMY STANDARDS FOR MODEL YEARS 2017-2025 (2010), <https://www.epa.gov/sites/production/files/2016-10/documents/ldv-ghg-tar.pdf>.

⁴⁶⁹ Light-Duty Standards, 77 Fed. Reg. at 62,627.

⁴⁷⁰ Christopher J. Carr & Tyler G. Welti, *EPA Issues Final Determination That No Adjustments to GHG Standards for Model Years 2022-2025 Will Be Made, but Questions Remain*, MORRISON FOERSTER (Jan. 18, 2017), <https://www.mofo.com/resources/publications/170118-epa-determination-ghg-standards.pdf>.

⁴⁷¹ Letter from Adm’r of the EPA Gina McCarthy to Stakeholders, Final Determination of the Mid-Term Evaluation of Light-duty Vehicle GHG Emissions Standards for Model Years 2022-2025 (Jan. 12, 2017) (adopting EPA Proposed Determination for the Mid-Term Evaluation, 81 Fed. Reg. 87,927 (Dec. 6, 2016)).

economy by 2025 will cost the industry \$200 billion over thirteen years.⁴⁷² In January Ford CEO Mark Fields told President Trump that it could cost one million automotive jobs. In March, the Trump administration filed a Notice of Intent to reconsider the Mid-Term Evaluation of the mileage and timing targets of the already promulgated CAFE 2022-2025 GHG standards for light-duty vehicles.⁴⁷³ Assessment of the appropriate maximum feasible standards is slated for completion by April 1, 2018.⁴⁷⁴ Despite the importance of CAFE standards to air quality and reduction of GHGs, such measures are seen as incompatible with the Trump administration's support of the energy extraction, energy production, and motor vehicle industries. In Administrator Pruitt's recent interview about the Mid-Term Evaluation, he stated that the CAFE standards for the 2020s are inappropriate and would be revised to relieve the auto industry of expensive burdens and to make cars less expensive for people to buy.⁴⁷⁵ In addition, Representative Roger Williams has introduced the CAFE Standards Repeal Act of 2017.⁴⁷⁶

VII. ADVOCATES AND BENEFACTORS: INTEREST GROUPS AND APPOINTEES INFLUENTIAL IN TRUMP ADMINISTRATION'S

A. Regulatory Deconstructionist Interest Groups Shape Pro-Energy, Pro-Big Business, Climate Change Denial Agenda

Leaders of forty-four conservative organizations reminded President Trump of his campaign promise to pull out of the Paris Climate Agreement.⁴⁷⁷ Additionally, twenty conservative Republican senators,

⁴⁷² *GOP Lawmakers Challenge CAFE Standard*, AUTOMOTIVE NEWS (Sept. 21, 2016), <http://www.autonews.com/article/20160921/OEM11/160929935/gop-lawmakers-challenge-cafe-standard>.

⁴⁷³ Notice of Intention to Reconsider the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light Duty Vehicles, 82 Fed. Reg. 14,671 (Mar. 22, 2017).

⁴⁷⁴ *Id.* at 14,672.

⁴⁷⁵ See Patrick Martin, *Pruitt says Obama-era EPA Auto Industry Standards are "Inappropriate"* (Apr. 3, 2018), https://www.washingtonpost.com/video/politics/pruitt-says-obama-era-epa-auto-industry-standards-are-inappropriate/2018/04/03/8037ad12-374e-11e8-af3c-2123715f78df_video.html?utm_term=.ce79c72fe589; Jennifer Dlouhy, Ryan Beene, & John Lippert, *EPA Chief Signals Show Down with California on Fuel Emission Standards*, BLOOMBERG (Mar. 13, 2018), <https://www.bloomberg.com/news/articles/2018-03-13/epa-chief-signals-showdown-with-california-on-tailpipe-standards>.

⁴⁷⁶ CAFE Standards Repeal Act of 2017, H.R. 1593, 115th Cong. (2017).

⁴⁷⁷ *Forty Four Free-Market Groups Urge Trump to Withdraw from Paris Climate Agreement*, COMPETITIVE ENTERPRISE INST. (May 8, 2017), <https://cei.org/content/forty-four-free-market-groups-urge-trump-withdraw-paris-climate-agreement> (including support from the Heritage Foundation, Hartland Institute, American Energy Alliance) and Myron Ebell of CEI, and part of the Trump transition team).

EPA's Scott Pruitt, and White House strategist Steve Bannon, also advised President Trump to withdraw from the agreement.⁴⁷⁸

Many of the groups opposed to the Climate Change Agreement have financial ties to the Koch brothers (who are heavily invested in traditional energy businesses).⁴⁷⁹ It was estimated that in 2009 alone, Charles and David Koch spent \$50 million to finance climate change skepticism.⁴⁸⁰ As discussed above, their holdings include a crude oil terminal at the starting point of the Keystone pipeline in Canada.⁴⁸¹ It is too soon to know what editorial influence they may exert on their recent investment in *Time* magazine.⁴⁸² The Koch brothers have helped fund dozens of organizations that further oil, coal, and energy interests, foster deregulatory goals, and promote minimization of taxes on big businesses. Their funds support organizations such as the Heritage Foundation, Americans for Prosperity, Club Growth, the American Legislative Exchange Council, Americans for Tax Reform, Tea Party candidates, the Judicial Watch, and the Cato Institute.⁴⁸³ Efforts of Koch-financed groups and the Competitive Enterprise Institute strongly influenced Trump's decision to withdraw from the Paris Climate Agreement.⁴⁸⁴ Furthermore, for over 25 years, the Cato Institute has advocated for the repeal of most of the CAA, CWA, the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and the Resource Conservation and Recovery Act ("RCRA"); and for the return of environmental regulation to local control, stating that, "Congress must jettison the entire foundation

⁴⁷⁸ See Camila Domonoske, *Trump Announces Withdrawal From Paris Climate Accord*, NPR (June 1, 2017), <https://www.npr.org/sections/thetwo-way/2017/06/01/530748899/watch-live-trump-announces-decision-on-paris-climate-agreement>.

⁴⁷⁹ Drew Griffin, *Who Influenced Trump's Climate Thinking?*, CNN (June 3, 2017), <http://www.cnn.com/videos/us/2017/06/03/trump-ebell-climate-competitive-enterprise-institute-griffin-dnt-kth-ac.cnn>; Shear & Cardwell, *supra* note 59; Readfearn *supra* note 59.

⁴⁸⁰ Sasson, *supra* note 60.

⁴⁸¹ *Id.*

⁴⁸² Mike Snider, *Koch Brothers Firm's Investment in 'Time' Raises Questions of Editorial Independence*, USA TODAY (Nov. 27, 2017), <https://www.usatoday.com/story/money/business/2017/11/27/koch-brothers-investment-time-raises-questions-editorial-independence/896944001/>.

⁴⁸³ See Mark Karlin, *Misinforming the Majority: A Deliberate Strategy of Right-wing Libertarians*, TRUTHOUT (July 9, 2017), <http://www.truth-out.org/opinion/item/41206-misinforming-the-majority-a-deliberate-strategy-of-right-wing-libertarians> (for other examples of Koch funded organizations, including the Center for Libertarian Studies, George Mason University's Buchanan-Koch enterprise, Donors Trust, Freedom Partners, Independent Institute, Institute for Justice, Generation Opportunity and the Leadership Institute).

