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**INQUIRY INTO THE IMPLEMENTATION OF BUSH'S
EXECUTIVE ORDER 13211 AND THE IMPACT ON
ENVIRONMENTAL AND PUBLIC HEALTH REGULATION**

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Miriam Jovanovic³*

ABSTRACT

Executive Order 13211, promulgated in 2001, requires the federal government to consider the impact of federal action on energy independence as part of the George W. Bush's National Energy Policy. This law review examines whether EO 13211 was used to curtail environmental protection and natural resource conservation.

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The article begins with a review of the procedure required of federal agencies under EO 13211 and its associated documents. The paper then examines case law and published federal rulemaking proceedings and examines how federal agencies apply tests to evaluate the potential energy effect. The study concludes that EO 13211 strikes a reasonable effective balance between environmental conservation and energy development.

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I. INTRODUCTION

A lot of ink has been used to discuss the Energy Policy Act of 2005 (EPAAct).⁴ Far less discussion has addressed Executive Order 13211 (EO 13211).⁵ Promulgated in 2001, EO 13211 requires the federal government to consider the impact of federal action on energy independence by mandating agencies to review regulations for adverse energy impacts. EO 13211 was lauded for its multidisciplinary approach to energy policy, one that coordinates amongst federal agencies whilst mindful of the interplay between energy, resource and environmental concerns.⁶ The development of alternative energy technology dramatically increased oil and gas drilling activities such as horizontal drilling and high volume hydraulic fracturing⁷ (what the public calls “fracking”). With such

4. See generally Justin Stolte, *The Energy Policy Act of 2005: The Path to Autonomy*, 33 J. LEGIS. 119 (2006).

5. Exec. Order No. 13,211, 3 C.F.R. § 767 (2002); Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use, 66 Fed. Reg. 28355 (May 22, 2001).

6. Sam Kalen, *Replacing a National Energy Policy with a National Resource Policy*, 19 NAT. RES. & ENV'T. 9 (2005).

7. For current legal commentary concerning horizontal drilling and high volume hydraulic fracturing, see Valeriia Hatami, *Solution to Unsound Science Behind Regulation of Hydraulic Fracturing Is Traceable*, 39 OKLA. CITY U. L. REV. 209 (2014); David K. String, *Fracking Good Solution to the Hydraulic Fracturing Regulation Conundrum*, 48 VAL. U. L. REV. 417 (2013); Jason T. Gerken, *What the Frack Shale We Do: A Proposed Environmental Regulatory Scheme for Hydraulic Fracturing*, 41 CAP. U. L. REV. 81 (2013); Hannah Wiseman, *Risk and Response in Fracturing Policy*, 84 U. COLO. L. REV. 729 (2013); Elizabeth Burleson, *Cooperative Federalism and Hydraulic Fracturing: A Human Right to a Clean Environment*, 22 CORNELL J.L. & PUB. POL'Y 289 (2012); Timothy Fitzgerald, *Frackonomics: Some Economics of Hydraulic Fracturing*, 63 CASE W. RES. L. REV. 1337 (2012); Eric Michel, *Discrimination in the Marcellus Shale: The Dormant Commerce Clause and Hydraulic Fracturing Waste Disposal*, 88 CHI.-KENT. L. REV. 213 (2012); Robin Kundis Craig, *Hydraulic Fracturing (Fracking), Federalism, and the Water-Energy Nexus*, 49 IDAHO L. REV. 241 (2012); Matt Willie, *Hydraulic Fracturing and Spotty Regulation: Why the Federal Government Should Let States Control Unconventional Onshore Drilling*, BYU L. REV. 1743

burgeoning US energy growth came the need to reevaluate environmental policy⁸ and natural resource conservation;⁹ for instance, some environmentalists questioned whether certain endangered species designations and other environmental regulation would conflict with oil and gas drilling permit applications. Others asserted that EO13211 made it “easier to develop energy resources on public lands, even at the risk of causing long-term degradation of natural resource values.”¹⁰

This paper sought to evaluate whether or not EO 13211 was in fact used to curtail critical habitat designation or other environmental

(2011); Robert Freilich & Neil M. Popowitz, *Oil and Gas Fracking: State and Federal Regulation Does Not Preempt Needed Local Government Regulation*, 44 URB. LAW. 533 (2012); Terry W. Roberson, *Environmental Concerns of Hydraulically Fracturing a Natural Gas Well*, 67 UTAH ENVTL. L. REV. 32 (2012); Hannah Coman, *Balancing the Need for Energy and Clean Water: The Case for Applying Strict Liability in Hydraulic Fracturing Suits*, 39 B.C. ENVTL. AFF. L. REV. 131 (2012); Hannah Jacobs Wiseman, *Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation*, 20 FORDHAM ENVTL. L. REV. 115 (2009); Laura C. Reeder, *Creating a Legal Framework for Regulation of Natural Gas Extraction From the Marcellus Shale Formation*, 34 WM. & MARY ENVTL. L. & POL’Y REV. 999 (2009); Robert E. Beck, *Current Water Issues in Oil and Gas Development and Production: Will Water Control What Energy We Have*, 49 WASHBURN L.J. 423 (2009); Thomas W. Merrill, *Four Questions About Fracking*, 63 CASE W. RES. L. REV. 971 (2012).

8. See Jonathan Verschuuren, *Hydraulic Fracturing and Environmental Concerns: The Role of Local Government*, J. ENVTL. L. 431, 436-40 (2015); Terry W. Roberson, *Environmental Concerns of Hydraulically Fracturing a Natural Gas Well*, 32 UTAH ENVTL. L. REV. 67 (2012).

9. See, e.g., David A. Dana & Hannah J. Wiseman, *Market Approach to Regulating the Energy Revolution: Assurance Bonds, Insurance, and the Certain and Uncertain Risks of Hydraulic Fracturing*, 99 IOWA L. REV. 123 (2013).

10. Rebecca Bratspies et al., *Protecting Public Health and the Environment by the Stroke of a Presidential Pen: Seven Executive Orders for the President’s First 100 Days* (2008), available at http://www.progressivereform.org/CPR_ExecOrders_Stroke_of_a_Pen.pdf [<https://perma.cc/TN5G-A5T4>] (recommending that President Barack Obama use his power to promulgate an executive order to repeal Executive Orders 13211 and 13212 in the first 100 days). For a discussion of Executive Order 13212 see note 23 below and accompanying text.

protection. The paper begins with an overview of EO 13211 and related federal documents. After setting out the procedural requirements federal agencies must undertake to comply with EO 13211, the article then surveys federal court cases reviewing EO 13211 and illustrative examples of how federal agencies applied the articulated tests to determine potential adverse energy impacts.

The paper concludes that although the express language of EO 13211 raises concerns that the federal government might favor energy development over environmental and natural resources protections, in fact federal agency action from the time of promulgation of EO 13211 until today demonstrates no tendency to do so. Rather, if EO 13211 has had any effect on environmental actions then it is not reflected in published agency action. If there is an effect on natural resource conservation practices and environmental regulation then such agency action must be taking place in the pre-ruling making stage and is not reflected in published federal actions.¹¹

Most federal agencies conducting an analysis pursuant to EO 13211 found no “significant energy impact,” allowing the proposed environmental and natural resource conservation regulation to bypass EO 13211 OMB energy review and move one step closer to promulgation.¹² Although EO 13211 permits significant agency discretion in determining what is an “adverse energy effect” and, in turn, the existence of a “significant energy action,” ultimately the

11. Elizabeth Glass Geltman, *Policy Surveillance on the Impact of Bush’s Executive Order 13,211 (Requiring Preparation of a Statement of Energy Effects as a Condition to Federal Action) on Environmental and Public Health Policy*, (Nov. 2, 2015), https://apha.confex.com/apha/.../Handout—Roundtable_329348.pdf. See also Elizabeth Glass Geltman, Gunwant Gill, and Miriam Jovanovic, *Impact of Executive Order 13211 on environmental regulation: An empirical study*, 89 ENERGY POLICY 302-10 (2016).

12. For a discussion of the role of OMB in regulatory review, see John D. Graham & Cory R. Liu, *Regulatory and Quasi-Regulatory Activity Without OMB and Cost-Benefit Review*, 37 HARV. J.L. & PUB. POL’Y 425 (2014). Cf. Steven T. Kargman, *OMB Intervention in Agency Rulemaking: The Case for Broadened Record Review*, YALE L.J. 1789-1810 (1986).

agency's finding must be grounded in fact.¹³ As such, agencies establishing environmental policy do carefully balance the importance of keeping the lights on with the duty to protect human health through sound environmental practices.

Through two administrations, one republican and one democratic, EO 13211 achieved its primary purpose of requiring federal agencies to calculate energy impacts of environmental action. When applicable, EO 13211 mandated SEEs are comparable to an abbreviated NEPA mandated Environmental Impact Statements (EIS). The agency determines how expensive the proposed regulation will be and if it will have a major impact on energy.¹⁴ EO 13211 makes evaluating adverse effects on energy a critical part of the regulatory cost-benefit equation.¹⁵ Despite fears to the contrary, to date, EO 13211 strikes a reasonably effective balance between environmental conservation and energy development.

II. BACKGROUND

On May 18, 2001, President George W. Bush issued EO 13211, entitled "Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution or Use."¹⁶ EO13211 requires all federal agencies to evaluate the effect of federal regulations on the "supply, distribution and use of energy."¹⁷ EO 13211 was an integral part of

13. These threshold questions are critical for if answered in the affirmative, they trigger EO 13211's applicability and the writing of a SEE. Exec. Order No. 13,211, 3 C.F.R. § 767 (2002); Maeve P. Carey, *Cost-Benefit and Other Analysis Requirements in the Rule Making Process* (Dec. 9 2014), available at <http://www.fas.org/sgp/crs/misc/R41974.pdf> [<https://perma.cc/NZ6V-GUX7>].

14. *Id.*

15. David E. Sanger, *The Energy Plan: Bush Shows His Green Side to Sell Agenda*, N.Y. TIMES, May 19, 2001, at A1.

16. Exec. Order No. 13,211, 3 C.F.R. § 767 (2002).

17. *Id.* The objective of EO 12866 was to align agency actions with Presidential priorities, to coordinate regulatory policies between agencies and to provide a "dispassionate and analytical 'second opinion' on agency actions." EO13211 is a direct benefactor of President Bill Clinton's Executive Order 12866 which established the review of federal regulations by the Office of Information and Regulatory Affairs (OIRA). With

the Bush Administration's National Energy Policy (NEP). Adopted in May 2001, the NEP was the brainchild of the National Energy Policy Development Group, whose recommendations generated a comprehensive energy policy approach. Comprised of government executives led by Vice-President Dick Cheney, the Development Group outlined a major role for public lands and resources in addressing energy needs.¹⁸ The NEP directed federal agencies to prioritize and expedite approval of energy development projects. A flurry of activity followed.

In 2002, a year after President Bush signed EO 13211¹⁹ the president promulgated Executive Order 13212 (EO 13212),²⁰ requiring federal agencies to "accelerate the completion of energy-related projects" by expediting energy permit reviews and taking other actions deemed necessary for such projects.²¹ The next year, in 2003, the Bureau of Land Management (BLM) issued Instruction Memoranda 2003-233 and 2003-234, requiring BLM to expedite permit review and impose the "least restrictive constraints" on oil and gas development²² on public lands. The crescendo of Bush's energy policy came in 2005 in the form of the EPAct.²³

From its inception, EO 13211 was labeled a pro-oil industry order with an environmentally friendly façade. The Natural Resources Defense Council unearthed an EO 13211 blueprint, authored by the American Petroleum Institute, a leading US oil industry lobbyist that

regulatory oversight through OIRA in place, EO13211 became an attainable objective.

18. Sonja Klopff et al., *A Roadmap to a Better NEPA: Why Environmental Risk Assessment Should Be Used to Analyze the Environmental Consequences of Complex Federal Actions* 38, 40 (2007), <http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1155&context=sdlp> [<https://perma.cc/GA9H-8JG8>].

