

University of Wyoming College of Law

Law Archive of Wyoming Scholarship

Faculty Articles

Faculty Scholarship

3-28-2019

The Incidental Environmental Agency

Tara Kathleen Righetti

University of Wyoming - College of Law, trighett@uwyo.edu

Follow this and additional works at: https://scholarship.law.uwyo.edu/faculty_articles

Recommended Citation

Righetti, Tara Kathleen, "The Incidental Environmental Agency" (2019). *Faculty Articles*. 85.
https://scholarship.law.uwyo.edu/faculty_articles/85

This Article is brought to you for free and open access by the Faculty Scholarship at Law Archive of Wyoming Scholarship. It has been accepted for inclusion in Faculty Articles by an authorized administrator of Law Archive of Wyoming Scholarship.

The Incidental Environmental Agency

Tara K. Righetti*

University of Wyoming College of Law
Laramie, Wyoming

State oil and gas conservation agencies are the gatekeepers to oil and gas development: as the agencies charged with granting drilling permits, they decide if, when, where, and how oil and gas will be developed. As such, oil and gas conservation agencies sit on the front lines in the emerging, and increasingly irresolvable, struggle between fossil energy development and the environment. Current oil and gas conservation regulation is designed to promote development, maximize recovery of the resource, and protect the individual property rights of mineral owners. However, advocacy by environmental constituencies, including surface owners and local governments, has challenged the entrenched paradigm whereby production must be maximized at the expense of all other interests. These efforts are pushing courts to redefine oil and gas conservation according to 21st century environmental values. This article examines the emergent environmental regulation function of oil and gas conservation agencies and identifies opportunities for these agencies to regulate according to their historic mandates in a manner that is inclusive of public values.

TABLE OF CONTENTS

I.	INTRODUCTION.....	2
I.	CONSERVATION LAW: PURPOSE AND HISTORY	5
II.	THE ROLE OF STATE OIL AND GAS CONSERVATION AGENCIES.....	12
A.	Statutory Authority and Jurisdiction.....	12
1.	Preventing Waste.....	14
2.	Protecting Correlative Rights	16
3.	Administering UIC and Waste Control Programs	17
4.	Encouraging Efficient Development.....	17
5.	Health, Safety, and Public Welfare.....	18
B.	Judicial Review of Agency Decisions	18
III.	REDEFINING OIL AND GAS CONSERVATION.....	19
A.	Before the Agency: Petitions for Rule Making.....	20
1.	Increased Setbacks.....	23
2.	Landscape Scale Impacts	25
B.	At the Ballot Box	26
C.	In the Courts	28
1.	Matters of Fairness	28
2.	Matters of Process	31
3.	Matters of Rights	32
IV.	AMENDING AGENCY AUTHORITY	36
V.	AN INCIDENTAL ENVIRONMENTAL AGENCY	39
VI.	CONCLUSION	45

* SER Associate Professor of Oil and Gas Law, University of Wyoming College of Law. I received valuable comments on earlier drafts from Jason Robison, Alex Ritchie, Heidi Robertson, members of the junior faculty research colloquia at the University of Wyoming, and from presentation of the topic during the Rocky Mountain Mineral Law Foundation 64th Annual Institute. Aspects of the paper are discussed in *Environmental Considerations in Conservation and Permitting*, 64 Rocky Mtn. Min. L. Inst. 5-1 (2018). Madeleine Lewis (JD/MA '19) provided invaluable research and editorial assistance.

I. INTRODUCTION

Conservation agencies such as the Wyoming Oil and Gas Conservation Commission (WOGCC) and the Texas Railroad Commission (RRC), regulate oil and gas operations for the purposes of preventing waste and protecting correlative rights.¹ No well on state or private land may be drilled without first applying for and obtaining authorization to drill from a state conservation agency. Exercised judiciously, this authority is a powerful force for conservation. In the nearly 120 years since the first conservation acts and oil and gas waste prevention statutes were enacted,² regulation by conservation agencies has vastly limited the environmental impacts associated with oil and gas exploration and production by limiting unnecessary drilling and therefore limiting energy inputs associated with extraction and preserving surface resources.³

Heightened concerns regarding the environmental and climate impacts of oil and gas development have led advocates, conservationists, voters and legislators to reexamine the environmental regulation role of oil and gas conservation agencies. The goals of conservation regulation and the tools available to commissions have changed little since Howard Williams wrote his first article on conservation in 1952.⁴ Public attitudes towards conservation, however, are changing. Motivated by increased awareness of and concern about environmental and climate impacts, landowners and environmental groups have begun to demand that conservation agencies exercise their authority to enhance environmental protections and consider issues related to the environment and climate change in making permitting and other decisions.⁵ While citizens, states, and counties attempt to compensate for what is perceived as inaction due to the lack of any comprehensive federal greenhouse gas legislation and to respond to and prevent highly publicized environmental and human health tragedies, state conservation agencies are issuing record numbers of permits.⁶ More than ever before, commissions are asked to look at beyond the drill site spacing unit and reservoir towards the cumulative and landscape scale impacts of conservation agency decisions on the environment as a whole.

¹ 1 Patrick H. Martin & Bruce H. Kramer, *The Law of Pooling and Unitization*, § 3.02[4] (3d ed. 2017).

² See, e.g., 49 TEX. GEN. LAWS 68 (1899); George A. Wilson, *Legal History of Conservation of Oil and Gas. A Symposium. Published by the Section of Mineral Law of the American Bar Association*, 48 YALE L.J. 1470 (1939).

³ See generally David Pierce, *Minimizing the Environmental Impact of Oil and Gas Development by Maximizing Production Conservation*, 85 N. D. L. REV. 759 (2009) (discussing transition “of rights in oil and gas reservoirs away from capture rights and toward correlative rights” with the result that “state oil and gas conservation commissions can [maximize] development of the oil and gas resource while minimizing the impact on surface and other natural resources.”). *Id.* at 759.

⁴ See Howard Williams, *Conservation of Oil and Gas*, 65 HARV. L. REV. 1155 (1952).