⁴⁸⁴ Drew Griffin & Miranda Green, *The Man Behind the Decision to Pull Out of the Paris Agreement*, CNN (June 3, 2017), <http://www.cnn.com/2017/06/03/politics/myron-ebell-paris-agreement/index.html>.

of modern environmental law if it hopes to provide regulatory relief for a battered economy.”⁴⁸⁵

Two months before President Nixon appointed Lewis Powell to the Supreme Court in 1971, Powell sent a then confidential memo to the United States Chamber of Commerce advocating coalition-building among business interests to counter liberal interest groups and to defend business interest in the courts.⁴⁸⁶ This memo provided the foundation for the creation of the Heritage Foundation, the Manhattan Institute, the Cato Institute, and Citizens for a Sound Economy, as well as Accuracy in Academia. It served as the catalyst for pro-active educational efforts to shift values.⁴⁸⁷

James McGill Buchanan, a Nobel Prize winner in Economics, also advocated using the political process to reconstruct democracy to safeguard the wealth and power of the economic elite minority and their property rights by fostering decentralization/federalism and deregulation. The 2017 tax reform legislation slashed the corporate tax rate from thirty-five percent to twenty-one percent,⁴⁸⁸ likely creating a massive deficit, which will give the Republicans grounds to argue for cut backs in social services, social security, and Medicare.⁴⁸⁹ This Dickensian opposition to subsidies for the poor or unfortunate extends to international relief, evidenced through opposition to the United States funding of programs such as the Green Climate Change Fund and the office of International Climate & Technology.

As Senator Elizabeth Warren recognized, “Big corporations and rich individuals have more influence in Washington than everyone else because they can offer politicians the ingredient that is essential to any battle for reelection: money. In recent years campaigns have become really, really expensive.”⁴⁹⁰

Billionaire Robert Mercer is viewed as one of the top ten most influential billionaires in conservative politics, having donated over \$36.8

⁴⁸⁵ JERRY TAYLOR, *THE CATO HANDBOOK FOR CONGRESS: POLICY RECOMMENDATIONS FOR THE 104TH CONGRESS* 261 (Cato Institute, 1st ed. 1995), <https://object.cato.org/sites/cato.org/files/serials/files/cato-handbook-policymakers/1995/9/104-28.pdf>.

⁴⁸⁶ *The Powell Memo (also known as the Powell Manifesto)*, RECLAIM DEMOCRACY!, http://reclaimdemocracy.org/powell_memo_lewis/ (last visited Mar. 27, 2018).

⁴⁸⁷ Terry Gross, *Tracing the ‘Rise of the Judicial Right’ to Warren Burger’s Supreme Court*, NPR (July 6, 2016), <http://www.npr.org/2016/07/06/484939647/tracing-the-rise-of-the-judicial-right-to-warren-burgers-supreme-court>.

⁴⁸⁸ Tax Cuts and Jobs Act, *supra* note 181, at § 13001.

⁴⁸⁹ Lauren Fox & Phil Mattingly, *The GOP Tax Plan is Heading for Conference Committee. What Happens Now?*, CNN (Dec. 4, 2017), <http://www.cnn.com/2017/12/04/politics/tax-reform-state-of-play/index.html>.

⁴⁹⁰ ELIZABETH WARREN, *THIS FIGHT IS OUR FIGHT, THE BATTLE TO SAVE AMERICA’S MIDDLE CLASS*, 160 (2017).

million to Super PACs⁴⁹¹ since the landmark 2010 Supreme Court case of *Citizens United v. Federal Election Commission*⁴⁹² expanded First Amendment “personhood” protection for corporations and the ability of their decision-makers to spend corporate funds to foster political agendas.⁴⁹³ The PAC Make America Number 1 (overseen by his daughter Rebekah Mercer) and Breitbart News are key recipients of his money.⁴⁹⁴ While Mercer initially backed Ted Cruz, he switched to Trump and promoted Steve Bannon and Kelly Ann Conway to become key White House strategists in the Trump campaign and administration. Steve Bannon returned to Breitbart to lead the fight from outside the White House in late August 2017,⁴⁹⁵ but continues to foster the goal of deconstruction of the administrative state. Bannon was forced out of the Breitbart leadership at the beginning of 2018, a departure initiated by investor Rebekah Mercer.⁴⁹⁶ Rebekah Mercer also runs the Mercer Family Foundation that donates to other conservative PACS, such as the Cato Institute and the Manhattan Institute.⁴⁹⁷

B. Judicial Appointments Evolve: as More Conservative Justices Adopt Skeptical Views of Regulatory Restrictions on Business Practices

Who is appointed to the Supreme Court will affect shifts in constitutional and regulatory interpretation. At the time Justice Powell was appointed as a Supreme Court Justice in 1971, the majority of the justices still held views that regulating business activities to protect people and the environment was a social priority and a constitutionally permissible policy.

In the 1981 decision of *Hodel v. Virginia Surface Mining and Reclamation Association, Inc.*, the Supreme Court upheld the Surface Mining Control and Reclamation Act (“SMCRA”)⁴⁹⁸ as a comprehensive

⁴⁹¹ Max Kutner, *Meet Robert Mercer, the Mysterious Billionaire Benefactor of Breitbart*, NEWSWEEK (Aug. 21, 2016, updates Nov. 11, 2016 and Dec. 2, 2016), <http://www.newsweek.com/2016/12/02/robert-mercer-trump-donor-bannon-pac-523366.html> (ranking Mercer third in donations to conservative groups and reporting that the PAC Make America Number 1 received \$15.5 million in Mercer donations).

⁴⁹² 558 U.S. 310 (2010).

⁴⁹³ Justice Powell authored the majority opinion in *First National Bank v. Bellotti*, 435 U.S. 765, 776 (1978), which assumed that the bank had protected First Amendment rights to engage in political speech, laying the foundation for the 2010 *Citizens United* decision.

⁴⁹⁴ Kutner, *supra* note 491; Griffin & Green, *supra* note 484.

⁴⁹⁵ See Jeremy Peters, *Steve Bannon Steps Down from Breitbart Post*, N.Y. TIMES (Jan. 9, 2018), <https://www.nytimes.com/2018/01/09/us/politics/steve-bannon-breitbart-trump.html>.

⁴⁹⁶ *Id.*

⁴⁹⁷ Kutner, *supra* note 491.

⁴⁹⁸ *Hodel v. Va. Surface Mining and Reclamation Ass’n Inc.*, 452 U.S. 264, 268 (1981); 30 U.S.C. § 1202(a).

statute to “establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations.”⁴⁹⁹ The now repealed Stream Protection Rule,⁵⁰⁰ discussed in Part IV was drafted under authority delegated to EPA by the SMCRA.

In *Hodel*, the Court viewed Congress as having nearly unlimited power to regulate under the Interstate Commerce Clause,⁵⁰¹ when coupled with the Elastic Clause, holding that:

[T]he Commerce Clause is a grant of plenary authority to Congress . . . may be exercised to its utmost extent, and acknowledges no limitations, other than are prescribed in the constitution . . . the commerce power extends not only to the ‘use of channels of interstate or foreign commerce’ . . . but also to ‘activities affecting commerce.’⁵⁰²

During the past twenty-five years, decisions of the United States Supreme Court have increasingly sided with large business interests. Petitions supported by the Chamber of Commerce are granted thirty-two percent of the time, compared to only one in every one hundred petitions from other petitioners granted by the Supreme Court.⁵⁰³ The Chamber’s position wins sixty-nine percent of the time under the Roberts Court, more than it did under the Rehnquist Court.⁵⁰⁴ The shift began in 1995 when the majority of the Court began to interpret congressional authority to regulate business interests under the interstate commerce clause more narrowly in *United States v. Lopez*.⁵⁰⁵ Since then, the pro-business shift has become more pronounced during the Roberts Court than any time since World War II.⁵⁰⁶

The regulatory deconstructionists and energy extraction interests now strongly influence political appointments, judicial appointments, and the

⁴⁹⁹ *Hodel*, 452 U.S. at 268.

⁵⁰⁰ 81 Fed. Reg. at 93,066.