19. Exec. Order No. 13,211, 3 C.F.R. § 767 (2002).

20. Exec. Order No. 13,212, 66 C.F.R. § 28357 (2001).

21. *Id.*

22. Klopff, *supra* note 18.

23. Justin Stolte, *The Energy Policy Act of 2005: The Path to Autonomy*, 33 J. LEGIS. 119 (2006).

closely resembled the final executive order.²⁴ Certain environmental groups were concerned that EO 13211 would be used to dissuade environmental and other regulatory action, protecting human health, in favor of US oil and gas industry interests.²⁵

The topic of EO 13211's impact on both energy and environmental policy has received minimal academic study. The one comprehensive study to date, praised EO 13211 for its multidisciplinary approach to energy policy that coordinates amongst federal agencies and recognizes energy, resource and environmental concerns.²⁶ The remaining studies contained only parenthetical mention of EO 13211.²⁷

This article sought to review proposed and final regulations promulgated after the signing of EO 13211 to evaluate how federal agency actions were influenced by the executive order and to determine whether the order had an adverse impact on proposed environmental regulation. While we were particularly interested in reviewing the potential conflict between agency actions in proposed

24. Don Van Natta Jr. & Neela Banerjee, *Review Shows Energy Industry's Recommendations to Bush Ended Up Being National Policy*, N.Y. TIMES, Mar. 28, 2002 at A18.

25. *Id.*

26. Kalen, *supra* note 6, at 12.

27. For articles including a brief discussion of EO 13,211 in other contexts, see, for example, Andrew Austin & Laurel Phoenix, *The Neoconservative Assault on the Earth: The Environmental Imperialism of the Bush Administration*, 16 CAPITALISM NATURE SOCIALISM 25 (2005); Curtis W. Copeland, Cong. Research Service, RL32240, THE FEDERAL RULEMAKING PROCESS: AN OVERVIEW (2013), available at <http://fas.org/sgp/crs/misc/RL32240.pdf> [<https://perma.cc/JYN2-65GZ>]; Robert E. Forbis, *The Political History of Hydraulic Fracturing's Expansion Across the West*, 6 CAL J POLITICS POL'Y 153 (2014); Sonja Klopfet al., *A Roadmap to a Better NEPA: Why Environmental Risk Assessment Should be Used to Analyze the Environmental Consequences of Complex Federal Actions*, 8 SUSTAINABLE DEV. L & POL'Y 38 (2007); Stuart Shapiro, *Defragmenting the Regulatory Process*, 31 RISK ANALYSIS 893 (2011); Stephen M. Johnson, *Ossification's Demise-An Empirical Analysis of EPA Rulemaking from 2001-2005*, 38 ENVTL. L. 767 (2008); Donald R. Arbuckle, *Collaborative Governance Meets Presidential Regulatory Review*, 2 J. DISP. RESOL. 343 (2009).

shale gas extraction permit areas, we did not limit our review to actions involving unconventional oil and gas.

III. DISCUSSION

A. THE MANDATES OF EO 13,211

EO 13211 requires federal agencies to prepare a Statement of Energy Effects (SEE) for matters identified as “significant energy actions.”²⁸ The SEE is submitted to the OMB Office of Information and Regulatory Affairs (OIRA) and a summary must be included in both the proposed and final rulemaking notices of the federal agency.²⁹ Where applicable, the statement must include:

information on any adverse effects on energy supply, distribution, or use;

reasonable alternatives to the action; and

the expected effects of such alternatives on energy supply, distribution, or use.³⁰

The purpose of preparing a SEE is to ensure that federal agencies “appropriately weigh and consider the effects of federal rulemaking on the supply, distribution, and use of energy.”³¹ A SEE is meant to analyze the effect of adopting a significant regulatory action on US energy.

In practice, a SEE requires a “detailed statement” relating to “any adverse effects on energy supply, distribution or use.” Adverse effects may include “a shortfall in supply, price increases, and increased use of foreign supplies.”³² The SEE must include a separate energy analysis for “reasonable alternatives” to the proposed action

28. Exec. Order No. 13,211, 3 C.F.R. § 767 (2002). An energy action is deemed significant if it is: a “significant regulatory action under EO 12866”; “likely to have a significant adverse effect on the supply, distribution, or use of energy”; or designated by OIRA as a “significant regulatory action.”

29. *See* Exec. Order No. 13,211, 3 C.F.R. § 767 (2002).

30. Exec. Order No. 13,211 § 2, 3 C.F.R. § 767 (2002).

31. *Id.*

32. *Id.*

aimed at reducing expected effects of the alternatives to the proposed rulemaking on “energy supply, distribution, and use.”³³ Reasonable alternatives may include:

- ✓ Informational Measures;
- ✓ Market-Based Approaches;
- ✓ Performance-Based Standards;
- ✓ Different Requirements for Different Segments of the Regulated Population;
- ✓ Alternative Levels of Stringency;
- ✓ Alternative Effective Dates of Compliance; or
- ✓ Alternative Methods of Ensuring Compliance.³⁴

Most federal agencies elect to include a summary of the SEE, rather than the SEE itself, in the initial Notice of Proposed Rulemaking (NPRM) and in resultant regulation.³⁵

B. OMB MEMORANDUM 01-27: \$100 MILLION TEST AND BEYOND

When an agency is required to prepare a SEE is not well articulated in the express language of the Executive Order, instead of explicitly defining the term “significant energy action,” EO 13211 references the definition contained in yet another Executive Order, EO 12866 entitled “Regulatory Planning and Review,” which deems a regulatory action significant if the proposed federal action will have an annual effect on the US economy of \$100 million or more.³⁶

33. *Id.*

34. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, OMB M-01-27, GUIDANCE FOR IMPLEMENTING E.O. 13211 (July 13, 2001).

35. *See* Exec. Order No. 13,211, 3 C.F.R. § 767 (2002).

36. Exec. Order No. 12,866, 3 C.F.R. § 638 (1994). *See, e.g.*, General Permits and Permits by Rule for the Federal Minor New Source Review Program in Indian Country, General permits and Permits by Rule for the Federal Minor New Source Review Program in Indian Country; Proposed Rule, 79 Fed. Reg. 41,846 (July 17, 2014) (to be codified at 40 C.F.R. pt. 49) (EPA said [t]his action is not subject to EO 13211 (66 Fed Reg. 28,355 (May 22, 2001)) because it is not a significant regulatory action under EO 12866.”).

A July 13, 2001 memorandum issued by the Office of Management and Budget (OMB) labeled Memorandum 01-27 was instrumental in federal agencies' implementation of EO 13211 and was the origin of incorporation of the \$100 million threshold into EO 13211 reviews. Memorandum 01-27 explained that a federal action may have "a significant energy effect" if it meets established legal mandates, including those set forth in Executive Order No. 12866,³⁷ the first order to set out the \$100 million threshold.

Memorandum 01-27 did not, however, limit the definition of "significant energy effect" to a dollar value. Rather, Memorandum 01-27 states that EO 13211 may also be triggered if agency action (a) has a material effect on the productivity, competition, or prices on energy within a region or (b) creates a serious inconsistency with agency energy policy.³⁸ As such, Memorandum 01-27 stipulates that a "significant adverse effect" on energy *could* include the following nine factors:

- 1) Reductions in crude oil supply of more than of 10,000 barrels per day;³⁹
- 2) Reductions in fuel production in excess of 4,000 barrels per day;
- 3) Reductions in coal production in excess of 5 million tons per year;⁴⁰
- 4) Reductions in natural gas production in excess of 25 million mcf⁴¹ per year;⁴²

37. OFFICE OF MGMT. & BUDGET, *supra* note 34.

38. *Id.*

39. *Id.* See, e.g., Colorado Roadless Rule, 77 Fed. Reg. 39,576 (July 3, 2012) (codified at 36 C.F.R. pt. 294. 40–49).

40. See, e.g., Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Five Endangered Mussels in the Tennessee and Cumberland River Basins; Final Rule, 69 Fed. Reg. 53,136 (Aug. 31, 2004) (evaluating five criteria as a result of section 7 implementation for five endangered mussels in the Tennessee and Cumberland River Basins: (1) Potential reductions in crude oil supply; (2) potential reductions in coal production; (3) potential reductions in natural gas production; (4) potential increases in the cost of energy production; and (5) potential increases in the cost of energy distribution).

41. Equals the volume of 1,000 cubic feet (cf) of natural gas.

42. OFFICE OF MGMT. & BUDGET, *supra* note 34. See, e.g., Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for the

5) Reductions in electricity production in excess of 1 billion kilowatt-hours per year or in excess of 500 megawatts of installed capacity;⁴³

6) Increases in energy use required by the regulatory action that exceed any of the thresholds above;

Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*); Final Rule 68 Fed. Reg. 37,276 (June 23, 2003) ("Energy distribution via natural gas pipelines is the only activity related to this executive order where section 7 consultation regarding the Preble's appears likely. The Service has conducted consultations with the Federal Energy Regulatory Commission regarding construction of interstate gas pipelines through Preble's habitat. Efforts were made to minimize disturbance, in some cases through placing temporal limits on construction or by directional drilling under sensitive habitat, and to assure timely revegetation of areas disturbed. Costs related to required section 7 consultations represent far less than 1 percent of the cost of energy distribution"); *see also* Endangered and Threatened Wildlife and Plants; Critical habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*); Final Rule, 73 Fed. Reg. 39,506 (July 9, 2008); Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin population of the Arkansas River shiner (*Notropis girardi*); Final Rule, 70 Fed. Reg. 59,808 (October 13, 2005); Endangered and Threatened Wildlife and Plants; Listening Roswell springsnail, Koster's springsnail, Noel's amphipod, and Pecos assimineia as Endangered With Critical habitat; Final Rule, 70 Fed. Reg. 46,304 (August 9, 2005); 70 Fed. Reg. 44,078 (August 1, 2005).

43. OFFICE OF MGMT. & BUDGET, *supra* note 34; *see, e.g.*, Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*); Final Rule, 70 Fed. Reg. 60,886 (October 9, 2005); Endangered and Threatened Wildlife and Plants; Reopening of the Comment Period on Proposed Designation of Critical Habitat for the Southwestern Willow Flycatcher, 70 Fed. Reg. 39,227 (July 7, 2005); Endangered and Threatened Species; Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon (*Oncorhynchus tshawytscha*) and Steelhead (*O. mykiss*) in California; Proposed Rule, 69 Fed. Reg. 71,880 (December 10, 2004); Endangered and Threatened Wildlife and Plants; Critical Habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008); Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Appalachian Elktoe, 67 Fed. Reg. 61,016 (September 27, 2002).

7) Increases in the cost of energy production in excess of one percent;⁴⁴

8) Increases in the cost of energy distribution in excess of one percent;⁴⁵

44. OFFICE OF MGMT. & BUDGET, *supra* note 33. *See, e.g.*, Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Three Threatened Mussels and Eight Endangered Mussels in the Mobile River Basin; Final Rule, 69 Fed. Reg. 40084 (July 1, 2004) (evaluating both (a) increases in the cost of energy production in excess of one percent and (b) increases in the cost of energy distribution in excess of one percent); *see also* Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for *Cirsium loncholepis* (La Craciosa Thistle); Final Rule, 74 Fed. Reg. 56,978 (November 3, 2009); Endangered and Threatened Wildlife and Plants; Final Rulemaking To Designate Critical habitat for the Threatened Southern Distinct Population Segment of North American Green Sturgeon, 74 Fed. Reg. 52,300 (October 9, 2009); Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for the Wintering Population of the Piping Plover (*Charadrius melodus*) in Texas, 73 Fed. Reg. 74,675 (December 11, 2008); Endangered and Threatened Wildlife and Plants; Critical Habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008).

45. OFFICE OF MGMT. & BUDGET, *supra* note 34. *See, e.g.*, Endangered and Threatened Species; Notice of Intent To Prepare a Recovery Plan for Pacific Eulachon, 78 Fed. Reg. 59,582 (September 26, 2013) (“based on information in the economic analysis, no energy-related impacts associated with fluted kidneyshell and slabside pearlymussel conservation activities within critical habitat are expected”); Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Buena Vista Lake Shrew, 78 Fed. Reg. 39,858 (July 2, 2013) (“based on information in the economic analysis, energy-related impacts associated with Buena Vista Lake shrew conservation activities within critical habitat are not expected”); Advisory Committee on Reactor Safeguards (ACRS); Meeting of the ACRS Subcommittee on Digital I&C; Notice of Meeting, 78 Fed. Reg. 24,027 (April 23, 2013) (“based on information in the economic analysis, energy-related impacts associated with Umtanum desert buckwheat and White Bluffs bladderpod conservation activities within critical habitat are not expected”); Endangered and Threatened Wildlife and Plants; Listing and Designation of Critical habitat for Taylor's Checkerspot Butterfly, Streaked Horned Lark, and Four Subspecies of *Mazama* Pocket Gopher, 78 Fed. Reg. 20,074 (April 3, 2013) (“given the small fraction of projects affected (two consultations over 20 years), consultation costs are not anticipated to increase the cost of energy production or distribution in the United States in

9) Or other similarly adverse outcomes.⁴⁶

1. Judicial Review of EO 13211

Few courts have considered federal agencies' application of EO 13211. In *PacifiCorp v. Environmental Protection Agency*,⁴⁷ the court considered the \$100 million dollar test in the evaluation of petitioners usage of EO 13211 to challenge EPA's regional haze plan. PacifiCorp argued against EPA mandated low NO_x burners for its Wyodak plant.⁴⁸ In defending the rule, EPA cited EO 13211's inapplicability as the regulation would not adversely affect the US economy by \$100 million or more. PacifiCorp countered that the regional haze rule qualified as a significant energy action because PacifiCorp's 2014 haze regulation compliance costs would total more than \$100 million in capital costs.⁴⁹ The case is pending before the Tenth Circuit.