⁵ This may be in response to Professor Pierce’s call to action, *supra* note 3, at 774–78.

⁶ See Kathleen Levine, *Oil and Gas Companies Are Seeking New Well Permits Like Never Before*, DENVER BUS. J. (June 5, 2018); Heather Richards, *Powder River Basin Inspires 10,000-Permit Drilling Battle from Oil and Gas Companies*, CASPER STAR TRIB. (May 13, 2018).

This article considers pressures on state oil and gas conservation agencies to take an expanded role in regulating and considering environmental impacts associated with oil and gas production on private land⁷ and looks at the emerging role of oil and gas conservation commissions as an environmental agency. Oil and gas conservation agencies have been bombarded by protests, requests for rulemaking, and applications to intervene in administrative proceedings calling for the conservation agencies to consider environmental impacts as part of their permit approval. On average, the agencies have been disinclined to take on these requests, finding that doing so would exceed the scope of their delegated authority.

Part I begins with description of conservation law and regulations, and a brief history of oil and gas regulation and the conservation purpose oil and gas conservation agencies.⁸ This part emphasizes the historic background and rationales that underpin state conservation law.⁹ It characterizes the naissance of conservation law as emerging from a period when environmental degradation was considered the implicit right of the industry. Part II describes conservation agencies' scope of authority.¹⁰ Traditionally, these functions are delegated for the purposes of preventing waste and protecting correlative rights.¹¹ However, in many cases, language embedded within the agencies' enabling statutes introduces the possibility of more expansive authority.¹² These may include definitions of waste that encompass actions contributing to environmental degradation, delegations of authority over state environmental programs, or language requiring the agency to protect health, safety, and the environment.¹³ This section highlights how these authorizations suggest an increased environmental regulatory function for state conservation agencies.

Parts III and IV examine recent efforts to require oil and gas conservation agencies to consider a more inclusive scope of environmental factors, including climate change. Part III explores efforts by environmental constituencies to democratize or circumvent conservation agencies and achieve standing in administrative proceedings.¹⁴ These efforts include requests for rulemaking from environmental advocates, voter initiatives, and challenges to agency decisions on the basis of environmental harms.¹⁵ Agencies have been reluctant to interpret environmental

⁷ An analysis of the environmental protection function of the federal oil and gas permitting process is beyond the scope of this article. Where oil and gas development occur on federal lands, numerous laws and regulations—including NEPA—require consideration of environmental impacts, even where development is achieved by directional drilling into federal minerals from entirely non-federal surface locations. *See*, BUREAU OF LAND MGMT., Permanent Instruction Memorandum No. 2018-014, *Directional Drilling Into Federal Mineral Estate from Well Pads on Non-Federal Locations*, (June 12, 2018).

⁸ *See infra* notes 28–91 and accompanying text.

⁹ *See id.*

¹⁰ *See infra* notes 92–108 and accompanying text.

¹¹ *See infra* notes 109–133 and accompanying text.

¹² *See infra* notes 134–146 and accompanying text.

¹³ *See id.*

¹⁴ *See infra* notes 147–281 and accompanying text.

¹⁵ *Id.*

protection language in their enabling acts as authorizing landscape scale environmental regulation, instead focusing on their traditional roles of maximizing hydrocarbon recovery and protecting the personal property interests of the owners of mineral rights within the reservoir.¹⁶ As a result, there has been a flurry of litigation considering the scope of commission authority and the agencies' obligations to engage in administrative rulemaking or to consider broader environmental impacts as a part of carrying out their statutory duties.¹⁷ These proceedings are at times conferring standing, or the potential for standing, on new parties where certain environmental views have not previously had an advocate and are expanding the factors that agencies must take into consideration when exercising their delegated authority.¹⁸ Part IV examines attempts to reform agency authority, including legislative actions preempting or limiting commission authority and influence by state governors.¹⁹ These efforts have sought to restructure conservation agencies in a manner that decreases the influence of industry voices and shift agency philosophies away from the promotion of development towards regulation to limit environmental impacts.²⁰

Part V considers the appropriate role of oil and gas conservation agencies in environmental regulation of oil and gas.²¹ Efforts to reform conservation agencies as new environmental regulators and may fail to achieve the comprehensive changes many advocates desire.²² In many cases, agencies may not have the standards or expertise to engage in the fact-finding necessary to meet these demands.²³ Instead, these actions risk muddling the regulatory environment and introducing uncertainties in an otherwise efficient permitting process. Concurrently reforms may diminish the efficacy of conservation agencies in pursuing the public policy interests with which they are charged.²⁴ Commissions are not formed or equipped to investigate and answer existential questions about the appropriate balance between environmental conservation and fossil energy development, nor would it be appropriate for them to do so.²⁵ However, there are opportunities for agencies to reduce environmental impacts, prevent waste, and streamline agency proceedings consistent with current policy directives. Structural and legal changes would further reduce concerns of undue influence by the industry and agency dependence. This section explores opportunities for conservation agencies to more effectively limit environmental impacts of oil and

¹⁶ See Pierce, *supra* note 3, at 759.

¹⁷ See, e.g., Colorado Oil & Gas Conservation Comm'n v. Martinez, 2019 Colo. 3, 2019 WL 179037 (2019); Ass'n of Irrigated Residents v. Department of Conservation, 11 Cal.App.5th 1202 (2017); City of Longmont v. Colorado Oil and Gas Association, 369 P.3d 573 (2016); Robinson Twp. v. Commonwealth (*Robinson IV*), 147 A.3d 536 (Pa. 2016); Robinson Twp. v. Commonwealth (*Robinson II*), 83 A.3d 901 (Pa. 2013).

¹⁸ See *infra* note 221–281 and accompanying text.

¹⁹ See *infra* notes 282–297 and accompanying text.

²⁰ *Id.*

²¹ See *infra* notes 310–315 and accompanying text.

²² *Id.*

²³ See *id.*

²⁴ See *infra* notes 299–309 and accompanying text.