⁵⁰¹ U.S. CONST. art. 1 § 8, cl. 3.

⁵⁰² *Hodel*, 452 U.S. at 276-77.

⁵⁰³ Adam Liptak, *Corporations Find a Friend in the Supreme Court*, N.Y. TIMES (May 4, 2013), <http://www.nytimes.com/2013/05/05/business/pro-business-decisions-are-defining-this-supreme-court.html>.

⁵⁰⁴ Judith Schaeffer, *Supreme Court Nominee Neal Gorsuch: Expected by Big Business to be Another Reliable Vote on the Roberts Court*, CONSTITUTION ACCOUNTABILITY CENTER (Mar. 2017), <https://www.theconstitution.org/sites/default/files/CAC-Gorsuch-And-Business.pdf>.

⁵⁰⁵ 514 U.S. 549 (1995).

⁵⁰⁶ See Corey Ciocchetti, *The Constitution, The Roberts Court, and Business: The Significant Business Impact of the 2011-2012 Supreme Court Term*, 4 WM & MARY BUS. L. REV. 385 (2013). See also Hope Babcock, *How the Supreme Court Uses Certiorari in the Ninth Circuit to Further Pro-Business Agenda: A Strange Pas de Deux within an Unfortunate Coda*, 41 ECOLOGY L. Q. 653 (2014); Nick Wells & Mike Fahey, *The US Supreme Court is More Friendly to Businesses than any time Since World War II*, CNBC (Mar. 1, 2017), <https://www.cnbc.com/2017/03/01/supreme-court-very-business-friendly-data-show.html>.

policies of the Trump administration, as groups such as the Heritage Foundation, Federalist Society, and the Chamber of Commerce gain even more influence than they exerted under prior Republican presidents. The conservative Federalist Society (which began its influence under the Reagan administration) is now the clearing-house for judicial appointments during the Trump administration.⁵⁰⁷ The Chamber of Commerce considers the appointment of Neil Gorsuch (son of former conservative EPA Administrator, Ann Gorsuch Burford) to the Supreme Court as a big win for business interests,⁵⁰⁸ especially considering his tendency to side with management in employee suits.⁵⁰⁹ His views are also especially appealing to the business community because of his “deep-rooted skepticism of administrative agency interpretation of the law,”⁵¹⁰ including his view that the *Chevron*⁵¹¹ deference requirement (that courts defer to agencies’ reasonable interpretation of laws) is a violation of separation of powers. Although Justice Gorsuch does not have an extensive record deciding environmental cases, environmentalists fear that his anti-deference position and expectation that agencies should be held to higher standards will not bode well for

⁵⁰⁷ Lawrence Baum & Neal Devins, *Federalist Court – How the Federalist Society Became the De facto Selector of Republican Supreme Court Justices*, SLATE (Jan. 31, 2017), http://www.slate.com/articles/news_and_politics/jurisprudence/2017/01/how_the_federalist_society_became_the_de_facto_selector_of_republican_supreme.html.

⁵⁰⁸ Thomas Donohue (Pres. and CEO), *Key Vote Letter: Confirm Neil Gorsuch*, CHAMBER OF COMMERCE (Apr. 4, 2017), <https://www.uschamber.com/above-the-fold/confirmgorsuch>. See

Charlie Savage, *Neil Gorsuch Helped Defend Disputed Bush-Era Terror Policies*, N. Y. TIMES (Mar. 15, 2017), <https://www.nytimes.com/2017/03/15/us/politics/neil-gorsuch-torture-guantanamo-bay.html> (discussing that Neil Gorsuch worked for the Justice Department under President George W. Bush on matters related to executive power, national security, torture and wiretapping, and advocated a weakening of review by civil courts of military tribunal decisions to “reduce significantly the potential for judicial creativity and his mother was Ann Gorsuch Burford, conservative EPA director under President Reagan).

⁵⁰⁹ See *Transam Trucking, Inc. v. Admin. Review Bd., Dep’t of Labor*, 833 F.3d 1206, 1216-17 (10th Cir. 2016) (then Judge Gorsuch dissenting adopted narrow construction of a statute, criticized the employee who refused his employer’s directive either to continue to remain with the trailer, although he was going numb, or to drive away with the trailer, despite its frozen brakes). See also *Compass Envtl. Inc. v. Occupational Safety & Health Review Comm’n*, 663 F.3d 1164, 1171-72 (10th Cir. 2011) (Judge Gorsuch dissenting, siding with the company that did not provide safe training to an electrocuted employee because he believed the agency failed to meet its burden of proof to show standards in the industry were violated or other evidence of a failed duty).

⁵¹⁰ See *TransAm Trucking*, 833 F.3d at 1216-17; Judith Schaeffer, *Supreme Court Nominee Neil Gorsuch: Expected by Big Business to be Another Reliable Vote on the Roberts Court*, CONSTITUTION ACCOUNTABILITY CENTER (Mar. 2017), <https://www.theconstitution.org/sites/default/files/CAC-Gorsuch-And-Business.pdf>.

⁵¹¹ *Chevron v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

interpretation of climate change regulations and other environmental restrictions on business behavior.⁵¹²

C. Climate Change Skeptics in Charge: Where Has All the Scientific Integrity Gone?

The EPA website still posts its policy on scientific integrity (initially created in 1999) that promotes “the aims of research, such as knowledge, truth, and avoidance of error, [f]or example, prohibitions against fabricating, falsifying, or misrepresenting research data.”⁵¹³ The EPA’s Principals of Scientific Integrity required employees use the “highest integrity” to perform work “objectively, without predetermined outcomes using the most appropriate techniques,” to represent their work “fairly and accurately,” and to “avoid financial conflicts of interest and ensure impartiality.”⁵¹⁴

The appointment of climate change skeptics, regulatory deconstructionists, and members of the energy extraction industry to key leadership positions in the Trump administration, however, is resulting in diminished reliance on independent scientific expertise in the development of energy and environmental policy. As recognize in the American Bar Association’s *Environmental Forum*, these “political appointees are at best neglectful and at worst hostile to the science-based mission of their agencies.”⁵¹⁵

Ryan Zinke’s appointment to head President Trump’s Department of Interior was opposed by 170 conservation groups.⁵¹⁶ When he was in Congress, he had a less than four percent environmental rating from the League of Conservation Voters and consistently voted against endangered species protections, including the ban on ivory trade.⁵¹⁷ In his letter to the Senate, the director of the Center for Biological Diversity stated that, “[a]nyone who cares about public lands, protecting wildlife

⁵¹² John Cushman, Jr., *Why Environmentalists are so Worried About Trump’s Supreme Court Pick*, INSIDE CLIMATE NEWS (Feb. 1, 2017), <https://insideclimatenews.org/news/01022017/neil-gorsuch-donald-trump-supreme-court-climate-change>.

⁵¹³ *Basic Information about Scientific Integrity*, EPA, <https://www.epa.gov/node/38287/view#principles> (last visited April 7, 2018).

⁵¹⁴ EPA’s *Principals of Scientific Integrity*, NATIONAL PARTNERSHIP COUNCIL, <https://www.epa.gov/sites/production/files/2014-11/documents/epa-principles-of-scientific-integrity.pdf> (last visited April 7, 2018).

⁵¹⁵ Halpern, *supra* note 185, at 38.

⁵¹⁶ Letter from Center for Biological Diversity Letter to the U.S. Senate, 170 Conservation Groups Urge Senate to Reject Zinke for Interior Secretary (Feb. 6, 2017), https://www.biologicaldiversity.org/news/press_releases/2017/ryan-zinke-02-06-2017.php.