*Centre for Biological Diversity v. National Highway Traffic Safety Administration (NHTSA)*⁵⁰ also considered the \$100 million test. In

excess of 1 percent. Thus, none of the nine threshold levels of impact ... is exceeded"); *see also* Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Dusky Gopher Frog (Previously Mississippi gopher Frog); Final Rules and Proposed Rule, 77 Fed. Reg. 35,118 (June 12, 2012).

46. OFFICE OF MGMT. & BUDGET, *supra* note 34.

47. *PacifiCorp v. EPA* was selected for discussion because it is indicative of the pro-energy industry petitions that mention EO 13211.

48. *Id.*

49. *PacifiCorp v. EPA*, Petitioner Statement, (10th Cir. 2014) decision pending.

50. *Centre for Biological Diversity v. NHTSA*, 508 F.3d 508, 544 (9th Cir. 2007), *vacated and withdrawn*, 538 F.3d 1172 (9th Cir. 2008). For a general discussion, see generally *Centre for Biological Diversity v. NHTSA*, Environmental Law in Case Studies, ENVTL. L. (2007), <http://elawreview.org/case-summaries/center-for-biological-diversity-v-national-highway-traffic-safety-administration/>; Gabrielle D [https://perma.cc/X96J-CQYU]; Gabrielle D. Richards, 2009 *Ninth Circuit Environmental Review: Case Summaries*, 40 ENVTL. L. 919 (2010); Michael Quillin, *Fueling the Debate: The Ninth Circuit's Order to Reevaluate Fuel Efficiency Standards for Lightweight Trucks*, 16 MO. ENVTL. L. & POL'Y REV. 223 (2009); Erica Schroeder, *A New Mandate for Federal CAFE Standards from the Ninth Circuit*, 35 ECOLOGY L. Q. 645

that case, an environmental group utilizes EO 13211 to highlight deficiencies in an energy related regulation. American Council for an Energy-Efficient Economy (ACEEE) argued that the corporate average fuel economy (CAFE) standards for “light trucks” (Model Years [MYs] 2008-2011) did not go far enough in potential energy conservation.⁵¹ The petitioners asserted that excluding Class 2b trucks was arbitrary and capricious because fuel economy standards are feasible and will result in significant energy conservation. The NHTSA defended agency action stating EO 13211 was inapplicable and, a SEE unnecessary, given the rule, “seeks to establish passenger car and light truck fuel economy standards that will reduce the consumption of petroleum and will not have any adverse energy effects.”⁵²

ACEEE explained that if class 2b trucks were to improve their fuel economy by 4% per year, 47,000 barrels of gasoline would be saved per day by 2020 equating to \$700 million of annual savings.⁵³ This exclusion, ACEEE pointed out, far exceeded the \$100 million threshold for a “significant energy action.” Concurring with ACEEE, the Ninth Circuit found EO 13211 applicable, as failing to set fuel standards for class 2b trucks did amount to a significant energy action. Accordingly, the Court remanded the Rule to the NHTSA to set new standards for class 2b trucks.⁵⁴

(2008),
<http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=1883&context=elq>; [<https://perma.cc/H7SN-VXBG>]. Cf. Arnold W. Reitze, *The Role of NEPA in Fossil Fuel Resource Development and Use in the Western United States*, 39 B.C. ENVTL. AFF. L. REV. 311 (2012).

51. *Centre for Biological Diversity v. NHTSA*, 508 F.3d at 520. Petitioners also challenged the rule under the Energy Policy and Conservation Act of 1975 (EPCA) as well as the NEPA.

52. *Centre for Biological Diversity v. NHTSA*, 508 F.3d at 520; *ee also Average Fuel Economy Standards, Passenger Cars and Light Trucks: Model years 2011-2015*, <https://www.federalregister.gov/articles/2008/05/02/08-1186/average-fuel-economy-standards-passenger-cars-and-light-trucks-model-years-2011-2015> [<https://perma.cc/6T9Y-N34B>].

53. *Id.*

54. *Id.*

The case is instructive, however, because an NGO (in this case ACEEE) aggressively employed EO 13211 to promote enhanced environmental standards. Here, ACEEE used EO 13211 to create enhanced energy efficient standards for mobile sources and highlight deficiencies in an energy related regulation before the NHTSA division of the United States Department of Transportation.

Although the \$100 million test is just recently showing up in courts, there is not yet any case law interpreting the applicability of the other articulated OMB factors. There is, however, a rich history in the rulemaking literature. Many federal agencies used the nine OMB criteria as a checklist⁵⁵ when conducting the required economic and energy analysis of proposed or final agency action.⁵⁶ Each is discussed in detailed below.

55. *See, e.g.*, FWS Designation of Critical Habitat for the Fluted Kidneyshell and Slabside Pearlymussel, 78 Fed. Reg. 59,566, 59,582 (Sept. 26, 2013); Designation of Critical Habitat for Buena Vista Lake Shrew, 78 Fed. Reg. 39,836, 39,858 (July 2, 2013); FWS Designation of Critical Habitat for *Eriogonum codium* (Umtanum Desert Buckwheat) and *Physaria douglasii* subsp. *tuplashensis* (White Bluffs Bladderpod), 78 Fed. Reg. 24,008, 24,026 (May 23, 2013); FWS Listing and Designation of Critical Habitat for Taylor's Checkerspot Butterfly, Streaked Horned Lark, and Four Subspecies of Mazama Pocket Gopher, 78 Fed. Reg. 20,074, 20,085 (Apr. 3, 2013); FWS Designation of Critical Habitat for Dusky Gopher Frog (Previously Mississippi Gopher Frog), 77 Fed. Reg. 35,118, 35,142-143 (June 12, 2012); National Marine Fisheries Service (NMFS) Designation of Critical Habitat for the Threatened Southern Distinct Population Segment of North American Green Sturgeon, 74 Fed. Reg. 52,300, 52,312 (Oct. 9, 2009); FWS Revised Designation of Critical Habitat for the Wintering Population of the Piping Plover (*Charadrius melodus*) in Texas, 73 Fed. Reg. 74,675, 74,680 (Dec. 9, 2008).

56. *See, e.g.*, Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Diamond Darter (*Crystallaria cincotta*), 78 Fed. Reg. 52,364, 52,383 (Aug. 22, 2013), <http://www.regulations.gov/#!documentDetail;D=FWS-R5-ES-2013-0019-0001>, [<https://perma.cc/W8EN-CAEM>] wherein FSW explained:

The OMB has provided guidance for implementing this E.O. that outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under

2. *Reductions in Crude Oil*

OMB Memorandum 01-27 stipulates that any action that results in reductions in crude oil supply of more than 10,000 barrels per day *could* be considered a significant adverse effect on energy. Numerous federal agencies have applied the “over 10,000 barrels per day” test in conducting economic analysis of proposed or final federal rulemaking. For example, the National Forest Service (NFS) discussed the 10,000 barrel per day threshold when adopting the Colorado Roadless Rule, an NFS proposed rule providing management direction in conserving approximately 4.2 million acres of Colorado Roadless Areas (CRAs) on NFS administered public lands.⁵⁷ In proposing the Colorado Roadless Rule, NFS sought to

consideration. The FEA considered the potential effects of the diamond darter critical habitat designation on coal, oil, and gas development. The FEA found that some limited impacts to these energy development activities are anticipated, but they will mostly be limited to the administrative costs of consultation. Therefore, reductions in energy production are not anticipated, and consultation costs are not anticipated to increase the cost of energy production or distribution in the United States in excess of one percent. None of the nine outcome thresholds of impact are exceeded, and the economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with diamond darter conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

57. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. 59,808, 59,842 (Oct. 13, 2005). For a history of the National Forest Service, see generally Glen O. Robinson, *The Forest Service: A Study in Public Land Management* (Jo Hinkel ed., 2013); Robert D. Baker, *Timeless Heritage: A History of the Forest Service in the Southwest*. Vol. 409. US Dept. of Agriculture, Forest

strike a balance between conserving roadless areas in public lands for future generations and encouraging economic development activities, including drilling for oil and gas, within the CRA.

Interest in the Colorado Roadless Rule proceedings themselves was great⁵⁸ and generated substantial public participation both in public meetings⁵⁹ and in written comments.⁶⁰ Oil and gas resources are vital to the Colorado economy and the proposed Colorado Roadless Rule could impact oil and gas development.⁶¹ An estimated 8% of the United States' dry natural gas reserves are located in Colorado. As such, Colorado is estimated to hold the third largest reserves of onshore dry natural gas in the nation, just after Texas and Wyoming.⁶² Prior to the rulemaking, Colorado wells produced 1.45 trillion cubic feet of natural gas for market, or 7% of total U.S. production. In addition, about 28.3 million barrels of oil were produced in Colorado, or 1% of U.S. production.

Oil and gas are central not only to Colorado's private sector, but revenues from oil and gas are also critical to the economy of the Colorado state government. Of the \$287 million in royalties collected

Service, 1988. *See also* JULIA M. WONDOLLECKED, *Public Lands Conflict and Resolution: Managing National Forest Disputes*. (2013); ROBERT L. GLICKSMAN, *Public Natural Resources Law* (2nd ed. 2007). For a critical discussion see Federico Cheever, *Four Failed Forest Standards: What We Can Learn from the History of the National Forest Management Act's Substantive Timber Management Provisions*, 77 OREGON L. REV. 601 (1998).

58. *See, e.g.*, USDA, COLORADO ROADLESS RULES, <http://www.fs.usda.gov/roadmain/roadless/coloradoroadlessrules> [<https://perma.cc/D9ZA-YV7C>]; *see also* Troy Hooper, *Colorado Roadless Rule Goes Into Effect*, THE HUFFINGTON POST (Sept. 5, 2012), <http://www.huffingtonpost.com/news/colorado-roadless-rule/> [<https://perma.cc/DM4L-G7TS>].

59. COLORADO ROADLESS RULE MEETINGS, <http://www.eventbrite.com/e/colorado-roadless-rule-meetings-tickets-1632927129> [<https://perma.cc/VCT3-R8X8>].

60. SPECIAL AREAS; ROADLESS AREA CONSERVATION: APPLICABILITY TO THE NATIONAL FORESTS IN COLORADO, http://www.regulations.gov/#!documentDetail;D=FS_FRDOC_0001-1051 [<https://perma.cc/W56R-N3PR>].

61. 76 Fed. Reg. at 21286-87.

62. *Id.*

on federal oil and gas production in Colorado, \$117 million were paid to the State of Colorado with an additional \$64 million collected in severance taxes. Economists classified approximately 266,900 acres within the CRAs as having “moderate to high” oil and gas potential and another 631,600 acres as having a “high” potential for oil and gas development.

Notwithstanding the importance of oil and gas development to Colorado’s economy, the NFS determined that, “projected natural gas and oil production from CRAs with high development potential, although locally significant, does not significantly change under the final rule.”⁶³ The agency explained that although a total of 355 firms affiliated with oil and gas development and production were located within the affected CRA region, 337 were considered small businesses. More significantly, no major difference in average annual natural gas or oil production was expected between the existing baseline conditions and those that would result if the proposed Colorado Roadless Rule was put into place. The record showed there were only two measurable differences in natural gas production across the alternative forest plans explored. Even in the most aggressive assumption, oil production was estimated to increase by only about seven barrels per day and 4 billion cubic feet per year, compared to the final regulation. Accordingly, NFS determined the seven barrels per day increase was “an inconsequential difference compared to the E.O. 13211 criterion of 10,000 barrels per day”⁶⁴ and the 4 billion cubic feet per year was below the criterion for significant effects of 25 bcf/year.⁶⁵

The Colorado Roadless Rule was not the only instance where the Department of the Interior applied the reduction in 10,000 barrels per day of oil test. In 2004, the Fish and Wildlife Service (FWS) of the Department of the Interior⁶⁶ also considered the test when evaluating

63. 77 Fed. Reg. 39575-39612 (Jul. 3, 2012), *available at* <https://www.gpo.gov/fdsys/pkg/FR-2012-07-03/html/2012-15958.htm> [<https://perma.cc/V7C9-QBZD>].