²⁵ See *infra* notes 299–315 and accompanying text.

gas development, arguing that such actions must be tailored to compliments the agencies existing authority and expertise.²⁶

Pressure on conservation agencies, counties, local governments, and other administrative bodies involved in permitting oil and gas operations is likely to increase. Societal and economic changes have increased awareness of and concern for the environmental externalities associated with oil and gas development. Meanwhile, the number of wells drilled and total production have grown significantly.²⁷ Through efforts at the ballot box, in state legislatures, and in the courts, oil and gas conservation agencies are emerging as a new, through perhaps unwitting, environmental agency.

I. CONSERVATION LAW: PURPOSE AND HISTORY

To conserve means to preserve for later use. Gifford Pinchot, cited as the founder of the Conservation Movement,²⁸ defined conservation as both the “use of natural resources for the greatest good of the greatest number for the longest time” and to require equal parts development and protection.²⁹ Like the concept of sustainable development, this definition of conservation may seem like an oxymoron—requiring equal mandates of preservation and consumption of a fixed good.³⁰ Similarly, geologic conservation in the context of oil and gas has been interpreted as encouraging development so as to maximize the total recoverable oil or gas from the reservoir.³¹ In so doing, conservation advances both society’s public interest in the development, production and the use of natural resources while protecting each individual property owner’s economic interest in the minerals under his or her property.

Conservation law owes its origin to the reckless waste of oil and gas and environmental devastation resulting from the unconstrained application of the rule of capture.³² The rule of capture provides that the title to oil and gas is obtained through capture of the hydrocarbons at the surface, regardless of whether some of those hydrocarbons may have migrated into the well from adjoining land that is not the property of the producer.³³ Actual, rather than conceptual, ownership

²⁶ See *infra* notes 299–332 and accompanying text.

²⁷ See U.S. Energy Info. Admin., *U.S. Oil and Natural Gas Wells by Production Rate* (Oct. 29, 2018), available at <https://www.eia.gov/petroleum/wells/>.

²⁸ ORRIS HERFINDAHL, WHAT IS CONSERVATION, RESOURCES FOR THE FUTURE 2 (1961).

²⁹ *Id.* (citing GIFFORD PINCHOT, BREAKING NEW GROUND (1947)).

³⁰ See Michael Redclift, *Sustainable Development (1987-2005): An Oxymoron Comes of Age*, 13 SUSTAINABLE DEV. 212 (2005).

³¹ Williams, *supra* note 4, at 1156 (oil and gas conservation is more or less coterminous with “attaining maximum production from known fields by more efficient utilization of reservoir energy. . .”).

³² See Pierce, *supra* note 3, at 760–61; Williams, *supra* note 4, at 1158.

³³ *Elliff v. Texon Drilling Co.*, 210 S.W.2d 558, 561–62 (Tex. 1948); Robert E. Hardwicke, *The Rule of Capture and Its Implications as Applied to Oil and Gas*, 13 TEX. L. REV. 391, 393 (1935).

of fluid or gaseous minerals requires an interest in a producing well.³⁴ This common law rule incentivizes the mineral owner of a tract of land, however small, to drill anywhere on the tract and in whatever density it can manage in order to capture as much of the common resource as possible.³⁵ Other mineral owners and lessees within the same reservoir who experience drainage are thus left without a remedy except to drill their own wells, a concept known as the offset drilling rule.³⁶ Failure of any oil and gas lessee to do so not only results in forfeiture of his property through drainage, but may also result in liability for royalties that would have been owed had a well to prevent drainage had been drilled.³⁷ The result is a scarcity mindset and a development imperative:³⁸ capture and profit from all within your dominion, or risk losing everything.³⁹

The early days following an oil discovery were characterized by “profligate drilling and tremendous physical waste.”⁴⁰ Following the 1859 discovery of the Drake well in Titusville, Pennsylvania, oil and gas development experienced a frenzy where new wells “sprang up like new shoots after rain” and which sent “land prices soaring and would-be oil men scrambling for leases.”⁴¹ Oil was carried in whiskey barrels and wooden vats, and allowed to run out over the land into pits.⁴² Forty years later, in January of 1901 in Beaumont, Texas, the Spindletop discovery precipitated another boom following publication of a photo of the Lucas gusher and a massive overstatement of production volumes.⁴³ Within a month there were thirteen rigs and by October there were 440 wells, some on “postage stamp size sites.”⁴⁴ Like they had in Titusville, prices plummeted: within a few months, a barrel of water sold for less than a cup of water.⁴⁵ Surface fires

³⁴ Pierce, *supra* note 3, at 762, 765.

³⁵ See Hague v. Wheeler, 27 A. 714, 719 (Pa. 1893).

³⁶ See Barnard v. Monongahela Natural Gas Co., 65 A. 801 (Pa.1907); Kelly v. Ohio Oil Co., 49 N.E. 399 (Ohio 1897).

³⁷ Bernard v. Monongahela Natural Gas Co., 65 A. 801, 802 (Pa. 1907); Texaco Inc. v. Indus. Comm’n of State of N.D., 448 N.W.2d 621, 623 n.2 (N.D. 1989) (citing PATRICK H. MARTIN & BRUCE M. KRAMER, WILLIAMS & MEYERS, MANUAL OF OIL AND GAS TERMS 519 (4th ed. 1976) (definition of “rule of capture”)); Patrick H. Martin, *A Modern Look at Implied Covenants to Explore, Develop, and Market Under Mineral Leases*, 3 OIL & GAS, NAT. RESOURCES & ENERGY J. 401, 425 (2017) (reprint, first published at 27 INST. ON OIL & GAS L. & TAX’N 177 (1976)); 5 Patrick H. Martin & Bruce M. Kramer, *Williams & Meyers, Oil and Gas Law* § 865 (2017); MAURICE MERRILL, THE LAW RELATING TO COVENANTS IMPLIED IN OIL AND GAS LEASES ch. 5 (2d ed. 1940).

³⁸ See Sendhil Mullainathan & Eldar Shafir, *Scarcity: Why Having Too Little Means So Much* (2013); Anuj K. Shah, Sendhil Mullainathan & Eldar Shafir, *Some Consequences of Having Too Little*, 338 SCIENCE 682, 682 (2012) (“[r]esource scarcity creates its own mindset, changing how people look at problems and make decisions.”).