⁵¹⁷ *National Environmental Scorecard 2017*, LEAGUE OF CONSERVATION VOTERS, <http://scorecard.lcv.org/members-of-congress> (last visited Mar. 27, 2018). See also Letter from Center for Biological Diversity, *supra* note 516.

and halting the climate crisis should understand that Zinke . . . will take us in exactly the wrong direction.”⁵¹⁸ At his confirmation hearing, Zinke advocated increasing fossil fuel extraction on public lands⁵¹⁹ and his subsequent actions support that thesis. Twenty-one of Zinke’s twenty-four political appointees hail from the energy extraction industry, raising the prospect that the Department has become a captured agency.⁵²⁰

Secretary Zinke has suspended the Department of Interior’s 200 advisory scientific panels, including advisory panels on BLM, invasive species, and Alaska’s North Slope.⁵²¹ It is vital that sound scientific methods are used in developing regulatory policy and failure to retain seasoned advisors makes that more difficult. Because the Utah Resource Advisory Council, which advised the BLM, was disbanded, the decision to reduce the size of the Antiquities Act national monuments was made without this scientific advisory input.⁵²² Zinke’s declared objective is to take immediate action to advance American energy independence, noting that “for too many local communities, energy on public lands has been more of a missed opportunity.”⁵²³ He established a Royalty Policy Committee to provide advice on the fair market value of and collection of revenues from Federal and Indian mineral and energy leases and related regulatory reform.⁵²⁴

The Department of Energy has announced plans to abandoned funding for the Next-Generation Ecosystem-Tropics study on how trees and soil microbes respond to changes in rainfall, nutrient levels, carbon dioxide levels and higher temperatures.⁵²⁵ Significant cuts in funding for the United States Geological Service library system are proposed, which could lead to restricted public access.⁵²⁶ The EPA Office of Research and

⁵¹⁸ Letter from Center for Biological Diversity, *supra* note 516.

⁵¹⁹ *Id.*

⁵²⁰ See Tay Wiles, *Amit Monument Review, a Pro-Energy Interior Emerges*, HIGH COUNTRY NEWS (Aug. 1, 2017), <http://www.hcn.org/articles/interiors-energy-priorities-undergird-sweeping-monuments-review>.

⁵²¹ Juliet Eilperin & Brady Dennis, *EPA Dismisses Half of Key Board’s Scientific Advisors; Interior Suspends More than 200 Advisory Panels*, WASH. POST (May 7, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/05/07/epa-dismisses-half-of-its-scientific-advisers-on-key-board-citing-clean-break-with-obama-administration/?utm_term=.ecde24541f37.

⁵²² Halpern, *supra* note 185 at 42.

⁵²³ Press Release, Dept. of Interior, Secretary Zinke Takes Immediate Action to Advance American Energy Independence (Mar. 29, 2017), <https://www.doi.gov/pressreleases/secretary-zinke-takes-immediate-action-advance-american-energy-independence>.

⁵²⁴ *Id.*

⁵²⁵ Gabriel Popkin, *Major Tropical Research Project to Cease 7 Years Early*, EARTH & SPACE SCIENCE NEWS (Dec. 11, 2017), <https://eos.org/articles/major-federal-tropical-research-project-to-cease-7-years-early>.

⁵²⁶ Halpern, *supra* note 185 at 40.

Development also faces a proposed forty percent cut in its funding, significantly jeopardizing science-based research,⁵²⁷ including elimination of the National Center for Environmental Research (“NCER”), which provides grants for projects such as the Science to Achieve Results (“STAR”) program.⁵²⁸

EPA Administrator, Scott Pruitt, does not see human activity or carbon dioxide as significant contributors to climate change and is implementing policies that support such denial. On the eve of the Peoples’ Climate March on Washington, April 29, 2017, Pruitt ordered the removal of much of the climate change information from EPA website.⁵²⁹ In a related press release, Pruitt said that the website was being updated to “reflect the approach of new leadership” to focus more on partnering with the states,⁵³⁰ which is somewhat problematic since President Trump’s budget proposals do not fund environmental grants to the states.⁵³¹ Under the Trump administration, a growing exodus of seasoned EPA civil servants is also under way. Staffing at EPA is at a thirty-year low and three EPA scientists recently were ordered not to discuss the impact of climate change on the estuary at the Narragansett Bay Estuary Program conference; the Trump administration hopes to withdraw financial support for the program.⁵³²

The Board of Scientific Counselors (“BOSC”) advises the EPA on the strength of the scientific methods that EPA uses for its various studies and judgments. Scott Pruitt has dismissed over half of the members of the EPA’s BOSC, rather than renewing their three-year terms, without appointing replacements. It lacks sufficient members for the subcommittees to perform need oversight, so six scheduled meetings were cancelled. Pruitt has also issued a directive that prohibits any scientist who has received EPA funding from serving on the agency’s scientific advisory panels, supposedly to prevent conflicts of interest.⁵³³

⁵²⁷ *Id.*

⁵²⁸ Corbin Hair, *EPA Plan to Reorganize Environmental Science Center Raises Questions*, SCIENCE (Feb. 27, 2018), <http://www.sciencemag.org/news/2018/02/epa-plan-reorganize-environmental-science-center-raises-questions> (but noting that some of the NCER functions would be absorbed into other agencies).

⁵²⁹ See *Air Pollution: Current and Future Challenges*, EPA, https://www.epa.gov/clean-air-act-overview/air-pollution-current-and-future-challenges#_edn8 (last visited Mar. 27, 2018); Marsh, *supra* note 46; Eilperin & Mooney, *supra* note 258.

⁵³⁰ Marsh, *supra* note 46.

⁵³¹ OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, AMERICA FIRST A BUDGET BLUEPRINT TO MAKE AMERICA GREAT AGAIN 43 (Mar. 13, 2017).

⁵³² Friedman, *supra* note 396.

⁵³³ EPA, STRENGTHENING AND IMPROVING MEMBERSHIP ON EPA FEDERAL ADVISORY COMMITTEE (2017), <https://www.epa.gov/newsreleases/administrator-pruitt-issues-directive-ensure-independence-geographic-diversity>.

Nevertheless, scientists from industries being regulated can serve, despite the fact that their research is funded by companies with a financial stake in the regulation. Ten Democratic senators sent a letter to the Government Accountability Office demanding an investigation concerning this double standard.⁵³⁴ The Association of Environmental Engineers and Science Professors has established a private shadow committee to review the recommendations of the new EPA advisors.⁵³⁵ In contrast, the proposed EPA Science Advisory Board Reform Act of 2017⁵³⁶ would alter the EPA's Science Advisory Board to make it easier for regulated entities to have a seat at the table, so that scientific and technical views are "fairly balanced." A similar measure passed the House in 2015.⁵³⁷

Administrator Pruitt is now under ethics scrutiny for alleged ties to and favors from energy lobbyists.⁵³⁸ More than a dozen energy lobbyists have received appointments at the EPA, including chemical industry lobbyist Nancy Beck to oversee toxic chemical regulation⁵³⁹ and Andrew Wheeler is nominated as deputy director, whose nomination is opposed by environmental groups because of his history of lobbying for coal and fossil fuel interests, advocacy for shrinking the size of Bears Ears Monument, and climate change denial work.⁵⁴⁰ Peter Wright, a senior attorney for Dow Chemical Company, has been selected to head the Superfund program.⁵⁴¹

Scott Pruitt's history of challenging EPA policies would make him an unlikely candidate for EPA Administrator in many other administrations. As Oklahoma's Attorney General, Pruitt challenged EPA ozone and methane rules and proposed rules on coal-fired power plants.⁵⁴² Pruitt denounced the Waters of the United States ("WOTUS") Rule as "the

⁵³⁴ Georgina Gustin, *10 Senators Call for Investigation into EPA Pushing Scientists Off Advisory Boards*, TRUTHOUT (Nov. 10, 2017), <https://insideclimatenews.org/news/09112017/scott-pruitt-epa-investigation-scientists-advisory-board-gao-congress>.