64. *Id.*

65. *Id.*

66. For a history of the Fish and Wildlife Service (FWS) of the Department of the Interior, see NATHANIEL PRYOR REED & DENNIS DRABELLE, *THE UNITED STATES FISH AND WILDLIFE SERVICE* (1984). *See*

the potential energy impacts of designating a critical habitat for the plant called Desert Yellowhead (*Yermo xanthocephalus*) in central Wyoming pursuant to section seven of the Endangered Species Act (ESA) of 1973.⁶⁷ Like Colorado Roadless Rule the year prior, the Desert Yellowhead designation was also controversial, generated a great deal of locate debate in Wyoming and led to numerous public comments.

Like NFS, FWS also carefully analyzed the economic impacts of the Desert Yellowhead critical habitat designation. Most of the businesses that could be negatively impacted by the designation were small businesses. Most of those small businesses were then engaged in either geophysical oil and gas exploration of BLM public lands or cattle ranching. Other small businesses that could be adversely affected were oil and gas operators that hoped to begin extraction on the BLM lands. Since there were no oil and gas operations currently operating in the area to be designated (only companies engaged in oil

also Thomas R. Vale, *THE AMERICAN WILDERNESS: REFLECTIONS ON NATURE PROTECTION IN THE UNITED STATES* (2005).

67. 16 U.S.C. § 1531 *et seq.* For discussions of the conflict between oil and gas development and the ESA, see Thomas Campbell et al., *Protecting the Lesser Prairie Chicken Under the Endangered Species Act: A Problem and an Opportunity for the Oil and Gas Industry*, 45 TEX. ENVTL. L. J. 31, 32-33, 36-38, 41, 48-50 (2015); Gabriel Eckstein & Jesse Snyder, *Endangered Species in the Oil Patch: Challenges and Opportunities for the Oil and Gas Industry*, 33 TEX. A&M L. REV. 379, 379-81, 393, 396-98, 401-09 (2013); Nicolas Parke, *Texas Oil and Gas Industry vs. the Dunes Sagebrush Lizard: How the Texas Habitat Conservation Plan Saved More Than Just a Lizard*, 43 TEX. ENVTL. L.J. 71, 72-99 (2012); Kalyani Robbins, *Awakening the Slumbering Giant: How Horizontal Drilling Technology Brought the Endangered Species Act to Bear on Hydraulic Fracturing*, 63 CASE W. RES. L. REV. 1143, 1143-66 (2012); Sally A. Paez, *Preventing the Extinction of Candidate Species: The Lesser Prairie-Chicken in New Mexico*, 49 NAT. RESOURCES J. 525, 534-35, 538-39, 541, 549, 552-55, 558, 561-75 (2009). See also Charles R. Shockey, *The Enigma of the Blind Salamander and Groundwater Pumping: Lessons from the Edwards Aquifer, Texas* (1996), available at <http://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1013&context=biodiversity-protection-implementation-and-reform-endangered-species-act> [<https://perma.cc/PU4D-8DXE>].

and gas exploration), FWS determined that the decision to list would not change energy production, supply or distribution facilities.

The FWS conclusion was bolstered by historic records that showed that in all of Fremont County Wyoming combined (the entire county where the critical habitat for the plant was located) less than 10,000 barrels of oil a day were produced. As such, FWS found that even in the worst-case financial impact scenario where section seven consultation causes lessees to forego drilling two production wells, it was extremely unlikely that crude oil supply would drop by more than the threshold 10,000 barrels per day specified as an adverse energy impact within the meaning of EO 13211. Accordingly, FWS concluded that the designation of critical habitat for *Yermo xanthocephalus* would not significantly affect future energy production.”⁶⁸

A year after designating the Desert Yellowhead, in 2005, the FWS again considered, *inter alia*, application of the 10,000 barrels per day standard in its proposed⁶⁹ and final designation⁷⁰ of critical habitat for the Arkansas River Basin Population of a small fish called the Arkansas River Shiner (*Notropis girardi*).⁷¹ The area designated to

68. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Yermo xanthocephalus* (Desert Yellowhead), 69 Fed. Reg. 12,278, 12,287-288 (Mar. 16, 2004). For a historical discussion of administrative law under DOI, see Charles F. Wheatley Jr., *Study of Administrative Procedures—The Department of Interior*, 43 GEO. L.J. 166 (1954).

69. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. at 59,842.

70. Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner, 70 Fed. Reg. 44,078, 44,082 (Aug. 1, 2005).

71. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. at 59,842. FWS said:

This final rule to designate critical habitat for the Arkansas River shiner is not expected to significantly affect energy supplies, distribution, or use. Appendix B of the draft economic analysis provides a detailed discussion and

protect the fish was large, covering the river basin in four rivers across four states: New Mexico, Texas, Oklahoma and Kansas. The designation would require oil and gas operators in the basins, most of whom were small businesses, to modify operations to have less impact on the fish. Adverse impacts were expected to be added costs of compliance for certain oil and gas projects. Those added costs would not, however, reduce production by 100,000 barrels per day (or two other OMB tests discussed in greater detail below). After a detailed and careful analysis of the energy impacts while conducting the more expansive economic analysis of the proposed fish designation, FWS determined that neither the energy sector in general nor the oil and gas industry in particular would likely experience a significant adverse effect due to the conservation requirements needed to protect the Arkansas River Shiner.

3. Reductions in Natural Gas Production

The corollary to the 100,000 barrels of oil per day test is the OMB test measuring potential to diminish production of natural gas. OMB Memorandum 01-27 stipulates that any federal action resulting in reductions in natural gas production in excess of 25 million mcf⁷² per year may constitute a “significant adverse affect” within the meaning of EO 13211.

analysis of this determination. Specifically, three criteria were determined to be relevant to this analysis: (1) Reductions in crude oil supply in excess of 10,000 barrels per day (bbls); (2) reductions in natural gas production in excess of 25 million Mcf per year; and (3) increases in the cost of energy production in excess of one percent. The draft economic analysis determined that the oil and gas industry is not likely to experience “a significant adverse effect” as a result of Arkansas River shiner conservation activities. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

72. Equals the volume of 1,000 cubic feet (cf) of natural gas.

The two tests are often evaluated together. For example, in both the Colorado Roadless Rule⁷³ and the critical habitat designation of the Arkansas River Shiner,⁷⁴ DOI evaluated the proposed rules using both the 100,000 barrels of oil a day and the of 25 million mcf per year of natural gas tests as indices of adverse energy impacts.⁷⁵ In the case of the Arkansas River Shiner, FWS acknowledged that natural gas production could be reduced. Economists projected that the production of natural gas due to the fish could be about 4 billion cubic feet per year, but that reduction fell below the 25 million mcf per year mark that would be considered an adverse energy impact within the meaning of EO 13211.⁷⁶

The analysis was echoed again in 2005 when FWS considered the critical habitat designation in Pecos County, Texas of the rare species of snail called the *Pecos assiminea*. The snail designation did not meet the diminished natural gas production test because while there was oil and gas exploration, no ongoing oil and gas production had begun in the region. As such, any added costs of compliance would be incorporated into planned operations as a cost of doing business. Moreover, since no drilling activities had begun, there was no indication any conservation efforts for the *Pecos assiminea* were

73. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. at 59,842.

74. Endangered and Threatened Wildlife and Plants; Critical Habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008); Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. at 59,842.

75. Endangered and Threatened Wildlife and Plants; Critical Habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. at 39,519; Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. at 59,842.

76. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner (*Notropis girardi*), 70 Fed. Reg. at 59,842.

required⁷⁷ since there was no guarantee the fields would be productive.

4. Reductions in Coal

While the OMB standards required it, historically few federal agency actions were needed to consider the impact of reductions in coal. A recent action by the EPA entitled the Clean Power Plan is, however, rather illustrative on the reduction in coal test.⁷⁸ The controversial Clean Power Plan⁷⁹ stated that the proposal was a “significant regulatory action under EO 12866” that “is likely to have a significant effect on the supply, distribution, or use of energy.”⁸⁰ The Clean Power Plan would set emission guidelines for states to follow in their respective plans addressing greenhouse gas (GHG) emitted from existing fossil fuel-fired electric generating units (EGUs) pursuant to the Clean Air Act (CAA) section 111(d).⁸¹

EPA prepared a very brief SEE that the agency included in the Clean Power Plan proposal. The SEE read:

We estimate a 4 to 7 percent increase in retail electricity prices, on average, across the contiguous U.S. in 2020, and a 16 to 22 percent reduction in coal-fired electricity generation as a result of this rule. The EPA projects that electric power sector delivered natural gas prices will increase by about 8 to 12 percent in 2020.⁸²

77. Endangered and Threatened Wildlife and Plants; Listing Roswell springsnail, Koster's springsnail, Noel's amphipod, and Pecos assimineia as Endangered With Critical habitat; Final Rule, 70 Fed. Reg. 46,304 (Aug. 9, 2005). In a nod to concerns raised by conservationists and environmental groups regarding water depletion in the area due to hydraulic fracturing, the FWS also noted that, “while oil and gas activities in this region may affect groundwater quality, they are not anticipated to affect groundwater levels.”

78. Carbon Pollution Emissions Guidelines for Existing Stationary Sources: EGUs in Indian Country and U.S. Territories, 79 Fed. Reg. 34830 (June 18, 2014) (to be codified at C.F.R. pt. 60); Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, 79 Fed. Reg. 41772 (July 17, 2014) (to be codified at 40 C.F.R. pt. 60).

79. 79 Fed. Reg. 34,830 (June 18, 2014).

80. *Id.*

81. 79 Fed. Reg. 34,830 (June 18, 2014).

82. *Id.* EPA summarized the regulatory effect of the proposed Clean Power Plan in tabular form as follows:

The EPA also prepared a more detailed Regulatory Impact Assessment (RIA)⁸³ for the Clean Power Plan.⁸⁴ In explaining the significant energy impact in the RIA, EPA provided numbers that differed from those posted in the Clean Power Plan ANPR.⁸⁵ The RIA states:

EPA projects that approximately 46 to 49 GW of additional coal-fired generation (about 19% of all coal-fired capacity and 4.6% of total generation capacity in 2020) may be removed from operation by 2020.

UA and Regulatory Plan Information

Publication Period: Fall 2014

Agenda Stage of Rulemaking: Proposed Rule

Major Rule: Yes

Legal Authorities: CAA 111

Legal Deadlines: None

Government Levels Affected: Federal, State, Tribal

Federalism Implications: Yes

Unfunded Mandates: No

Requires Regulatory Flexibility Analysis: Undetermined

Small Entities Affected: No

International Impacts: No

Energy Effects: Yes

Included in Regulatory Plan: Yes

Further details of the estimated energy effects for the Clean Power Plan were included in the economic impact analysis posted in the public docket, *available at* <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2013-0602>

83. US Environmental Protection Agency, Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants (June 2014) § 3.10 at 3-47, *available at* <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602ria-clean-power-plan.pdf> [<https://perma.cc/6KF2-9PWU>].

84. For background on the Clean Power Plan see CLEAN POWER PLAN FOR EXISTING POWER PLANTS, <http://www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants> [<https://perma.cc/5R49-TAB7>].

85. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014).

EPA also projects the average delivered coal price decreases by 16.3% to 16.5% with decreased production of 208 to 228 million tons (24.6% to 27.7% of US production) in 2020 and that electric power sector delivered natural gas prices will increase by about 9.3% to 11.5% with increased power sector consumption of between 979 to 1,194 billion cubic feet (BCF) in 2020.

Average retail electricity prices are projected to increase in the contiguous U.S. by 5.9% to 6.5% in 2020.⁸⁶[1]

EPA received 4,315,706 public comments on the proposed Clean Power Plan (with 33,668 unique comments posted on the public docket *Regulations.gov*).⁸⁷ Of the millions of public comments written, only a handful addressed the relevance of EO 13211.⁸⁸

86. US Environmental Protection Agency, *supra* note 74; *see also* US Environmental Protection Agency, Clean Power Plan Proposed Rule - Regulatory Impact Analysis (June 2014), *available at* <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-regulatory-impact-analysis>.

87. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 829 (June 18, 2014); EPA Docket EPA-HQ-OAR-2013-0602-0001, *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-0001>.