³⁹ DAVID F. PRINDLE, PETROLEUM POLITICS AND THE TEXAS RAILROAD COMMISSION 24 (2011).

⁴⁰ See Williams, *supra* note 4.

⁴¹ Judith Linsley & Jo Ann Stiles, GIANT UNDER THE HILL: A HISTORY OF THE SPINDLETOP OIL DISCOVERY AT BEAUMONT, TEXAS, IN 1901, 12, Texas Historic Association (2008).

⁴² DANIEL YURGIN, THE PRIZE: THE EPIC QUEST FOR OIL, MONEY & POWER 30 (2008).

⁴³ *Id.* at 70, 115–16. See also Darren Dochuk, *Blessed by Oil, Cursed with Crude: God and Black Gold in the American Southwest*, 99 J. AM. HIST. 51, 51 (2012).

⁴⁴ Linsley & Stiles, *supra* note 41 at 131, 150; Yurgin, *supra* note 42, at 86.

⁴⁵ Yurgin, *supra* note 42, at 30, 86.

and explosions at primitive refineries decimated whole blocks of land, leakage and evaporation were prolific, and unmanaged poisonous gasses resulted in the fatalities of people and animals.⁴⁶ Yet, for all its destruction, Spindletop ushered in a new era of steamship companies and oil-fired locomotives, and with it a global search for oil that continues until this day.⁴⁷

Unconstrained, the rule of capture presents a classic commons problem.⁴⁸ Not surprisingly, the application of the rule of capture to early production operated to disastrous effect. It resulted in excessive development, resource misallocation, and gross economic and geologic waste.⁴⁹ The rule of capture encouraged behavior that injured the rights of others to the common source of supply by stranding hydrocarbon resources underground. Excessive drilling wastes subsurface resources through the dissipation of reservoir energy, thus rendering portions of the oil or gas unrecoverable.⁵⁰ Primary production using the natural reservoir drive can result in recovery of up to 20% of the total original oil in place (OOIP).⁵¹ If subsurface reservoir pressures are unnecessarily depleted, more of that oil and gas will become immobilized underground and will be unrecoverable without artificial pressurize maintenance through expensive, and energy intensive enhanced recovery techniques.⁵² Thus, optimal use of reservoir pressure to maintain natural drive for primary recovery maximizes total economic recovery and prevents the physical waste of oil and gas. As Professor Patrick Martin writes, “[r]easonable development for the lessor [and lessee] historically has meant overdevelopment for the country” leading to “extravagant, wasteful consumption of petroleum and too rapid a depletion of this finite resource.”⁵³ Where each mineral owner is incentivized to “capture” as much oil and gas as possible through production from its individual tract, the resultant overdevelopment and rapid drawdown of resources can have disastrous impacts on field wide pressure maintenance.

The rule of capture also contributes to waste by encouraging rapid drilling and development before adequate gas handling infrastructure can be developed.⁵⁴ The drilling imperative – during

⁴⁶ Linsley & Stiles, *supra* note 41 at 167.

⁴⁷ Yurgin, *supra* note 42, at 86.

⁴⁸ Jacqueline Lang Weaver, *The Tragedy of the Commons From Spindletop to Enron*, 24 J. LAND RESOURCES & ENV'T L. 187 (2004); Pierce, *supra* note 3, at 763.

⁴⁹ See Patrick H. Martin, *What the Frack? Judicial, Legislative, and Administrative Responses to a New Drilling Paradigm*, 68 ARK. L. REV. 321, 322–23 (2015).

⁵⁰ See Northcutt Ely, *The Conservation of Oil*, 51 HARV. L. REV. 1209, 1219–20 (1938).

⁵¹ AMERICAN PETROLEUM INSTITUTE, BULL. D-14, STATISTICAL ANALYSIS OF CRUDE OIL RECOVERY AND RECOVERY EFFICIENCY (2d ed., 1984).

⁵² U.S. DEPARTMENT OF ENERGY, *Enhanced Oil Recovery/CO2 Injection*, www.fossil.energy.gov/programs/oilgas/eor/index.html, (last visited Jan. 1, 2019); Klaas van 't Veld & Owen Phillips, *The Economics of Enhanced Oil Recovery: Estimating Incremental Oil Supply and CO2 Demand in the Powder River Basin*, 31 THE ENERGY J. 31, 32 (2010).

⁵³ Martin, *supra* note 49, at 423.

⁵⁴ See Alexandra B. Klass & Danielle Meinhardt, *Transporting Oil and Gas: U.S. Infrastructure Challenges*, 100 IOWA L. REV. 947, 1009–12 (2015); see also N.D. Pipeline Auth., *North Dakota Natural Gas: A Detailed Look at Natural Gas Gathering* (Oct. 21, 2013).

high commodity prices, prior to lease expirations, to prevent drainage from nearby discoveries, and to capture a disproportionate share of the reservoir – encourages operators to drill and complete oil wells without infrastructure available for the capture and sale of associated gas. Natural gas that cannot be captured, sold, or stored, is vented or flared. Not only is the natural gas commodity itself wasted rather than put to productive end use, the pressure of the reservoir is depleted through its extraction.

The common law has long imposed a duty upon owners of common resources not to commit waste. Waste and its associated environmental impacts, however, are not an incidental byproduct of oil and development, they are by design. In the early days of oil exploration, courts upheld the right of an owner to flare or vent gas it had captured at the surface. In 1893 the Pennsylvania Supreme Court in *Hague v. Wheeler* held that the rule of capture protected the developer of a gas well from liability when it, having no market for its gas, elected to flare all of the natural gas it captured.⁵⁵ The court found that since the producer was not acting negligently or maliciously, and since the post-capture waste did not injure the property of health or others,⁵⁶ it could obtain title to the gas produced from its land without fear of injunction or liability for conversion.⁵⁷

Concerns about waste, overproduction, price instability, and the unconstrained rule of capture eventually elicited government intervention in the form of conservation regulation.⁵⁸ By 1920, there were already serious concerns about depletion, the exhaustion of oil and gas resources, and the need for international sources to secure a stable supply.⁵⁹ Early conservation measures took the form of statutes prohibiting certain actions that were deemed wasteful.⁶⁰ These included prohibitions on long-term flaring or allowing a well to become wild or ignite, mandates requiring the proper plugging of abandoned wells, and rules limiting production to some portion of a well's maximum capacity.⁶¹ In many states these first conservation laws did not include mechanisms such

⁵⁵ Bruce Kramer & Owen L. Anderson, *The Rule of Capture – An Oil and Gas Perspective*, 35 ENV'T L. 899, 907–08 (2005).