⁵³⁵ See Halpern, *supra* note 185, at 44.

⁵³⁶ EPA Science Advisory Board Reform Act of 2017, H.R. 1431, 115th Cong. (2017) (passing of bill completed by House and referred to Senate Committee on the Environment and Public Works).

⁵³⁷ EPA Science Advisory Board Reform Act, H.R. 1029, 114th Cong. (2015) (passing of bill completed by House).

⁵³⁸ Rebecca Hersher, *EPA Chief Pruitt Faces Mounting Scrutiny For Ethics Violations*, NPR (Apr. 3, 2018), <https://www.npr.org/2018/04/03/599145343/epa-chief-pruitt-faces-mounting-scrutiny-for-ethics-violations>.

⁵³⁹ *Id.*

⁵⁴⁰ Rebecca Hersher, *Former Coal Lobbyist on Tap for No. 2 Spot at EPA*, NPR (Mar. 17, 2018), <https://www.npr.org/2018/03/17/593546626/former-coal-lobbyist-on-tap-for-no-2-spot-at-epa>.

⁵⁴¹ Timothy Cama, *Trump Taps Chemical Company Lawyer to Lead EPA Superfund Office*, THE HILL (Mar. 2, 2018), <http://thehill.com/policy/energy-environment/376505-trump-taps-chemical-company-lawyer-to-lead-epa-superfund-office>.

⁵⁴² Hersher, *supra* note 540.

greatest blow to private property rights the modern era has seen,”⁵⁴³ and led a multi-state lawsuit against it while he was Oklahoma’s Attorney General.⁵⁴⁴ Therefore, it is not surprising that President Trump’s February 28, 2017 Executive Order⁵⁴⁵ required a review and rescission of the WOTUS Rule.⁵⁴⁶ Administrator Pruitt signed a proposed rule in late June to rescind the Obama administration WOTUS rule and redefine “waters of the United States” in alignment with Justice Scalia’s view in the 2006 *Rapanos v. United States* plurality decision⁵⁴⁷ that only wetlands with a continuous surface connection to permanent bodies of water are protected.⁵⁴⁸ Other wetlands that are part of the ecological basin⁵⁴⁹ that lack direct physical connect would fall outside of federal CWA jurisdiction. The change ignores the essential role of wetlands in filtering pollutants, providing habitat for flora and fauna, assisting in water retention during periods of drought, and protecting against storm surges⁵⁵⁰ from storms that have increased in frequency and magnitude as climate change increases.⁵⁵¹

This diminution of scientific expertise and appointment of individuals whose views are the antithesis of the office to which they are appointed is not in the best interest of sound policy-making. President Trump’s initial nominee to head the CEQ, Kathleen Hartnett White, has been withdrawn from consideration because of the opposition of some Senate Republicans who questioned her expertise and her adamant denial of climate change factors.⁵⁵² She is a senior fellow at the Texas Public Policy

⁵⁴³ Curtis Killman, *Oklahoma Attorney General Scott Pruitt Sues EPA Again*, TULSA WORLD (July 9, 2015), http://www.tulsaworld.com/news/courts/oklahoma-attorney-general-scott-pruitt-sues-epa-again/article_c603ba08-dd62-5b0a-ad3e-e4b8d0e2d977.html.

⁵⁴⁴ BLOOMBURG BNA, 2017 OUTLOOK ON ENVIRONMENT & ENERGY (Jan. 9, 2017) (listing cases that Pruitt brought against EPA).

⁵⁴⁵ Exec. Order No. 13,778, Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule, 82 Fed. Reg. 12,497 (Mar. 3, 2017).

⁵⁴⁶ Clean Water Rule, 80 Fed. Reg. 37,054 (recodification of Pre-existing Rules June 29, 2015), (defining “Waters of the United States”).

⁵⁴⁷ *Rapanos, et ux, v. United States and Carabell v. United States Army Corps of Engineers*, 547 U.S. 715, 739 (2006).

⁵⁴⁸ Clean Water Rule, 80 Fed. Reg. 37,054.

⁵⁴⁹ *Rapanos*, 547 U.S. at 780 (Justice Kennedy concurring opinion established the “sufficient nexus” standard, that allowed wetlands to fall within federal jurisdiction under the CWA’s statutory phrase “navigable waters” if the wetlands “significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’”).

⁵⁵⁰ See *Wetlands*, *supra* note 277.

⁵⁵¹ See discussion in Endangerment Rule, 74 Fed. Reg. at 66,524-66,535. See also *Not so Big Chill: Arctic Finishes Warmest Winter on Record*, ABC (Mar. 6, 2018), <http://www.13abc.com/content/news/Not-so-big-chill-Arctic-finishes-warmest-winter-on-record-476042133.html>.

⁵⁵² Juliet Eilperin & Brady Dennis, *White House Withdraws Controversial Nominee to Head Council on Environmental Quality*, CHICAGO TRIBUNE (Feb. 4, 2018), <http://>

Foundation, funded by the Koch brothers and Exxon. In her view fossil fuels like coal are good because they “dissolved the economic justification for slavery.” However, there is one appointee pending before the Senate who does believe that humans are primarily responsible for climate change, Barry Myers, CEO of Accu-Weather, who is nominated to head NOAA, but detractors note his potential financial conflict of interest.⁵⁵³

Regulations have to be approved by the White House Office of Information and Regulatory Affairs (“OIRA”), part of the Office of Management and Budget. OIRA was established by President Clinton, under Executive Order 12,866,⁵⁵⁴ to coordinate retrospective review of regulations, decide whether agencies have adequately addressed problems during the rule-making process, and authorize government data collection and statistical practices. It can impose extensive delays by sending regulations back to the agencies.⁵⁵⁵ A 2011 report from the Center on Progressive Reform (“CPR”) stated that in ten preceding years, OIRA altered eighty-four percent of EPA rule submissions during the George W. Bush and Obama administrations. Although EPA rules constituted eleven percent of the rules reviewed, forty-one percent of OIRA meetings with various constituent groups related to EPA rules, according to the CPR report, with the OIRA open door policy allowing extensive access by industry lobbyists.⁵⁵⁶ Since President Reagan’s Executive Order 12,291, all new “major” regulations (exceeding \$100 million) are subject to Regulatory Impact Analysis (“RIA”),⁵⁵⁷ a form of cost-benefit analysis overseen by the OIRA. OIRA also participates in the implementation of the Small Business Regulatory Enforcement and Fairness Act (“SBREFA”).⁵⁵⁸ OIRA will be coordinating President Trump’s Executive

www.chicagotribune.com/news/nationworld/politics/ct-trump-environment-nominee-kathleen-hartnett-white-20180204-story.html.

⁵⁵³ See Halpern, *supra* note 185, at 39; Jason Samehow, *Barry Myers, Trump’s Pick for NOAA Declares Humans are the Main Cause for Climate Change*, WASH. POST. (Nov. 29, 2017), https://www.washingtonpost.com/news/capital-weather-gang/wp/2017/11/29/barry-myers-trumps-pick-to-run-noaa-declares-humans-are-main-cause-of-climate-change/?utm_term=.9b6ea1d3b27d.

⁵⁵⁴ Exec. Order No. 12,866, Regulatory Planning and Review, 58 Fed. Reg. 51,735 (Oct. 4, 1993).

⁵⁵⁵ Steve Eder, *Neomi Rao Scholar Who Will Lead Trump’s Regulatory Overhaul*, N.Y. TIMES (July 9, 2017), <https://www.nytimes.com/2017/07/09/business/the-scholar-who-will-help-lead-trumps-assault-on-rules.html>.