88. *See* Comment submitted by Leonard K. Peters, Secretary, Energy and Environment Cabinet, State of Kentucky, *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-22574>; Comment submitted by Alexander C. Schoch, Executive Vice President, et al., Peabody Energy Corporation (Dec. 1, 2014), *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-24170>; Comment submitted by Hal Quinn, President and Chief Executive Officer, National Mining Association at 141, *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-24094> (Dec. 1, 2014); Comment submitted by U.S. Representative Lamar Smith, Chairman, Committee on Science, Space and Technology, House of Representatives, Congress of the United States (Dec. 1, 2014), *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-22609>. Over two dozen commenters raised compliance with EO 12866, *see, e.g.*, Comment submitted by Allison Wood, Hunton & Williams LLP on behalf of Utility Air Regulatory Group (UARG), (December 1, 2014), *available at*

The state of Kentucky, challenging the EPA's authority to issue the Clean Power Plan,⁸⁹ asserted, by way of public comments in the Clean Power Plan docket, that the SEE published in the Clean Power Plan ANPR provided "very limited discussion" and was thus, "clearly inadequate."⁹⁰ Kentucky argued that the RIA did not constitute a "detailed statement" of the numerous adverse energy effects and failed to meet EO 13211 requirements because the SEE did not provide any regional or local impacts of the proposed Clean Power Plan. Kentucky explained, "while noting that electricity prices will increase by four to seven percent and that natural gas prices will increase by eight to twelve percent, EPA does not reference the regional and local impacts of these changes."⁹¹ Kentucky expressed concern, that given natural gas' historic price volatility replacing coal-fired power plants with their natural gas counterparts would lead to price hikes for electric utility consumers that would be difficult for Appalachians to bear.

Kentucky also pointed out that EPA's SEE notes a "16 to 22 percent reduction in coal-fired electricity generation...but does not reference the change in U.S. coal production."⁹² EPA projected that the Clean Power Plan rule will reduce U.S. coal production by 20 to 27 percent in 2020, a reduction between 217 to 291 million tons of coal annually—at least 40 times greater than the five million ton reporting threshold required by OMB Memorandum 01-27.⁹³

Kentucky asserted that to meet the dictates of EO 13211, EPA should expand its SEE to provide greater detail on adverse energy impacts such as the effect of reduced coal production on Appalachia.

<http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-22767>.

89. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014).

90. Comment submitted by Leonard K. Peters, Secretary, Energy and Environment Cabinet, State of Kentucky, (June 6, 2006) 13-14, *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-22574> at 13-14.

91. *Id.*

92. *Id.*

93. *Id.*

The state requested that EPA also address alternatives that mitigate regional and local impacts of the proposed rule.⁹⁴

EPA promulgated the final Clean Power Plan on October 23, 2015⁹⁵ and the rule became effective on December 22, 2015.⁹⁶ The rule was challenged even before it became law. Once promulgated more lawsuits were filed.⁹⁷ On February 9, 2016, the Supreme Court issued a stay of the CleanPower Plan pending judicial review. EPA said “The Court’s decision was not on the merits of the rule. EPA firmly believes the Clean Power Plan will be upheld when the merits are considered because the rule rests on strong scientific and legal foundations.”⁹⁸ Executive Order 13211 was not a factor in the litigation.

5. Reductions in Electricity Production

OMB Memorandum 01-27 stipulates that any federal action that results in reductions in electricity production in excess of 1 billion kilowatt-hours per year or in excess of 500 megawatts of installed capacity may be considered an adverse energy affect within the meaning of EO 13211. A variety of federal agencies considered the reduction in electrical testing when proposing federal regulations designed to encourage natural resource conservation and environmental protection. These federal agencies include subdivisions within both DOI and the Department of Commerce (DOC).

94. *Id.*

95. Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations, 80 Fed. Reg. 64966 (October 23, 2015).

96. *Id.*

97. Timothy Cama, *Two Dozen States Sue Obama Over Coal Plant Emissions Rule*, THE HILL, Oct. 23, 2015, <http://thehill.com/policy/energy-environment/257856-24-states-coal-company-sue-obama-over-climate-rule> [<https://perma.cc/7RNS-DUGA>].

98. CLEAN POWER PLAN FOR EXISTING POWER PLANTS, <http://www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants> [<https://perma.cc/YD8H-F2QU>].

After discussion of the elements above, it should come as no surprise that FWS considered reductions in electricity production in excess of 1 billion kilowatt-hours per year or in excess of 500 megawatts of installed capacity in a number of instances. For example, in evaluating conservation activities to preserve the habitat of an endangered bird called the southwestern willow flycatcher (*empidonax trailii extimus*),⁹⁹ in 2005 FWS considered whether required conservation measures would yield a net reduction in electricity production in excess of 1 billion kilowatt-hours.¹⁰⁰ The southwestern willow flycatcher can be found in about 120,824 acres of land located in Arizona, California, Nevada, New Mexico and Utah. As such, the proposal generated a lot of public comment on how designation of the critical habitat for the endangered bird would impact commercial and public use of land. Public use issues discussed in public comments included tribal rights, transportation, fire management and military use of land. Commercial concerns focused on grazing, agriculture, recreation and development by large and small businesses. There was also concern on how the designation might impact river dams and resulting electrical output. After careful analysis, FWS concluded that critical habitat designation of the southwestern willow flycatcher would not trigger the OMB test of 1 billion kilowatt-hours in net electrical production loss.

99. Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*); Final Rule, 70 Fed. Reg. 60,886 (Oct. 19, 2005). For a detailed discussion of “reductions in electricity production in excess of 1 billion kilowatt-hours per year or in excess of 500 megawatts of installed capacity” see Endangered and Threatened Wildlife and Plants; Critical Habitat Revised Designation for the kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008).

100. Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for the southwestern Willow Flycatcher (*Empidonax traillii extimus*); Final Rule, 70 Fed. Reg. 60,886 (Oct. 19, 2005). *See also* National Oil and Hazardous Substances Pollution Contingency Plan; National Priorities List, 70 Fed. Reg. 39,227 (July 7, 2005). In addition, FWS found that the “total financial impacts related to southwestern willow flycatcher conservation activities (\$ 2.7 million annually) represent 0.02 percent of the estimated annual baseline cost of regional energy production, and this is well below the 1 percent threshold suggested by OMB.”

FWS is not the only federal agency balancing the needs of natural resources conservation against electrical power. The DOC's National Oceanic and Atmospheric Administration (NOAA) also adopted the over 500 megawatts of installed capacity test when considering protection of certain endangered or threatened species. For example, when considering protection of the Gulf sturgeon,¹⁰¹ a fish capable of growing over six feet in length, NOAA found that "even in the worst case scenario, implementation of section 7 for the Gulf sturgeon will not result in a 'reduction in electricity production in excess of 500 megawatts of installed capacity' or an 'increase in the cost of energy production in excess of one percent.'"¹⁰²

In evaluating salmon, NOAA through the National Marine Fisheries Service (NMFS) applied two threshold tests to determine whether a critical habitat designation needed to protect salmon would have a "significant adverse effect on the supply, distribution, or use of energy."¹⁰³ As with the Gulf Sturgeon, NOAA evaluated reductions in electricity production to determine if the impact would

101. Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for the Gulf Sturgeon; Final Rule 68 Fed. Reg. 13,370 (Mar. 19, 2003).

102. *Compare id. with* Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for the Appalachian Elktoe, 67 Fed. Reg. 61,016 (Sept. 27, 2002) (even in the worst case scenario, implementation of section 7 for the Appalachian elktoe will not result in a "reduction in electricity production in excess of 500 megawatts of installed capacity" or an "increase in the cost of energy production in excess of one percent."). *See also* Endangered and Threatened Wildlife and Plants; Critical habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008) (FWS Critical Habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*)). *See also* Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Three Threatened Mussels and Eight Endangered Mussels in the Mobile River Basin, 69 Fed. Reg. 40,084 (July 1, 2004) (FWS Designation of Critical Habitat for Three Threatened Mussels and Eight Endangered Mussels in the Mobile River Basin).

103. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Three Threatened Mussels and Eight Endangered Mussels in the Mobile River Basin; Final Rule, 69 Fed. Reg. 71,880 (Dec. 10, 2004).

be in excess of 1 billion kilowatt-hours per year or in excess of 500 megawatts of installed capacity.¹⁰⁴ Salmon designation would affect hydropower projects. The actual costs of section 7 compliance to protect the salmon was debated. Heightened costs included: construction modifications to hydropower plants to improve fish passage facilities and programs; research and monitoring of water quality and fish passage efficiency; and other offsite mitigation efforts. NMFS concluded, based partially on its own section 7 consultation history, that the total impact of salmon conservation or mitigation overestimated the incremental impacts of critical habitat designation.¹⁰⁵ Although some construction modification (and subsequent species monitoring) would be required, neither the modification costs nor the monitoring costs were particularly high compared to the budget of the entire plant. As such, NMFS's EO 13211 energy impacts analysis indicated that designation of salmon critical habitat would not in fact have impacts that exceed the OMB established thresholds of over 1 billion kilowatt-hours per year or of over 500 megawatts of installed capacity.¹⁰⁶

104. *Id.* The agencies also considered increases in the cost of energy production in excess of one percent. NMFS noted that, "for both thresholds of the energy impacts analysis, the assessment concludes that the total impacts of salmon conservation/mitigation measures for hydropower projects *may* exceed the thresholds for determining that an adverse energy effect is significant."

105. *Id.* ("[T]here is strong evidence that consultation based on the jeopardy standard alone is capable of imposing significant impacts on such projects.").

106. *Id.*, stating:

Approximately 90 hydropower projects exist within the area covered by the seven ESUs addressed in this rulemaking. The projects range from very small ones with installed capacities considerably less than 5 MW to much larger projects ranging up to 196 MW installed capacity. Within California, the majority of hydropower projects are private or State-owned and licensed by FERC. A smaller percentage of all projects are owned and operated by the Corps or BOR. Consultations on hydropower projects

More recently, in 2014, NMFS evaluated the critical habitat designation of the loggerhead sea turtle (*Caretta caretta*) for the Northwest Atlantic Ocean Distinct Population Segment (DPS) within the Atlantic Ocean and the Gulf of Mexico.¹⁰⁷ After acknowledging that “[o]il and gas exploration and alternative energy projects may affect the essential features of critical habitat for the loggerhead sea turtle,” NMFS determined that “the designation is not expected to impact the level of energy production.”¹⁰⁸ The agency explained that it was very unlikely for the energy industry to experience a change in production above the OMB threshold of billion kilowatt-hour as a result of the loggerhead sea turtle’s critical habitat designation.¹⁰⁹ Although NMFS found there would be no adverse energy impact

represent a relatively small percentage of the total section 7 consultations concerning listed salmon, but cost of project modification may be higher than for other activities.

107. Endangered and Threatened Species: Critical habitat for the Northwest Atlantic Ocean Loggerhead Sea Turtle Distinct Population Segment (DPS) and Determination Regarding Critical habitat for the North Pacific Ocean Loggerhead DPS), 79 Fed. Reg. 39,856 (July 10, 2014).

108. *Id.*

109. *Id.* The designation was made pursuant to the Endangered Species Act of 1973, as amended (ESA). NMFS explained:

Specific areas for designation include 38 occupied marine areas within the range of the Northwest Atlantic Ocean DPS. These areas contain one or a combination of habitat types: Nearshore reproductive habitat, winter area, breeding areas, constricted migratory corridors, and/or *Sargassum* habitat. The U.S. Fish and Wildlife Service (USFWS) is issuing a final rule for loggerhead critical habitat for terrestrial areas (nesting beaches) in a separate document. No marine areas meeting the definition of critical habitat were identified within the jurisdiction of the United States for the North Pacific Ocean DPS, and therefore we are not designating critical habitat for that DPS.

resulting from the protective regulation for the loggerhead sea turtle (and, hence no requirement to draft a SEE), in its own publication announcing the measure NMFS doubted the ultimate effectiveness of the designation's actual conservation impact on the loggerhead sea turtle.¹¹⁰

6. Over 1% increase in the cost of energy production

OMB Memorandum 01-27 stipulates that any federal action that causes an increase in the cost of energy production in excess of one percent may be considered an adverse energy affect within the meaning of EO 13211. The one percent of energy production¹¹¹ test was the OMB factor most often cited by federal agencies when evaluating EO 13211 compliance.¹¹²

110. *Id.* In uncharacteristic candor, NMFS said:

Due to the extensive requirements of oil and gas development and renewable energy projects to consider environmental impacts, including impacts on marine life, even absent critical habitat designation for the loggerhead sea turtle, we anticipate it is unlikely that critical habitat designation will change conservation efforts recommended during section 7 consultation for these projects. Consequently, it is unlikely the identified activities and projects will be affected by the designation beyond the quantified administrative impacts.