⁵⁶ *Id.* See also *Breaux v. Pan Am. Petroleum Corp.*, 163 So. 2d 406, 412 (La. Ct. App. 1964); *Elliff v. Texon Drilling Co.*, 210 S.W.2d 558, 562 (Tex. 1948).

⁵⁷ *Elliff*, 210 S.W.2d at 562.

⁵⁸ *Oil and Gas Conservation*, 43 HARV. L. REV. 1137, 1138–40 (1930) [hereinafter *Oil and Gas Conservation*]; Weaver, *supra* note 48, at 187; Noel F. Delporte, *The California Oil-Gas Conservation Acts*, 16 ST. LOUIS L. REV. 234, 237 (1931); Thomas A. Mitchell, *The Future of Oil and Gas Conservation Jurisprudence: Past as Prologue*, 49 WASHBURN L.J. 379, 414 (2010); Phillip E. Norvell, *The History of Oil and Gas Conservation Legislation in Arkansas*, 68 ARK. L. REV. 349, 349 (2015).

⁵⁹ David White, *The Petroleum Resources of the World*, 89 ANNALS AM. ACAD. POL. & SOC. SCI. 111, 111–12 (1920).

⁶⁰ Peter D. Junger, *The Wyoming Oil and Gas Conservation Act*, 13 WYO. L.J. 1, 2 (1958).

⁶¹ *Id.*; *Higgins Oil. Co. v. Guaranty Oil Co.*, 82 So. 206, 211 (1919); *Martin & Kramer*, *supra* note 37, at § 3.01; Norvell, *supra* note 58, at 364–65; *Oil and Gas Conservation* *supra* note 58, at 1138.

as spacing or pooling to limit the number of wells drilled.⁶² Instead, the focus of early conservation laws was to avoid spillage or venting into the atmosphere, rather than ensuring efficient reservoir development.⁶³

These rules however quickly ran afoul of the prevailing common law property ownership principles created by the rule of capture. Regulation of oil and gas development and prohibitions on waste limited the rights of mineral owners to maximize their ownership through capture. As such, mineral owners asserted that state conservation regulations violated their rights to substantive due process and resulted in a taking of their common law property interests.⁶⁴ While remaining true to the principals of capture, the Court rejected arguments that regulations preventing waste violated the mineral owners' rights to due process.⁶⁵ Instead, the Court upheld the state's conservation law as a valid exercise of the states police power to regulate private property to protect the public health, safety, and welfare by preventing the damage that natural gas waste would have on the public and other mineral owners.⁶⁶ Finding that a legislative modification of the common law rule of capture did not effect a total taking of the mineral owners property rights, the Supreme Court wrote that legislative power "can be manifested for the purpose of protecting all the collective owners, by securing a just distribution, to arise from the enjoyment, by them, of their privilege to reduce to possession, and to reach the like end by preventing waste."⁶⁷

As conservation regulation proliferated, cooperation of producing states within a common region was deemed necessary to achieve conservation objectives through stability and uniformity of laws across common regions.⁶⁸ Thus, in 1935 Congress approved the Interstate Compact to Conserve Oil and Gas (IOC), which requires member states to "conserve oil and gas by the prevention of physical waste . . ."⁶⁹ The IOC significantly shaped conservation law.⁷⁰ Ratification of the IOC coincided with the passage of conservation laws in several ratifying states. Six major producing states initially ratified the IOC, though now almost all producing states are now

⁶² J. Howard Marshall & Norman L. Meyers, *Legal Planning of Petroleum Production*, 41 YALE L. J. 33, 39 (1931); J. Howard Marshall & Norma. L. Meyers, *Legal Planning of Petroleum Production: Two Years of Proration*, 42 YALE. L.J. 702, 739 (1933); Norvell, *supra* note 58, at 367–68; *Oil and Gas Conservation*, *supra* note 58.

⁶³ Nancy Saint-Paul, *Summers, Oil and Gas*, § 4:2 (3rd ed., 2015); Sullivan, *The History and Purpose of Conservation Law, Oil and Gas Conservation Law and Practice*, RMMLF-INST 1-1, 1-17–18 (Sep. 1985).

⁶⁴ See *Ohio Oil Co. v. Indiana*, 177 U.S. 190 (1900).

⁶⁵ Kramer & Anderson, *supra* note 55, at 912-913.

⁶⁶ *Ohio Oil Co.*, 177 U.S. at 209.

⁶⁷ *Id.* at 209–10.

⁶⁸ *Id.*

⁶⁹ 49 Stat. 939, 74 Pub. Res. 64, 74 Cong. Ch. 781, art. II (1935) (Interstate Oil Compact); see H.R.J. Res. 407, 74th Cong. (1935); see also Junger, *supra* note 60, at 5; Sullivan, *supra* note 63, at 1-17.