⁵⁵⁶ James Goodwin, *Behind Closed Doors at the White House: How Politics Trumps Protection of Public Health, Worker Safety, and the Environment*, CENTER FOR PROGRESSIVE REFORM (Nov. 2011), <http://www.progressivereform.org/CPRblog.cfm?idBlog=988077B5-DE2C-DC21-41F7765C3218E689>.

⁵⁵⁷ Exec. Order No. 12,291.

⁵⁵⁸ 5 U.S.C. §§ 801-804 (1996) (amended 2007).

Orders 13,771⁵⁵⁹ and 13,777,⁵⁶⁰ requiring agencies to reduce unnecessary regulatory burdens and enforce regulatory reform initiatives.⁵⁶¹

President Trump appointed Neomi Rao to head OIRA to spearhead his regulatory reform agenda. Rao founded the Center for the Study of the Administrative State at the George Mason University's Antonin Scalia Law School, which has received a \$10 million donation from the Charles Koch Foundation. In addition to clerking for conservative Justice Thomas, after graduating from University of Chicago Law School, she served as counsel to the Senate Judiciary Committee under Senator Orrin G. Hatch, and was an associate counsel and special assistant to President George W. Bush.⁵⁶² President Trump issued an Executive Order that requires agencies to offset the cost associated with a new regulation by eliminating the costs associated with two prior regulations; and to cap spending on new regulations for 2017 at zero dollars.⁵⁶³ Insisting that "[n]ew efforts to stop pollution don't automatically make old ones unnecessary,"⁵⁶⁴ the Natural Resources Defense Council ("NRDC"), the Communications Workers of America, Earthjustice, and Public Citizen NGOs have filed a suit in the United States District Court of the District of Columbia to challenge the executive order as circumventing the APA and violating statutes under which the agencies operate.⁵⁶⁵

The kind of criticism levied at Presidents Reagan and George W. Bush is similar to that said against President Trump today. President Reagan's EPA Director Anne Gorsuch sought voluntary compliance from industry, as she directly negotiated with regulated industries, rather than relying on professional staff and reorganized EPA to enhance control over civil

⁵⁵⁹ Exec. Order No. 13,771, Reducing Regulation and Controlling Regulatory Costs, 82 Fed. Reg. 9,339 (Feb. 2, 2017) (directing agencies that the total incremental cost of all new regulations, including repealed regulations, to be finalized this year shall be no greater than zero, unless otherwise required by law).

⁵⁶⁰ Exec. Order No. 13,777, Enforcing Regulatory Reform Agenda, 82 Fed. Reg. 12,285 (Mar. 1, 2017).

⁵⁶¹ See Press Release, EPA, Reducing Regulatory Burdens: EPA Withdraws "Once In Always In" Policy for Major Sources under Clean Air Act (Jan. 25, 2018), <https://www.epa.gov/newsreleases/reducing-regulatory-burdens-epa-withdraws-once-always-policy-major-sources-under-clean> (In response to Exec. Order 13,777, EPA withdrew the "once in always in" policy that required major sources of hazardous air pollutants under CAA § 112 to always comply with standards for major sources, even if their emissions later drop below the threshold. Under the new guidance memorandum, issued without notice and comment, the less stringent control standards for "area sources" will apply if a former "major source" drops below the threshold.)

⁵⁶² Eder, *supra* note 555.

⁵⁶³ Exec. Order No. 13,771.

⁵⁶⁴ Public Citizen, Inc. v. Trump, No. 1:17-cv-00253 (D.D.C. Feb. 8, 2017); Public Citizen, Inc. v. Trump, No. cv-17-253 (D.D.C. May 15, 2017).

⁵⁶⁵ *Id.* See Tim Devaney, *Trump Sued over '1-in-2-out' Regulations Order*, THE HILL (Feb. 18, 2017), <http://thehill.com/regulation/318457-trump-sued-over-1-in-2-out-regulations-order>.

service staff. This resulted in the resignation of nearly 4000 seasoned employees and the loss of their expertise 3000 in the first two years while she was EPA director, in what staff viewed as a “deliberate plan to paralyze if not totally dismantle the enforcement program.”⁵⁶⁶ She replaced many career civil servants in mid-level positions with individuals that opposed regulatory oversight on such industries.⁵⁶⁷ In other words, she paved the way for the Trump administration’s assault on the EPA. Greg Wetstone, chief environment council at the House Energy and Commerce Committee during the George W. Bush administration (and subsequent director of advocacy at the Natural Resources Defense Council) recalled: “Never has America seen two more intensely controversial and blatantly anti-environmental political appointees than Watt [then Secretary of Interior] and Gorsuch.”⁵⁶⁸

Many of President George W. Bush’s close advisors also came from the oil, energy, mining and timber industries, a pattern similar to the Trump cabinet members and advisors. The Energy Policy Act,⁵⁶⁹ signed by George W. Bush gave \$14.5 billion in tax breaks to big oil and reduced regulations for the industry.⁵⁷⁰ In this regard, there is a similarity in President Trump’s policies of encouraging offshore drilling and mineral leases.⁵⁷¹

Sierra Club spokesman, Josh Dorner, complained that President George W. Bush “has undone decades if not a century of progress on the environment . . . undermined science . . . rendered governmental agencies unable to do their most basic function even if they wanted to.”⁵⁷² Vice President Dick Cheney and President Bush’s CEQ were criticized for allegedly altering the scientific findings on fuel-efficiency standards for car emissions.⁵⁷³ They also were accused of censoring information about climate change consequences. In addition, the Bush administration allegedly tried to block data showing the acceleration in global warming (according to a former EPA official and a NASA scientist).⁵⁷⁴

Trump’s EPA head, Scott Pruitt, similarly called for EPA to remove climate change data from its website and for EPA staff to not focus on

⁵⁶⁶ Cally Carswell, *How Reagan’s EPA Chief Paved the Way for Trump’s Assault on the Agency*, NEW REPUBLIC (Mar. 21, 2017), <https://newrepublic.com/article/141471/reagans-epa-chief-paved-way-trumps-assault-agency>.

⁵⁶⁷ McGarity, *supra* note 281, at 208.

⁵⁶⁸ Little, *supra* note 267.

⁵⁶⁹ Pub. L. No. 109-58, 119 Stat. 594 (2005).

⁵⁷⁰ Lindsey Renick Mayer, *Big Oil, Big Influence*, PBS (Aug 1, 2008), <http://www.pbs.org/shows/347/oil-politics.html>.

⁵⁷¹ Exec. Order No. 13,795. *Compare with* Obama Memorandum on Artic OCS, *supra* note 163.

⁵⁷² Exec. Order No. 13,795.

⁵⁷³ *Id.*

⁵⁷⁴ *Id.*

climate change. On April 22, 2017 Science Matters marches were held in 600 cities to stand up for scientific facts⁵⁷⁵ and counter such anti-environmental legislative proposals⁵⁷⁶ and executive actions. Rush Holt, head of the American Association for the Advancement of Science, said that this is not simply a reaction to President Trump's election. For years, scientists and members of the academic community have worried about the erosion of the value of expertise and the rise of pseudoscientific and anti-scientific notions; as a result, "[scientific] evidence has been crowded out by ideology and opinion in public debate and policymaking."⁵⁷⁷ By nominating to key leadership positions individuals who minimize the importance of climate change and scientific expertise, President Trump left no doubt on where he stands on environmental issues.