111. Guidance for Implementing E.O. 13211, OMB Memorandum 01-27 (July 13, 2001).

112. For a detailed discussion see Endangered and Threatened Wildlife and Plants; Critical habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008) (“only two adverse effects of energy supply, distribution, or use were relevant to this analysis, and neither was considered significant: (1) The net loss of gigawatt hours is anticipated to be less than 27 percent of the threshold suggested by OMB, and (2) the additional cost of sturgeon-related energy production is less than the 1 percent threshold suggested by OMB. Therefore, this final rule to designate critical habitat for the Kootenai River sturgeon is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required”). *See also* Draft Economic Analysis of Critical Habitat Designation for the Fluted Kidneyshell and Slabside Pearlymussel (April 2013) at 123 (“The energy analysis above highlights no significant adverse

The 1 percent of energy production cost test was applied by a number of federal rulemakers, evaluating the impact of ESA designations on both the electric utility industry¹¹³ and the oil and gas industry.¹¹⁴ For example, in evaluating the incremental impacts associated with the critical habitat designation for the wintering population of small Texas shorebird called the piping plover (*Charadrius melodus*) in 2008, FWS found the designation would not be of sufficient magnitude to affect either energy production or delivery. Although the agency agreed that the designation of the Texas piping plover would, in fact, result in some energy-related impacts, including impacts on energy production, the agency averred that the adverse effects were not significant within the meaning of EO13211. Economic estimates concluded that the maximum amount of oil production potentially affected by the critical habitat designation of the piping plover was only about 282 barrels of oil per day with the maximum amount of natural gas production of 3.4 million Mcf per year. These estimates were based on prior oil and natural gas production in the region. Both estimated amounts were well below the 1% threshold set out in the OMB guidance. As such,

impacts to energy production in any of the major sectors. Based on this, it is unlikely that the national cost of energy production or distribution will increase by 1 percent as a result of critical habitat designation.”), *available at* <http://www.regulations.gov/#!documentDetail;D=FWS-R4-ES-2013-0026-0002>.

113. *See, e.g.*, Endangered and Threatened Wildlife and Plants; Critical habitat Revised Designation for the Kootenai River Population of the White Sturgeon (*Acipenser transmontanus*), 73 Fed. Reg. 39,506 (July 9, 2008) (evaluating reductions in electricity production in excess of one billion kilowatt hours (kWh) per year or in excess of 500 megawatts (MW) of installed capacity and increases in the cost of energy production in excess of 1 percent to determine “whether the electricity industry is likely to experience “a significant adverse effect” as a result of Kootenai sturgeon conservation activities”).

114. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for *Cirsium loncholepis* (La Graciosa Thistle), 74 Fed. Reg. 56,978 (Nov. 3, 2009); Endangered and Threatened Wildlife and Plants; Final Rulemaking To Designate Critical habitat for the Threatened Southern Distinct Population Segment of North American Green Sturgeon, 74 Fed. Reg. 52,300 (Oct. 8, 2009).

no SEE was required for the proposal to designate critical habitat for the wintering population of the piping plover in Texas.¹¹⁵

A year later, in 2009, the FWS applied the same test of whether an increase in energy production cost was in excess of one percent in considering the critical habitat designation for the endangered plant called that La Graciosa thistle (*Cirsium loncholepis*). The results of FWS economic and EO 13211 analysis led FWS to revise its ESA findings and reduce the habitat designation by about 16,986 ac (6,873 ha). After making the space revision, FWS determined that the one percent of production test was not met. The final designation of critical habitat was not expected to significantly affect oil and gas production in the area because the proposal involved reactivation of existing wells, as opposed to new oil and gas development. Since the production was based on reactivation of old wells, which FWS found speculative at best, the service found that, as a matter of law, there was no resultant increase in the cost of energy production due to critical habitat designation.¹¹⁶ Hence, no SEE was needed.

115. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for the Wintering Population of the Piping Plover (*Charadrius melodus*) in Texas, 73 Fed. Reg. 74,675 (Dec. 9, 2008).

116. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for *Cirsium loncholepis* (La Graciosa Thistle), 74 Fed. Reg. 56,978 (Nov. 3, 2009). For an explanation of critical habitat designation see D. Noah Greenwald, Kieran F. Suckling, and Stuart L. Pimm, *Critical habitat and the role of peer review in government decisions*, 62.7 *BioScience* 686-690 (2012); Jared B. Fish, *Critical Habitat Designations after New Mexico Cattle Growers: An Analysis of Agency Discretion to Exclude Critical Habitat*, 21 *FORDHAM ENVTL. L. REV.* 575 (2010); Michael Senatore, John Kostyack, and Andrew Wetzler, *Critical Habitat at the Crossroads: Responding to the GW Bush Administration's Attacks on Critical Habitat Designation Under the ESA*, 33 *GOLDEN GATE U. L. REV.* 447 (2003). For a critical discussion of the La Graciosa thistle and other designations see Jared Margolis, *RUNAWAY RISK: Oil Trains and the Government's Failure to Protect People, Wildlife and the Environment* (Center for Biological Diversity February 2015) ("The oil-train rail routes pass through critical habitat for the threatened red-legged frog, endangered coast steelhead and California tiger salamander, as well as endangered plants, such as the La Graciosa thistle"), http://www.w.biologicaldiversity.org/campaigns/oil_trains/pdfs/runaway_risks_web.pdf [<https://perma.cc/KDK6-6MQT>].

In a counter-veiling example the same year, FWS deferred determining EO 13211's applicability. In the 2009 evaluation of green sturgeon (*Acipenser medirostris*) critical habitat designation,¹¹⁷ FWS found that designation of the fish could potentially have energy impacts "as the result of requested project modifications to hydropower dams, alternative energy hydrokinetic projects, and LNG facilities."¹¹⁸ [2] The critical habitat designation for the green sturgeon decision was, hence, deferred because the agency could not determine the scale of adverse energy impacts at the time of the ANPR.¹¹⁹

117. Endangered and Threatened Wildlife and Plants: Final Rulemaking To Designate Critical habitat for the Threatened Southern Distinct Population Segment of North American Green Sturgeon, 74 Fed. Reg. 52,300 (Oct. 8, 2009). For a discussion of the green sturgeon, see Green Sturgeon (*Acipenser medirostris*), N.O.A.A. Fisheries (2015), <http://www.fisheries.noaa.gov/pr/species/fish/green-sturgeon.html> [<https://perma.cc/2Z5U-5HX6>].

118. *Id.*

119. Endangered and Threatened Wildlife and Plants: Final Rulemaking To Designate Critical habitat for the Threatened Southern Distinct Population Segment of North American Green Sturgeon, 74 Fed. Reg. at 52,300. The agency also said:

The potential impacts of permanent crop loss on carbon dioxide levels in the atmosphere and the potential changes in climate and energy consumption in affected regions are unclear at this time due to many uncertainties. For example, it is uncertain what the effects of crop loss are on atmospheric carbon dioxide levels and subsequently on climate and on energy consumption by consumers. Further complicating matters is the uncertainty regarding how these relationships may be affected by other impacts on atmospheric carbon dioxide levels from activities related to or outside of this critical habitat designation.

Compare Daniel L. Erickson, *Patterns of Migration and Habitat Use By Green Sturgeon (Acipenser medirostris) in the Vicinity of a Proposed Wave Energy Project in Oregon*, 145th Annual Meeting of the American

7. *Over 1% increase in cost of energy distribution*

A corollary to the one percent of production test is the one percent of distribution test also set out in OMB Memorandum 01-27, which stipulated that increases in the cost of energy distribution in excess of one percent may be considered an adverse energy affect within the meaning of EO 13211. Although less often cited than the 1% of energy production test, regulatory literature reveals robust application of the 1% of energy distribution test.

For example, in evaluating the impact on energy distributions, the FWS concluded that conservation proposals protecting the critical habitat of the dusky gopher frog¹²⁰ (*Lithobates sevosus*) would not cause an adverse energy-related impact despite expressed interest by landowners in oil and gas development within the designated habitat. FWS explained that designation of the gopher frog critical habitat would not result “in the complete loss of oil and gas development in Unit 1.”

In addition, FWS found that there could be no adverse impact in distribution since it was uncertain that any proposed oil and gas development in the designated dusky gopher frog critical habitat area would in fact be successful in yielding oil and/or natural gas. No oil and gas development had yet occurred within the region. Predictions of riches by landowners notwithstanding, since oil and gas development is an inherently risky investment, FWS found that it was uncertain whether the dusky gopher frog habitat designation would have any significant affect on the production, distribution, or use of energy at all. Indeed, if there was an adverse affect it was extremely unlikely to be above the 1 percent criteria OMB equated with a significant affect on energy supplies, distribution, or use. No

Fisheries Society. Afs, 2015, <https://afs.confex.com/afs/2015/webprogram/Paper21060.html> [https://perma.cc/2SVV-B6CY].

120. Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Dusky Gopher Frog (Previously Mississippi Gopher Frog); Final Rule and Proposed Rule, 77 Fed. Reg. 35,118 (June 12, 2012).

SEE was required or written for the dusky gopher frog critical habitat designation.¹²¹

In discussing critical habitat designation of the Texas' piping plovers (discussed earlier), FWS applied the one percent of energy distribution test and determined that the designation for Texas wintering population of the piping plover would not produce an adverse energy impact. The project modification costs to accommodate the habitat designation of the piping plover were relatively minor, estimated at approximately \$ 0.2 million to \$ 1.8 million per well. As such, the designation for the Texas bird was not likely to increase energy costs by more than one percent.¹²² Operators were expected to bear the costs as an operational expense.

C. OTHER TESTS

1. The National Scale Test: 1% of Wells Within the State

Though not articulated in the OMB Memorandum, more recently in 2014, under the Obama administration, FSW developed a "national scale test" that evaluates whether one percent of the oil and

121. *Id.* For other examples of ESA designations where the agency found no energy impacts, see, for example, 78 Fed. Reg. 59,556 (Sept. 26, 2013) ("based on information in the economic analysis, no energy-related impacts associated with fluted kidneyshell and slabside pearlymussel conservation activities within critical habitat are expected"); 78 Fed. Reg. 39,836 (July 2, 2013) ("based on information in the economic analysis, energy-related impacts associated with Buena Vista Lake shrew conservation activities within critical habitat are not expected"); 78 Fed. Reg. 24,008 (Apr. 23, 2013) ("based on information in the economic analysis, energy-related impacts associated with Umtanum desert buckwheat and White Bluffs bladderpod conservation activities within critical habitat are not expected"); 78 Fed. Reg. 20,074 (Apr. 23, 2013) ("given the small fraction of projects affected (two consultations over 20 years), consultation costs are not anticipated to increase the cost of energy production or distribution in the United States in excess of 1 percent. Thus, none of the nine threshold levels of impact ... is exceeded").

122. 73 Fed. Reg. 74,675 (Dec. 1, 2008); 73 Fed. Reg. 74,681 (Dec. 9, 2008). *Cf.* 69 Fed. Reg. 40,084 (July 1, 2004) (evaluating both (a) increases in the cost of energy production in excess of one percent and (b) increases in the cost of energy distribution in excess of one percent).

gas wells within the state may be impacted by proposed rulemaking. FWS's ANPR concerning the conservation of the Gunnison sage-grouse (*Centrocercus minimus*) is illustrative of the development and efficacy of the national scale test.

In developing protective measures for the threatened bird called the Gunnison sage-grouse, FWS proposed designating approximately 1,429,551 acres of Colorado and Utah lands as critical habitat.¹²³ In so doing FWS acknowledged, "incremental effects of the critical habitat designation were assumed to occur for energy projects in unoccupied sage-grouse habitat." FWS explained:

Approximately 31 producing or newly permitted oil and gas wells are located within unoccupied portions of the critical habitat designation. Approximately 28,000 wells in the State of Colorado produced 1.3 billion Mcf-equivalents in 2005 (an Mcf-equivalent is the total heat value of natural gas and oil expressed as a volume of natural gas). The number of wells within the critical habitat designation, therefore, represents less than one percent of wells in the State.¹²⁴

FWS determined that the Gunnison sage-grouse designation was not a significant energy action because such a small percentage of wells within the state of Colorado were impacted. As such, the designation would not result in significant incremental impacts to the energy industry "on a national scale."¹²⁵ No SEE was drafted or required.¹²⁶

2. Administrative Costs of Consultation Test

Federal agencies routinely consider the administrative costs of consultation when evaluating adverse energy impacts. This practice has become increasingly common when determining the impact of

123. 79 Fed. Reg. 69,312 (Feb. 6, 2014).