⁷⁰ Kemp Wilson, *Conservation Acts and Correlative Rights: Has the Pendulum Swung Too Far?*, 35 RMMLF-INST 18 (1989).

members.⁷¹ By the end of the 1930s, Arkansas, California, Louisiana, Oklahoma, and Texas had passed legislation creating conservation agencies or delegated authority to existing agencies to regulate oil and gas production activities.⁷² However, it was not until later that a majority of states adopted comprehensive conservation regulations including modern conservation techniques such as spacing and pooling. The IOC created the Interstate Oil Compact Commission (IOCC), now the Interstate Oil and Gas Compact Commission, as its governing body.⁷³ In 1949 the IOCC drafted a model conservation statute for the purposes of effectuating the goals of the IOC, preventing waste, and preserving correlative rights.⁷⁴ The model act went beyond previous conservation measures by providing authority to create drilling units and require cost sharing between owners within a unit.⁷⁵ Shortly thereafter, Colorado and Wyoming enacted conservation legislation in 1951 and ⁷⁶Pennsylvania enacted its Oil and Gas Conservation Law in 1961.⁷⁷ Today, every oil and gas producing state has some form of oil and gas conservation regulation.⁷⁸ While the content varies, conservation regulation has developed consistent with the purposes advanced by the IOC and the model act and “the basic pattern is essentially the same.”⁷⁹

Conservation regulations have evolved to address four principal types of waste.⁸⁰ Underground waste, resulting in dissipation of reservoir energy was addressed through wasted

⁷¹ See Interstate Oil & Gas Compact Comm’n, *Member States*, <http://iogcc.ok.gov/member-states> (last visited Dec. 31, 2018) (map showing current membership in the IOC); Nat’l Ctr. For Interstate Compacts, *Interstate Compact to Conserve Oil and Gas*, <http://apps.csg.org/ncic/Compact.aspx?id=81> (last visited Dec. 31, 2018).

⁷² Robert E. Hardwicke, *The Rule of Capture and Its Implications as Applied to Oil and Gas*, 13 TEX. L. REV. 391, 420 (1935); A.W. Walker, Jr., *Property Rights in Oil and Gas and their Effect Upon Police Regulation of Production*, 16 TEX. L. REV. 370, 380-381 (1938); see also Wilson, *supra* note 70.

⁷³ IOC, art. VI.

⁷⁴ Barth P. Jiggs Walker, *Discussion: A Model Oil and Gas Conservation Law*, 26 TUL. L. REV. 267, 270 (1952); Junger, *supra* note 60, at 5 (citing Legal Committee, IOCC, *A Form of an Oil and Gas Conservation Statute* (Interstate Oil Compact Comm’n adopted 1949, amended 1950)).

⁷⁵ Thomas A. Daily, *Rules Done Right: How Arkansas Brought its Oil and Gas Law into a Horizontal World*, 68 ARK. L. REV. 259, 260 (2015).

⁷⁶ See COLO. REV. STAT. §§ 34-60-10—130; WYO. STAT. ANN. §§ 30-5-101—28.

⁷⁷ Mitchell, *supra* note 58, at 397-398; see Oil and Gas Conservation Law, Act of July 25, 1961, P. L. 825, No. 359 (codified at 58 PA. CONS. STAT. §§ 401 to 419 (West 1996)).

⁷⁸ See Saint-Paul, *supra* note 63, at § 4:2.

⁷⁹ Sullivan, *supra* note 63, at 1–18.

⁸⁰ See *Conservation of Natural Gas and the Federal-State Conflict*, Note, 64 COLUM. L. REV. 888 (1964).

prevention measures,⁸¹ including pooling,⁸² spacing,⁸³ oil and gas ratios, maximum efficient rate limitations,⁸⁴ and unitization for secondary recovery.⁸⁵ Waste of resources at the surface, such as excessive flaring, was likewise prohibited. Economic waste was discouraged through prohibitions on undesirable uses of natural gas or oil, such as the manufacture of carbon black, that consume limited resources without maximizing societies economic returns.⁸⁶ These mechanisms included “complete or partial prohibition of production or consumption” or prohibition of the use of petroleum products “in nonefficient processes or inferior uses.”⁸⁷ Finally, although rarely used today, issues related to price instability and premature well abandonment due to production that outpaced demand⁸⁸ were addressed with prorationing,⁸⁹ common purchase orders requiring ratable take, and, at times, minimum wellhead pricing.⁹⁰ Like earlier safety legislation, conservation statutes have survived numerous due process and equal protection challenges arguing that

⁸¹ See *Walker v. J-W Operating Co.*, 2012-0662 (La. App. 1 Cir. 12/21/12), 2012 WL 6677913, at *3 (unpublished) (commission sought to prevent waste by issuing permits for alternate wells upon a finding that one well could not effectively drain the unit, drawing upon broad delegation of authority to commission to enact any “any-reasonable rules, regulations, and orders” necessary to carry out purpose of conservation act (quoting La. Rev. Stat. Ann. § 30:4)), *writ denied*, 2013-0185 (La. 4/1/13), 110 So. 3d 582 (mem.); see also Kramer & Martin, *supra* note 1, at ch. 5.

⁸² See ARK. CODE ANN. § 15-72-302(e)(2) (West 2018); COLO. REV. STAT. § 34-60-116(7) (West 2018); NEB. REV. STAT. § 57-909(2); N.M. STAT. ANN. § 70-2-17(c); OKLA. STAT. tit. 52, § 87.1(e); WASH. REV. CODE § 78.52.250(4); WYO. STAT. ANN. § 30-5-109(a); Bruce M. Kramer, *Compulsory Pooling and Unitization: State Options in Dealing with Uncooperative Owners*, 7 J. ENERGY L. & POL’Y 255, 276–78 (1986).

⁸³ See COLO. REV. STAT. § 34-60-116 (2018); OKLA. STAT. tit. 52, § 87.1 (2017); N.D. CENT. CODE § 38-08-07 (2018); N.M. STAT. ANN. § 70-2-17 (2018); *Brown v. Humble Oil & Ref. Co.*, 83 S.W.2d 935, 944 (Tex. 1935); Robert E. Hardwicke, *Oil-Well Spacing Regulations and Protection of Property Rights in Texas*, 31 TEX. L. REV. 99, 107 (1952) (citing Texas “Rule 37”).

⁸⁴ See COLO. REV. STAT. § 34-60-102(1)(b) (2007); see also Kramer & Martin, *supra* note 1, at § 5.01[2].