VII. CONCLUSIONS AND RECOMMENDATIONS

Most Americans, including sixty-nine percent of Republicans, do not believe that environmental regulations addressing climate change cost American jobs, according to a Harvard University poll.⁵⁷⁸ Over sixty percent of voters did not want the President to withdraw from the Paris Climate Accord.⁵⁷⁹ In a Yale University poll, sixty-two percent of Trump supporters approved of either taxing or regulating pollution that causes global warming, and fifty-two percent supported elimination of all federal subsidies for the fossil fuel industry.⁵⁸⁰ Nevertheless, President Trump listened to climate change deniers and advocates for fossil fuel and energy extraction in announcing the withdrawal of the United States from the Paris Climate Agreement and in promoting development of coal, oil, and gas resources regardless of environmental impact. Recognizing and implementing effective measures to counter climate change is essential to the survival of humans and natural resources, not just in the United

⁵⁷⁵ Joel Achenbach, Ben Guarino & Sarah Kaplan, *People are Marching for Science: 'There is No Planet B,'*, WASH. POST (Apr. 22, 2017), https://www.washingtonpost.com/national/health-science/big-turnout-expected-for-march-for-science-in-dc/2017/04/21/67cf7f90-237f-11e7-bb9d-8cd6118e1409_story.html?utm_term=.e39f84c5aedf.

⁵⁷⁶ See Better Evaluation of Science and Technology Act ("BEST Act"), S. 578, 115th Cong. (2017) (proposed); Honest and Open New EPA Science Treatment Act of 2017 ("HONEST Act"), H.R. 1430, 115th Cong. (2017) (passed House and referred to Senate Committee on the Environment and Public Works.).

⁵⁷⁷ Achenbach *supra* note 575.

⁵⁷⁸ *Poll: Majority of Americans oppose President Trump's Proposed Cuts to EPA's budget, Withdrawing from Paris Climate Treaty*, HARV. SCH. OF PUB. HEALTH (Apr. 26, 2017), <https://www.hsph.harvard.edu/news/press-releases/poll-majority-americans-oppose-president-trumps-proposed-cuts-epas-budget-withdrawing-paris-climate-treaty/>.

⁵⁷⁹ *Id.*

⁵⁸⁰ See YALE PROGRAM ON CLIMATE CHANGE COMMUNICATION, *supra* note 41.

States but around the globe. The United States should rejoin the Paris Climate Agreement.

Criticisms of presidential policy and congressional action are not new, but such criticism seems to be more pronounced with the Trump administration. Gallop polls showed that presidents Reagan, George W. Bush and Obama had favorable ratings of fifty-seven to fifty-nine percent in June of their first year in office, while Trump's approval rating was at thirty-nine percent (lower than Clinton's forty-three percent).⁵⁸¹ Under the Trump administration and in Congress⁵⁸² today, partisan zealot approaches seem to dominate more times than not, and alterative facts seem to be a daily refrain. As the 2014 Princeton University study recognized, "alignments of the most influential business-oriented groups are negatively related to the average citizen's wishes . . . the majority of Americans have 'little influence over the policies our government adopts.'"⁵⁸³

From the late 1960s through the early 1980s, Congress included many vocal environmentalists and the United States led the world in adopting environmental protection measures. In the 1970s, Congress passed NEPA,⁵⁸⁴ ESA,⁵⁸⁵ MMPA,⁵⁸⁶ FIFRA,⁵⁸⁷ TSCA,⁵⁸⁸ SMCRA,⁵⁸⁹ RCRA,⁵⁹⁰ and amendments to the CWA⁵⁹¹ and CAA,⁵⁹² with bi-partisan support. The Safe Drinking Water Act,⁵⁹³ the Coastal Zone Management Act,⁵⁹⁴ the Outer Continental Shelf Lands Act,⁵⁹⁵ the National Forest Management Act⁵⁹⁶ were also among the environmental laws passed in

⁵⁸¹ *Presidential Approval Ratings: Donald Trump*, GALLOP, <http://www.gallup.com/poll/203198/presidential-approval-ratings-donald-trump.aspx> (last visited Mar. 27, 2018). President Kennedy had the highest approval rating of modern presidents with seventy-five percent.

⁵⁸² *Congress and the People*, GALLOP, <http://www.gallup.com/poll/1600/congress-public.aspx> (last visited Mar. 27, 2018) (showing Congressional approval is even lower, ranging from eleven to twenty-eight percent during the past five years).

⁵⁸³ Martin Gilens & Benjamin I. Page, *Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens*, *Perspectives on Politics*, 12 AM. POL. SCI. ASS'N 564, 576, 577 (Sept. 2014).

⁵⁸⁴ 42 U.S.C. §. 4321 et seq. (1970).

⁵⁸⁵ 16 U.S.C. ch. 35 § 1531 et seq (1973).

⁵⁸⁶ 16 U.S.C. Ch. 31 (1972).

⁵⁸⁷ 7 U.S.C. § 136 et seq. (1972).

⁵⁸⁸ 15 U.S.C. § 2601 et seq. (1972).

⁵⁸⁹ 42 U.S.C. Ch. 25 (1977).

⁵⁹⁰ 42 U.S.C. § 6901 et seq. (1976).

⁵⁹¹ 33 U.S.C. Ch. 26 (1972).

⁵⁹² 42 U.S.C. 7410 et seq. (1970).

⁵⁹³ 42 U.S.C. § 300f (1974).

⁵⁹⁴ 16 U.S.C. §§ 1451-1464 (1972).

⁵⁹⁵ 43 U.S.C. § 1331 et seq. (1953) (amended 1978).

⁵⁹⁶ Pub. L. No. 94-588 (1976) (amending the Forest and Rangeland Renewable Resource Planning Act, 16 U.S.C. 1601-1610 (1976)).

the 1970s. EPA and NOAA were created to implement many of the laws.⁵⁹⁷ National Earth Day was created in 1970, marking an era of bipartisan congressional involvement in developing and passing strong environmental legislation.

When they had control of at least one house of Congress, Democrats held numerous hearings and investigations on controversial environmental actions, something that they are not able to initiate with the Trump administration. During President Reagan's first term, Democrats still controlled the House, and moderate Republicans led the Senate. Consequently, in the 1980s Congress was a check and balance to the dismantling of pro-environmental policy under the Reagan administration. That check is lacking presently, with more conservative Republicans controlling the House, Senate, and Presidency. Unless the Republicans in Congress are willing to stand up for environmental integrity, a majoritarian desire for sound environmental policy that counters climate change and promotes renewable energy will be ignored; water and air quality will decline, and the survival of the planet's resources will be in great jeopardy.

According to the Public Employees for Environmental Responsibility, enforcement under the CWA and CAA has been significantly reduced under Pruitt's leadership, as Pruitt has targeted major regulations and rules for rescission. In comparison to the three previous presidential administrations, the Trump administration collected sixty percent less in civil fines during the first six months. The Environmental Integrity Project reports that the Trump administration had only filed twenty-six civil action for violations (thirty percent fewer than the average of those three administrations).⁵⁹⁸ In addition, Pruitt is minimizing transparency and prohibiting paper trail in conjunction with his limited discussions with staffers.⁵⁹⁹

The Trump administration has unleashed an atrocious path of deconstruction of the environmental and natural resources that they have a moral and legal responsibility to protect. Executive orders of the Trump administration, cabinet selections, and congressional actions indicate an

⁵⁹⁷ Message from President Richard Nixon to the Congress about Reorganization Plans to Establish the Environmental Protection Agency and the National Oceanic and Atmospheric Administration (July 9, 1970), <http://www.presidency.ucsb.edu/ws/index.php?pid=2575&st=environmental+protection+agency&st1>.

⁵⁹⁸ *Civil Penalties Against Polluters Drop 60 Percent So Far Under Trump*, ENVTL. INTEGRITY PROJECT (Aug. 10, 2017), <https://www.environmentalintegrity.org/news/penalties-drop-under-trump/>.