124. *Id.*

125. *Id.* (citing, Industrial Economics, Inc. 2014, p. A-15).

126. *Id.* (citing, Industrial Economics, Inc. 2014, p. A-15). For a later discussion of the Gunnison sage grouse in Colorado see Amy J. Davis, Michael L. Phillips, and Paul F. Doherty, *Survival of Gunnison sage grouse Centrocercus minimus in Colorado, USA*, 462 *J. OF AVIAN BIOLOGY* 186-192 (2015), <http://onlinelibrary.wiley.com/doi/10.1111/jav.00473/abstract> [<https://perma.cc/LJ8J-7YBR>].

ESA designations on oil and gas development. Federal agencies do not qualify administrative costs as significant, however, unless those costs involve increasing national production or distribution by more than one percent.

For example, FWS considered the effect that critical habitat designation of the diamond darter fish (*Crystallaria cincotta*) would have on coal, oil, and gas development. Although the diamond darter designation affected approximately 122.5 river miles in West Virginia and Kentucky and was demonstrated to have some limited impacts on energy development activities, FWS found no need to draft a SEE because the economic impact would “mostly be limited to the administrative costs of consultation.” These added costs would not constitute important reductions in energy production because the added consultation costs were unlikely to increase the cost of energy production or distribution in the United States in excess of one percent.¹²⁷

The administrative costs test can also be found in FSW’s analysis of the impact of critical habitat designation for the six endangered West Texas aquatic invertebrate species¹²⁸ on natural gas pipelines.¹²⁹ FSW found that the designation would result in minimal

127. *Id.* FWS also measured the designation against the nine outcome thresholds stated by OMB and determined that none were present. *Cf.* Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Six West Texas Aquatic Invertebrates, 78 Fed. Reg. 40,970 (July 9, 2013). *See also* Industrial Economics Incorporated, *Economic Analysis of Critical Habitat Designation of Marine Habitat for the Northwest Atlantic Ocean Distinct Population Segment of the Loggerhead Sea Turtle* (July 11, 2013) p. 119, available at <http://www.regulations.gov/#!documentDetail;D=NOAA-NMFS-2013-0079-0004>.

128. Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Six West Texas Aquatic Invertebrates, 78 Fed. Reg. 40,970 (July 9, 2013). The species were: Phantom springsnail (*Pyrgulopsis texana*), Phantom tryonia (*Tryonia cheatumi*), diminutive amphipod (*Gammarus hyalleloides*), Diamond tryonia (*Pseudotryonia adamantina*), Gonzales tryonia (*Tryonia circumstriata*), and Pecos amphipod (*Gammarus pecos*).

129. Endangered and Threatened Wildlife and Plants; Designation of Critical habitat for Six West Texas Aquatic Invertebrates, 78 Fed. Reg. 40,983 (July 9, 2013).

consultations¹³⁰ with the increased economic costs being wholly administrative such as addressing the adverse modification standard in section 7 consultation. Given the small number of projects affected, FWS concluded that designation was not anticipated to increase the cost of US energy production or distribution in excess of one percent. FWS did “not expect the designation of critical habitat to significantly affect energy supplies, distribution, or use due to the small amount of habitat we have designated and the lack of Federal activities that would be affected by the designation.”¹³¹ After check listing all nine tests outlined by the OMB, including evaluation of administrative costs, FWS determined there would not be a significant energy action and no SEE was required.

D. NOVEL LEGAL THEORIES¹³²

In evaluating the applicability of EO 13211, OMB often applies, in addition to its standard nine economic criteria, four further criteria derived from the Regulatory Flexibility Act (RFA). These RFA specific criteria include:

130. *Id.*

131. *Id.*

132. 79 Fed. Reg. 59,058 (Sept. 30, 2014) (After acknowledging that the BLM rule codifying policies for submitting applications for solar or wind energy development grants outside designated leasing areas, for solar or wind energy development leases inside designated leasing areas, for transmission lines with a capacity of 100 kV or more, and for pipelines 10 inches or more in diameter, BLM determined that it was “unlikely to have a significant adverse effect on the supply, distribution, or use of energy, and could have a positive impact on energy supply, distribution, or use. In fact, its intent is to facilitate such development”); 78 Fed. Reg. 59,466 (Sept. 26, 2013) (FSW conducted a review under EO13211 before designating the critical habitat for lynx “due to potential novel legal and policy issues” but found that since the costs were primarily administrative, such as consultations under section 7 of the Act on mining and oil and gas projects by Federal agencies in Units 2, 4, and 5, the agency did not expect the designation of this proposed critical habitat to significantly affect energy supplies, distribution, or use”). *See also* 74 Fed. Reg. 8659 (Feb. 25, 2009); 73 Fed. Reg. 62,458 (Oct. 21, 2008).

(1) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.¹³³

Rules fitting the \$100 million or more condition are often referred to as “economically significant” or “major” regulatory actions.¹³⁴

In applying the RFA criteria, federal agencies often conclude that the action under review does not raise novel legal or policy issues.¹³⁵ Other times agencies acknowledging, in an ANPR, their inability to fully evaluate whether a novel issue is raised, promise to consider the potential in the full rulemaking process.¹³⁶ Finally, despite presenting a novel legal and policy theory, agencies often determine that there is no adverse agency impact on energy using the economic test.¹³⁷

133. Regulatory Flexibility Act, 5 U.S.C. § 601 *et seq.* (2012); *see also* Eagle Permits; Take Necessary To Protect Interests in Particular Localities, 74 Fed. Reg. 46,836 (Sept. 11, 2009), for an instance in which OMB made its determination based on these criteria.

134. *See* Carey, *supra* note 13, at 7. *See also* GAO, *National Energy Policy: Inventory of Major Federal Energy Programs & Status of Policy Recommendations* (GAO-05-379 June 2005) at 64 (According to DOE most agency actions do not require Statement of Energy Effects “because the order sets forth a \$100 million level of economic effect for a statement to be necessary”).

135. *See, e.g.*, 78 Fed. Reg. 58,189 (Sept. 23, 2013); 78 Fed. Reg. 47,572 (Aug. 9, 2012); 75 Fed. Reg. 49,435 (Aug. 13, 2010); 75 Fed. Reg. 14,260 (Mar. 24, 2010); 74 Fed. Reg. 23,024 (May 15, 2009); 74 Fed. Reg. 17,288 (July 21, 2009); 73 Fed. Reg. 29,075 (May 20, 2008).

136. *See, e.g.*, 77 Fed. Reg. 3726. (Jan. 25, 2012).

137. *See, e.g.*, 75 Fed. Reg. 21,394 (Apr. 23, 2010):

This final rule is considered a significant regulatory action under E.O. 12866 due to potential novel legal and policy issues, but it is not expected to significantly affect energy supplies, distribution, or use. Appendix A of the final economic analysis provides a discussion and analysis of

FSW and EPA, in particular, have a well-established history of signaling the need to conduct an EO 13211 energy review when environmental regulation raises novel legal or policy questions. For example, in 2008, some commenters objected to EPA's proposal regarding NPDES Voluntary Permit Fee Incentive for Clean Water Act Section 106 Grants,¹³⁸ on the grounds that EPA did not comply with the required regulatory review processes. EPA wholly disagreed "with assertions that the rule will have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities."¹³⁹ In deference to public comments, however, EPA determined that its final rule did constitute a "significant regulatory action" under Executive Order

this determination. The Midwest Generation facilities that rely on the transportation of coal through Illinois Units 1 and 2 generate 1,960 megawatts of electricity. The dragonfly conservation measures advocated by the Service, however, are not intended to alter the operation of these facilities. Rather, the recommended conservation activities focus on improving maintenance and railway upgrades. Thus, no energy-related impacts associated with Hine's emerald dragonfly conservation activities within critical habitat units are expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use and a Statement of Energy Effects is not required.

See also Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx, 74 Fed. Reg. 8616 (Feb. 25, 2009); Endangered and Threatened Wildlife and Plants; Revised Designation of Critical habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*); Final Rule, 72 Fed. Reg. 72,010 (Dec. 19, 2007).

138. NPDES Voluntary Permit Fee Incentive for Clean Water Act Section 196 Grants; Allotment Formula, 73 Fed. Reg. 52,584 (Sept. 10, 2008).

139. *Id.*

12866 “because it raises novel policy issues.” The EPA accordingly submitted the rule to OMB for review.¹⁴⁰

The trend to submit items for OMB review continues. Last year, EPA opened a docket requesting public input on methods to reduce methane and other greenhouse gas emissions from existing municipal solid waste (MSW) landfills.¹⁴¹ EPA said the inquiry may be a

140. *Id.*

141. Emission Guidelines and Compliance times for Municipal Solid Waste Landfills, 79 Fed. Reg. 41,772 (July 17, 2014). EPA explained:

The Environmental Protection Agency (EPA) intends to consider the information received in response to the ANPRM in evaluating whether additional changes beyond those in the proposed revisions for new sources are warranted. MSW landfill emissions are commonly referred to as “landfill gas” or “LFG” and contain methane, carbon dioxide (CO₂), and nonmethane organic compounds (NMOC). Some existing landfills are currently subject to control requirements in either the landfill new source performance standards (NSPS) or the federal or state plans implementing the landfill emission guidelines; both the NSPS and emission guidelines were promulgated in 1996. The EPA believes that these guidelines merit review to determine the potential for additional reductions in emissions of LFG. Such reductions would reduce air pollution and the resulting harm to public health and welfare. Significant changes have occurred in the landfill industry over time, including changes to the size and number of existing landfills, industry practices, and gas control methods and technologies. The ANPRM recognizes changes in the population of landfills and presents preliminary analysis regarding methods for reducing emissions of LFG. In determining whether changes to the emission guidelines are appropriate, the EPA will, in addition to evaluating the effectiveness of various methods for reducing emissions of LFG, consider the total methane

“‘significant regulatory action’ because the action raises novel legal or policy issues.”¹⁴² Since the docket only requested public input without specifying proposed rulemaking, EPA determined that other statutory (such as National Environmental Policy Act)¹⁴³ and Executive Order reviews (such as EO13211)¹⁴⁴ would not apply. The agency promised, however, that “[s]hould the EPA subsequently determine to pursue a rulemaking, the EPA will address the statutes and Executive Orders as applicable to that rulemaking.”¹⁴⁵ In the ANPR, EPA specifically sought public comment on the degree to which EO13211, among other executive reviews, might impact the rulemaking under consideration.¹⁴⁶

emission reductions that can be achieved in addition to the reductions of NMOC emissions. The EPA is also seeking input on whether it should regulate methane directly. The ANPRM also addresses other regulatory issues including the definition of LFG treatment systems and requirements for closed areas of landfills, among other topics.

142. 79 Fed. Reg. at 41,793.

143. 42 U.S.C. § 4321 *et seq.* (2000).

144. 79 Fed. Reg. at 41,793.

145. *Id.*

146. *Id.* The agency said:

Nevertheless, the EPA welcomes input and/or information that would help the EPA to assess any of the following: The potential impact of a rule on small entities pursuant to the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*); potential impacts on federal, state, or local governments pursuant to the Unfunded Mandates Reform Act ((UMRA) (2 U.S.C. 1531-1538); federalism implications pursuant to Executive Order 13132, titled Federalism (64 FR 43255, November 2, 1999); availability of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113; tribal implications pursuant to Executive Order 13175, titled Consultation and Coordination

E. OMB MEMORANDUM 01-27 RECAP

Certain themes have emerged in the application of OMB Memorandum 01-27 to federal regulatory action. While filling in the gaps of EO 13211 ambiguity, the nine criteria outlined in OMB Memorandum 01-27 still provide federal agencies ample flexibility to determine whether an “adverse energy effect” does or does not exist and, in turn, whether a “significant energy action” does or does not arise. While these nine threshold questions are critical in determining EO 13211’s applicability and the requirement to draft a SEE,¹⁴⁷ the criteria do not impede most proposed federal agency environmental protection and natural resources conservation action.

F. BLM MEMORANDA NO. 2002-53

The BLM controls more than 247.3 million acres of US public lands making it uniquely situated to control oil and gas development.¹⁴⁸ BLM determinations can either expedite or impede

with Indian Tribal Governments (65 FR 67249, November 6, 2000); environmental health or safety effects on children pursuant to Executive Order 13045, titled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997); energy effects pursuant to Executive Order 13211, titled Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (66 FR 28355, May 22, 2001); paperwork burdens pursuant to the Paperwork Reduction Act (PRA) (44 U.S.C. § 3501); or human health or environmental effects on minority or low-income populations pursuant to Executive Order 12898, titled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, February 16, 1994). The EPA will consider such comments during the development of any subsequent rulemaking.