⁸⁵ See ARK. CODE ANN. §§ 15-72-308 TO -315; CAL. PUB. RES. CODE § 3640 (2018); KAN. STAT. ANN. §§ 55-1301–17; LA. REV. STAT. ANN. § 30:5.1; MISS. CODE ANN. § 53-3-7 (2014); N.M. STAT. ANN. §§ 70-7-1–21 (2018 West); OKLA. STAT. ANN. tit. 52, §§ 287.1–.15 (West 2018); WYO. STAT. ANN. § 30-5-110 (2007). Notably, Texas does not have a compulsory pooling or unitization statute.

⁸⁶ *Henderson Co. v. Thompson*, 300 U.S. 258 (1937); *Walls v. Midland Carbon Co.*, 254 U.S. 300 (1920).

⁸⁷ *Williams*, *supra* note 4, at 1155–56. Occasionally, these methods have been implemented. For example, production and fracturing moratoria have been employed in limited circumstances to stop waste and protect health, safety and the environment, or while agencies pursue rulemaking efforts. See, e.g., U.S. DEP’T OF THE INTERIOR, NTL No. 2010-N04, NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL AND GAS LEASES IN THE OUTER CONTINENTAL SHELF REGIONS OF THE GULF OF MEXICO AND THE PACIFIC TO IMPLEMENT THE DIRECTIVE TO IMPOSE A MORATORIUM ON ALL DRILLING OF DEEPWATER WELLS (May 30, 2010), and, N.Y. Exec. Order No. 41 (Dec. 13, 2010), available at <http://www.toxicstgettinging.com/MarcellusShale/documents/exec-order-41>, continued by N.Y. Exec. Order No. 2 (Jan. 1, 2011), available at <http://www.governor.ny.gov/executiveorder/2>. Local governments have also imposed moratoria on drilling and hydraulic fracturing, with limited success. See, Lori Riverstone-Newell, *The Rise of State Preemption Laws in Response to Local Policy Innovation*, 47 PUBLIUS: THE J. OF FEDERALISM 403, 405 (2017).

⁸⁸ *Oil and Gas Conservation*, *supra* note 58, at 1142–43.

⁸⁹ E.g., LA. ADMIN. CODE tit. 43, §§ 3501–3511, 3701–3709 (2018); 16 TEX. ADMIN. CODE §§ 3.45, .49 (2016); see *Champlin Ref. Co. v. OCC*, 286 U.S. 210, 234–36 (1932); 2 Ernest E. Smith & Jacqueline Lang Weaver, TEXAS LAW OF OIL & GAS § 9.3(A) (2d ed. 2018).

⁹⁰ *Smith & Weaver*, *supra* note 89, at § 9.3(A).

regulations to curb waste and protect correlative rights unlawfully restrict the profitable uses to which private property can be applied. In a series of cases the US Supreme Court has upheld these limitations based on state interests in preserving natural resources, assuring delivery of oil and gas to the public, and protecting the correlative rights of owners within the pool. As the Court wrote in *Cities Service Gas Co. v. Peerless Oil & Gas Co.*, “It is now undeniable that a state may adopt reasonable regulations to prevent economic and physical waste of natural gas.”⁹¹

II. THE ROLE OF STATE OIL AND GAS CONSERVATION AGENCIES

A. Statutory Authority and Jurisdiction

State regulation of oil and gas is delegated by statute to oil and gas conservation agencies.⁹² Despite this broad authority conservation agencies are not empowered to act on all matters related to oil and gas development. For example, conservation agencies cannot adjudicate title disputes,⁹³ contract rights,⁹⁴ tort claims,⁹⁵ or consider violations of antitrust laws.⁹⁶ In order for a conservation agency to have jurisdiction to resolve a dispute, issue an order, or grant a permit, that authority must have been lawfully delegated to it⁹⁷ with appropriate standards for delegation⁹⁸ and not be preempted by other law.⁹⁹ Thus, oil and gas regulatory agencies are both limited and empowered

⁹¹ *Cities Serv. Gas Co. v. Peerless Oil & Gas Co.*, 340 U.S. 179, 185 (1950). This proposition has recently been challenged in Colorado. See *Wildgrass Oil and Gas Committee v. State of Colorado*, Case 1:19-cv-00190-WYD (U.S. Dist. Colo 2019).

⁹² PATRICK H. MARTIN, *THE JURISDICTION OF STATE OIL AND GAS COMMISSION OIL AND GAS CONSERVATION LAW AND PRACTICE* 3-1, 3-4– 3-5 (Rocky Mt. Min. L. Fdn. 1985); see, e.g., OKLA. CONST. art. VII, § 1.

⁹³ Martin, *supra* note 92, at 3-10 (citing *Sun Oil v. Railroad Commission* 390 S.W. 2d 803 (Tex. Civ. App.—Austin 1965)).

⁹⁴ *Id.* (citing *Superior Oil Co. v. Humble Oil & Ref. Co.*, 241 So. 2d 911, 912 (La. 1970); *Amerada Petroleum Corp. v. RRC*, 395 S.W.2d 403, 406 (Tex. Civ. App.—Austin 1965)).

⁹⁵ *Id.* (citing *Kingwood Oil Co. v. Hall-Jones Oil Corp.*, 396 P.2d 510 (Okla. 1964); *Foree v. Crown Cent. Petroleum Corp.*, 431 S.W.2d 312 (Tex. 1968)).

⁹⁶ *Id.* (citing *Woods Exploration & Producing Co. v. Aluminum Co. of America*, 382 S.W.2d 343 (Tex. Civ. App. 1964)); Michael J. Wozniak & Jamie L. Jost, *Horizontal Drilling: Why It’s Much Better to “Lay Down” Than to “Stand Up” and What is an “18° Azimuth” Anyway?*, 57 ROCKY MT. MIN. L. INST. 11-1, 11-10 to 11-12 (2011).

⁹⁷ *Mistretta v. United States*, 488 U.S. 361 (1989); Martin, *supra* note 92, at 3-5 — 3-8.

⁹⁸ See Morris D. Forkosch, *A Treatise on Administrative Law* § 68 (1956).