⁵⁹⁹ L.A. Times Editorial Bd., *How President Trump and the EPA's Scott Pruitt Are Making America's Environment Deadly Again*, L.A. TIMES (Sept. 5, 2017), <http://www.latimes.com/opinion/editorials/la-ed-trump-epa-environment-pruitt-20170905-story.html>.

active assault on environmental protection regulations and policies, under the auspices of promoting job growth and diminishing costly regulatory compliance. President Trump proposed a \$2.6 billion, or thirty-one percent, cut to the EPA's budget and elimination of funding for many environmental programs,⁶⁰⁰ while refocusing the agency's role away from climate change priorities. He has appointed individuals who deny or question the causes of climate change and have a history of opposing environmental protection measures to head the EPA, the Department of Interior, and their respective subcabinet posts. His appointees are not fulfilling the primary mission of the agencies they head. The EPA's priority is protecting human health and the environment,⁶⁰¹ not minimizing regulatory oversight for the benefit of the fossil fuel industry. The Department of Interior and its Bureau of Land Management are required to balance multiple uses of federal land and manage the land for both present and future needs, while taking into account natural scenic, scientific and historical value of the lands,⁶⁰² and giving priority to the designation and protection of areas of critical environmental concern.⁶⁰³ According to its own website, the Department of Interior is charged with managing and protecting natural resources, cultural heritage and providing scientific information about those resources, along with trust responsibilities with Native Americans.⁶⁰⁴ Nevertheless, public lands are being leased for oil, gas, coal and hard-rock interests at record-setting rates, with little accompanying guidance to assure that these activities are implemented in ways that minimize contamination of our air and water, and destruction of natural resources. Consideration of short-term and long-term consequences of such policies on the health of our citizens and our environment is paramount to avoiding a tragedy of the commons of our environment.

With a potential increase in the production of coal, oil, and gas, the EPA, the Department of Interior, and other agencies should adopt measures to regulate air quality, minimize the impact of increased production, and reduce the likelihood of oil spills and other environmental risks. Energy production is at an all-time high, so energy extraction should not trump environmental considerations. Environmental conservation for the sake of future generations should

⁶⁰⁰ OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, AMERICA FIRST A BUDGET BLUEPRINT TO MAKE AMERICA GREAT AGAIN 43 (Mar. 13, 2017).

⁶⁰¹ *Our Mission and What We Do*, EPA, <https://www.epa.gov/aboutepa/our-mission-and-what-we-do> (last visited Apr. 17, 2018).

⁶⁰² FMLA, 43 U.S.C. § 1702(c).

⁶⁰³ 43 U.S.C. § 1712(b)(3).

⁶⁰⁴ *About*, U.S. Dep't of Interior, <https://www.doi.gov/whoweare> (last visited Apr. 22, 2018).

take priority over so-called property rights exploitation of energy resources today.

The Interior Department should be required to go through new NEPA analysis and notice and comment before opening leases on sensitive land. The Pipeline Safety Act⁶⁰⁵ should be amended to allow states to consider safety and danger to human health and the environment in deciding whether to approve routes and siting of oil and natural gas pipelines. Safety considerations should not be under the exclusive jurisdiction of federal regulators, especially if the Trump administration is advocating return of land management to the states in other spears. More safeguards need to be implemented to reduce the likelihood of oil spills and environmental degradation where oil exploration, extraction, and transport occur. Energy extraction leases should not be permitted if the lands have historical significance, cultural significance or essential habitat. In addition, renewable energy needs to be encouraged as a vital component in the mix of energy resources.

The Antiquities Act should be amended to expressly limit subsequent presidents from reducing land and protections of these historical, environmental, and scientific important monuments by more than 5% (which would allow adjustments for local needs and priorities). Lands designated for preservation under the Antiquities Act should remain as a protected area to preserve historical artifacts and habitat for species. Preservation of habitat, including wetlands, is essential to the survival of species. Species protection under the ESA should not be undermined.

The CAA, CWA, OSCLA, and SMCRA should be amended to recognize climate change as a serious air and water quality problems. The amendments should clearly direct and delegate authority to EPA and Department of Interior to regulate both criteria pollutants and GHGs and their sources. In addition, climate change should be recognized and prioritized in other congressional laws, including those that deal with flood control and address the consequences of storms, droughts, acidification of the oceans, land erosion, species protection, and habitat degradation. Other agencies, such as NOAA and FWS, also need sufficient delegated authority to deal with the consequences of climate change. There is a real danger, however, in initiating legislation to make these changes in the current political climate, as riders to those amendments are likely to undermine those laws, rather than strengthen them.

Well-reasoned policies based on sound science need to follow an orderly adoption and implementation process to facilitate adaptation by

⁶⁰⁵ 49 U.S.C. § 60101 et seq. (1994).

agencies, businesses and citizens. Representatives and senators should be dissuaded from passing regulatory oversight that is so onerous that it practically prevents environmental regulations from been created, enforced or challenged. Congress should not adopt the Regulations from the Executive in Need of Scrutiny (“REINS”) Act⁶⁰⁶ or other similar laws that prevent our nation from addressing serious issues in a timely manner, based on agency expertise with input from constituency groups. However, when agencies are reviewing and revising existing environmental regulations, agencies need to address critical environmental issues based on scientific data. APA procedure, with adequate time for notice and comment should be followed and consideration of the comments should be more than pro forma.

Since the Stream Protection Rule has been struck down by congressional use of the CRA, and substantially similar regulatory action precluded, Congress has the responsibility of crafting a law that addresses the water pollution and land degradation issues posed by coal mining. The damage to streams and water quality does not automatically cease just because the rule is disapproved or studies assessing the health impact are disbanded. The CRA should be amended to delete the prohibition on an agency’s ability to ever create another “substantially the same” rule. Appropriate agencies, such as BLM, should receive specific delegated authority and directive to protect waterways from dangers of coal ash and sludge and to regulate fracking and its dangers.

Government agencies need to be objective, transparent, and truthful in their presentation of information, analysis of studies, and interaction with the public. Integrity needs to be restored in communication. The United States Department of Agriculture (“USDA”) should be required to retain and disclose the history of animal welfare enforcement records.⁶⁰⁷ EPA should be required to post scientific findings concerning the existence and impact of climate change and its relationship to human activities on its website. Scientists and staffers should not be prevented from speaking at conferences concerning important matters such as climate change. Congress needs to pass standards—enforceable beyond the agency’s internal review—that will protect professionals from political retaliation,

⁶⁰⁶ H.R. 26, 115th Cong. (2017) (proposed but not adopted).

⁶⁰⁷ Natasha Daley, *US Backtracks on Purge of Animal Abuse Records - What We Know*, NAT’L GEOGRAPHIC (Feb. 22, 2017), <https://news.nationalgeographic.com/2017/02/wildlife-watch-usda-animal-welfare-records-trump-explainer/> (Recognizing that the USDA under the Trump administration’s Sonny Perdue purged the USDA website of most of the animal welfare records, preventing the American public from viewing reports of mistreatment of animals in facilities. Such records previously provided a seventeen-year data base of violations of the Animal Welfare Act and other animal abuse legislation.).

and the data they develop from destruction or obfuscation for political deleterious objectives.

Returning the United States to the practices of the 1920's isolationism or the Gilded Age of the 1890s, with wealth-concentration and a dependence on coal, sets us on a path of self-destruction, not only from an environmental perspective, but from an economic and trade perspective as well. New oil, coal and mineral extraction should not be permitted in environmentally sensitive areas of land or sea. We must preserve the institutional frameworks and agreements that encourage environmental research and environmental protection.

In the 1970s, America led the world in adoption of laws establishing the framework for environmental protection. Rather than exploiting limited energy resources for the benefit of the wealth of the ruling class of a single generation, what is needed today is a revival of the spirit of bipartisan environmentalism within Congress, the Presidency, industry, and society—a spirit which internalizes policies that foster responsible environmental management, recognizes the reality of climate change, and addresses its problems effectively.