147. See Carey, *supra* note 13, at 9.

148. Bureau of Land Mgmt., US Dep’t of the Interior, PUBLIC LAND STATISTICS 1 (2012),

energy operations in a large portion of the United States (and a huge portion of land of interest for development in the west). As such, on December 12, 2001, BLM issued its own directives on how BLM would implement Executive Orders 13211 and 13212.¹⁴⁹ Instruction Memorandum No. 2002-53 called on BLM staff to prepare a “Statement of Adverse Energy Impact” when proposed actions directly or indirectly have an adverse impact on energy development, production, supply or distribution. Pursuant to Memorandum 2002-53, BLM must seek approval of the Statement of Adverse Energy Impact from the state director or a delegated representative and the statement itself must be incorporated as part of any associated record of decision.¹⁵⁰

Upon release, Memorandum 2002-53 was heavily criticized for encouraging BLM staff to sidestep environmental concerns in favor of energy resource development.¹⁵¹ As one commentator explained, “to anyone who understands how bureaucracies work, the message of the executive order and memorandum [BLM 2002-053] is clear: the burden of argument is on the denier, and the BLMer who wants commendations on his/her personnel file will deny very carefully and quite rarely.”¹⁵²

Memorandum 2002-53 notwithstanding, review of BLM activity from promulgation of the EO 13211 to the present indicates that the BLM is no more or less likely to invoke EO 13211 than any other

http://www.blm.gov/public_land_statistics/pls12/pls2012.pdf
[<https://perma.cc/5A76-97FP>].

149. See Bureau of Land Mgmt., US Dep’t of the Interior, Public Instruction Memorandum No. NV-2002-049 (April 26, 2002), available at http://www.blm.gov/style/medialib/blm/nv/information/laws_regs_policies/ibs_ims/2002/ims.Par.52587.File.dat/nvim2002-049.3000.pdf [<https://perma.cc/GSV3-8FBR>].

150. See Laura Lindley and Robert C. Mathes, *Formal & DeFacto Federal Land Withdrawals and Their Impact on Oil & Gas & Mining Development*, 48 ROCKY MT. MIN. L. INST. 25 (2002).

151. See Stephen H.M. Bloch and Heidi J. McIntosh, *A View From the Front Lines: The Fate of Utah’s Redrock Wilderness Under the George W. Bush Administration*, 33 GOLDEN GATE U. L. REV. 477 (2003).

152. Jon Margolis, *Bush’s Energy Push Meets Unintended Consequences*, HIGH COUNTRY NEWS, Sept. 2, 2002, <http://www.hcn.org/issues/233/11391> [<https://perma.cc/4UL7-M8UM>].

federal agency. In fact, there is no instance published in the Federal Register in which BLM reported a change in proposed regulation based on EO 13211. To the contrary, BLM's recent establishment of the first comprehensive federal regulations applicable to hydraulic fracturing indicates that Memorandum 2002-53 was not used to thwart environmental controls or natural resource conservation or other measures aimed at protecting human health, including specific regulations aimed at protecting surface and groundwater.¹⁵³

1. 2.6 BLM Regulations on Hydraulic Fracturing

On March 26, 2015, the BLM issued regulations entitled "Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands."¹⁵⁴ The final rule included an energy impact analysis that contained a detailed discussion of the mechanics of EO 13211. BLM explained that a key consideration in determining whether EO 13211 requires alteration of federal agency action "is the extent to which the costs of the requirements might impact investment, production, employment, and a number of other factors."¹⁵⁵

In the context of oil and gas shale extraction on federal lands, the BLM articulated that determining whether an adverse energy action exists boils down to whether an operator would "choose to invest in other areas, non-Federal and non-Indian lands, when faced with the cost requirements of the rule."¹⁵⁶ In applying this test, the BLM concluded that the "additional cost per hydraulic fracturing operation is insignificant when compared with the drilling costs in recent years, the production gains from hydraulically fractured well operations, and the net incomes of entities within the oil and natural gas industries."¹⁵⁷ Moreover, the majority of the bulk costs associated with the new BLM hydraulic fracturing rules, would apply to wells yet to be drilled as opposed to existing wells and refracturing operations. The proactive application of the new BLM rules allows

153. Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands: Final Rule, 80 Fed. Reg. 16,128 (Mar. 26, 2015).

154. *Id.*

155. *Id.*

156. *Id.*

157. *Id.*

operators to factor in regulatory cost increases up front when making oil and gas investment decisions.

BLM stated that its hydraulic fracturing regulations would not have a significant energy effect because the compliance costs of the average hydraulic fracturing operation represent about 0.13 to 0.21 percent of the total cost of drilling a well. The BLM estimated compliance costs, partly based on industry data, were not substantial when compared with the total costs of drilling a well and accounting for the increased regulatory requirements. BLM economists estimated that the rule will result in increased compliance costs of about \$11,000 per well, compared to the 4 to 9 million total costs required for drilling a typical horizontal well.¹⁵⁸ As such, the BLM said the hydraulic fracturing rule was not likely to have any effect on the investment decisions of firms – and certainly not an adverse impact that would serve as a deterrent to investment in new energy infrastructure. Thus, BLM resolved that the federal government's first foray into establishing standards for hydraulic fracturing was extremely unlikely to affect the supply, distribution, or use of energy.¹⁵⁹

The BLM hydraulic fracturing final rule gives ample evidence that the agency considered adverse energy effects, weighed the costs associated with the action and yet crafted environmental policy that allows energy development without sacrificing environmental protection the agency deemed necessary. Moreover, the BLM actions set an important policy precedent: the costs of environmental regulations impacting future energy development would not be used to preclude environmental protections. Rather, oil and gas developers are now expected to account for the cost of environmental protection when making development decisions. Increased costs influencing when oil and gas operators undertake new drilling projects, would not in and of itself be significant enough to constitute a major energy

158. Benjamin Sturrow, *Federal Judge Issues Stay on BLM Fracking Rule*, STAR TRIBUNE, June 23, 2015, http://trib.com/business/energy/federal-judge-issues-stay-on-blm-fracking-rule/article_7e14957f-11d9-5120-b1d9-e86bf382bb1c.html [https://perma.cc/Z2VD-23QK].

159. Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands; Final Rule, 80 Fed. Reg. 16,128 (Mar. 26, 2015).

impact. Rather, if increased costs impacted the timing or speed of oil and gas drilling then those increased costs will be factored into routine energy investment decisions.¹⁶⁰

Days after being issued, the BLM hydraulic fracturing rule was challenged by the Independent Petroleum Association of America (IPAA) and Western Energy Alliance (the Alliance) in the United States District Court for the District of Wyoming.¹⁶¹ The two-page complaint, challenging the BLM rule on both substantive and procedural grounds, requests the federal court set the BLM hydraulic fracturing regulations on federal land. Specific procedural defects were not articulated in the complaint. Nor was there mention of EO 13211 or its interpretive memorandum.

A second suit challenging the BLM rules was brought by the oil and gas producing states of Colorado, North Dakota, Utah and Wyoming. Again, neither EO 13211 or its interpretive memorandum was a factor in determining the fate of the BLM rules.

In June, the judge assigned to review the industry based case, Wyoming U.S. District Court Judge Scott W. Skavdahl, stayed the BLM rules from taking effect until the outcome of the case.¹⁶²

IV. CONCLUSIONS

EO 13211 was introduced during the George W. Bush administration and was designed to require the federal government to consider the impact of governmental action on energy. The question raised by this research is whether or not EO 13211 succeeded in protecting US efforts to gain energy independence, and if so, did the

160. *Id.*

161. *Independent Petroleum Association of America v. Jewell*, 15-CV-41-F (D. Wyo. Mar. 20, 2015).

162. Benjamin Sturrow, *Federal Judge Issues Stay on BLM Fracking Rule*, STAR TRIBUNE, June 23, 2015, http://trib.com/business/energy/federal-judge-issues-stay-on-blm-fracking-rule/article_7e14957f-11d9-5120-b1d9-e86bf382bb1c.html [<https://perma.cc/LW7W-MPL6>]; see also Benjamin Sturrow, *BLM Fracking Rule Delayed Another Month*, STAR TRIBUNE, July 20, 2015, http://trib.com/business/energy/blm-fracking-rule-delayed-another-month/article_2a5a929d-6955-5693-a878-96756bd656ee.html.

energy success come at the cost of environmental and public health protection.

Preliminary research in crafting this study revealed certain endangered species designations in Texas had the potential to curtail oil and gas drilling permits. This paper sought to determine whether or not EO 13211 had in fact been used to curtail environmental protection. Our research found no evidence that EO 13211 was used to prevent critical habitat designation or other environmental protection. For example, in 2013, the FSW designated two plants in Texas as critical habitats under the ESA¹⁶³ and included a statement pursuant to EO 13211¹⁶⁴ maintaining that the action would not impact energy policy.¹⁶⁵

Review of federal agency action demonstrates that if EO 13211 has had any effect on environmental actions by federal agencies then it is taking effect in the pre-ruling making stage. While measuring the deterrent effect of pre-ruling considerations is beyond the scope of

163. Endangered and Threatened Wildlife Plants, 78 Fed. Reg. 56,071-56,120 (Sept. 11, 2013) (“We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for two Texas plants, *Leavenworthia texana* (Texas golden glade-cress) and *Hibiscus dasycalyx* (Neches River rose-mallow), under the Endangered Species Act of 1973.”)

164. Exec. Order No. 13,211, 66 Fed. Reg. 28,355 (May 21, 2001).

165. *Id.* The agency said:

The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with Texas golden glade-cress or the Neches River rose-mallow conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Cf. Stephen J. Reiling, Alan J. Roberson, and John E. Cromwell III, *Drinking Water Regulations: Estimated Cumulative Energy Use and Costs*, 101 J. AM. WATER WORKS ASSOC. 42 (2009).

this study, one can conclude that the overwhelming majority of published federal agency rules, evaluating energy impacts pursuant to EO 13211, are found not to constitute “significant energy action[s]” and hence not subject to EO 13211 OMB review.

The two court cases¹⁶⁶ [3] and the two recent rulemaking proceedings by the EPA concerning the Clean Power Plan¹⁶⁷ and the BLM concerning hydraulic fracturing¹⁶⁸ reveal extremely careful balance required by federal agencies in applying EO 13211 while safeguarding public health and the environment. Both these federal actions are currently before the courts and the validity of agency action is being reviewed, albeit only Kentucky raised concerns based on EO 13211 grounds and the Kentucky queries arose only during comments to rulemaking and not in judicial challenges.

Although EO 13211 allows significant discretion to find that an “adverse energy effect” does not exist and, hence, a “significant energy action” will not occur, ultimately the energy determination made by the federal agency must be both grounded in fact and substantiated in law.¹⁶⁹ EO 13211 has never been successfully invoked by industry to thwart environmental regulation, natural resource conservation or public health policy. Rather, across the board, federal agencies take seriously the responsibility of balancing domestic energy needs with environmental protection, land conservation and public health. In short, despite early skepticism, EO 13211 effectively sets up a regulatory thought process requiring federal agencies to consider the energy impacts of federal action – including regulations that are deemed protective of the environment, provide for resource conservation and promote general public health. When deemed applicable, EO 13211 mandated SEEs were indeed

166. *See supra* notes 47 and 52. *See* Carbon Pollution Emission Guidelines, 79 Fed. Reg. 34,830 (June 18, 2014); Endangered and Threatened Wildlife Plants, 78 Fed. Reg. 52,364 (Sept. 23, 2013).

167. *Id.*

168. *See* Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands; Final Rule, 80 Fed. Reg. 16,128 (Mar. 26, 2015).

169. These threshold questions are critical for if answered in the affirmative, they trigger EO13211’s applicability and the writing of a SEE. *See* Carey, *supra* note 13.

drafted with diligence and in a manner similar to an abbreviated NEPA mandated EIS. Although the language at the end of final and proposed federal rules can appear formulaic and therefore boilerplate, federal agencies, including those agencies specifically charged with environmental, natural resource and public health protection, do evaluate adverse effects on energy as a critical and routine part of regulatory cost-benefit analysis.¹⁷⁰

Despite fears of environmental groups, over the past fourteen years EO 13211 strikes a reasonably effective compromise between environmental conservation and energy development. Review of federal agency action illustrates that EO 13211 review in both republican and democratic administrations pragmatically fosters energy growth while protecting the ideals of human health through sound environmental practices.

170. *See also* Sanger, *supra* note 15.