⁹⁹ See, e.g., *Millennium Pipeline Co. v. Seggos*, 288 F. Supp. 3d 530, 539 (N.D.N.Y. 2017) (“states are preempted from independently enforcing [Section 401 Clean Water Act certification] standards through the denial of state permits”); *Islander E. Pipeline Co. v. McCarthy*, 525 F.3d 141, 143 (2d Cir. 2008) (“the Clean Water and Coastal Zone Management Acts are notable in effecting a federal-state partnership to ensure water quality and coastal management around the country, so that state standards approved by the federal government become the federal standard for that state”); *ANR Pipeline Co. v. OCC*, 860 F.2d 1571, 1582 (10th Cir. 1988) (OCC Order No. 281285 asserted that regulation of interstate pipelines was within its jurisdiction based on the state’s ratable take statute and

by their statutory delegations of authority. The agency may not act outside the areas where it has been empowered to act, whether that authority remains with the state or has been delegated to another agency.¹⁰⁰ For example, in *Kerr-McGee Corp. v. WOGCC*, the Supreme Court of Wyoming invalidated the WOGCC’s decision that a new tertiary production project was not entitled to a 2% severance tax exemption on the basis that the statute creating the tax exemption included a five-year limitation.¹⁰¹ Although the WOGCC had the authority to certify tertiary recovery projects, the court found that the commission had “no authority to base its decision on tax matters” and had “invaded an area in which it had no statutory right” since the state legislature had delegated “the construction of any statute affecting the assessment, levying, and collection of taxes” to the State Board of Equalization.¹⁰²

State oil and gas conservation statutes provide for the establishment of a regulatory agency and delegation of authority to regulate oil and gas.¹⁰³ Consistent with their delegated “quasi-legislative”, “quasi-judicial,” and enforcement powers, conservation agencies engage in diverse functions including rulemaking, entering orders such as pooling orders, conducting investigations, fact finding, and applying sanctions or levying civil penalties.¹⁰⁴ This broad authority, combined with specific mandates and policy directives, has served as the basis for commission regulation of the manner and location of production, the technical aspects of production, and the preemption of conflicting local land use regulations.¹⁰⁵ For instance, state oil and gas conservation agencies derive their authority to regulate for hydraulic fracturing from their respective enabling acts.¹⁰⁶ The conservation agency is required to fulfill these delegated duties consistent with the public

was necessary to prevent waste and protect correlative rights); *Colo. Mining Ass’n v. Bd. of Cnty. Comm’rs of Summit Cnty.*, 199 P.3d 718, 723 (Colo. 2009) (citing *State Dep’t of Health v. The Mill*, 887 P.2d 993, 1004 (Colo. 1994)); *Gulf Oil Corp. v. WOGCC*, 693 P.2d 227, 238 (Wyo. 1985) (finding “find no intent by Congress to exclude states from regulating mining activities on federal land so as to safeguard environmental values”). *See also* Alexandra B. Klass, *State Innovation and Preemption: Lessons from State Climate Change Efforts*, 41 *LOY. L.A. L. REV.* 1653, 1673 (2008).

¹⁰⁰ *See* *Gage v. RRC*, 582 S.W.2d 410, 413 (Tex. 1979); *Larsen v. WOGCC*, 569 P.2d 87, 90 (Wyo. 1977); *Helmerich & Payne, Inc. v. OCC*, 532 P.2d 419, 422–23 (Okla. 1975) (citing *H.F. Wilcox Oil & Gas Co. v. State*, 19 P.2d 347, 350 (Okla. 1933)); *Union Pac. R.R. Co. v. COGCC*, 284 P.2d 242, 246–47 (Colo. 1955).

¹⁰¹ *See* *Kerr-McGee v. Wyo. Oil & Gas Conservation Com’n*, 903 P.2d 537 (Wyo. 1995).

¹⁰² *Id.* at 544–45.

¹⁰³ *See, e.g.*, *COLO. REV. STAT. ANN.* § 34-60-105 (West 2018); *N.M. STAT. ANN.* § 70-2-6 (West 2018); *OKLA. STAT.* tit. 17, § 52 (West 2018); *58 PA. STAT. ANN.* § 405 (West 2018); *TEX. NAT. RES. CODE* § 81.051 (West 2018); *WYO. STAT. ANN.* § 30-5-104 (West 2018).

¹⁰⁴ *See, e.g.*, *WYO. STAT. ANN.* § 30-5-104 (West 2018); *McGowan v. Mississippi State Oil & Gas Bd.*, 604 So.2d 312 (Miss. 1992); *see also* *Martin, supra* note 92, at 3-5.

¹⁰⁵ These grants of authority have also cited preemption of local government rules that conflict with state regulations, *see, City of Longmont v. Colorado Oil and Gas Association*, 369 P.3d 573 (2016).

¹⁰⁶ *See, e.g.*, *COLO. REV. STAT. ANN.* § 34–60–102(1)(b) (2018); *MONT. CODE ANN.* § 82-11-201 (West 2018); *N.M. STAT. ANN.* § 70-2-11 (West 2018); *TEX. NAT. RES. CODE ANN.* § 86.082 (West); *WYO. STAT. ANN.* § 30-5-104 (West 2018). Each agency enabling act provides several general requirements to address oil and gas production, applicable to both conventional and hydraulically fractured wells. Some relevant provisions common to most acts include bonding, permitting, well location, waste disposal, and strata sealing. William J. Brady & James P. Crannell, *Hydraulic Fracturing Regulation in the United States: The Laissez-Faire Approach of the Federal Government and Varying State Regulations*, 14 *VT. J. ENVTL. L.* 39, 63 (2012).

purposes as established by the legislature.¹⁰⁷ These purposes are principally the prohibition of waste, the protection of correlative rights, and the conservation and efficient development and production of oil and gas.¹⁰⁸

1. Preventing Waste

All state conservation statutes include some form of a prohibition on waste, though statutory definitions differ.¹⁰⁹ Texas and Wyoming, for example, limit definitions of waste strictly to physical waste—the spillage of oil and gas or dissipation of reservoir energy resulting in the stranding of oil and gas underground.¹¹⁰ Wyoming’s legislature expressly excluded economic waste from its consideration when it rejected language that would have permitted its commission to consider as waste “the drilling of wells not reasonably necessary to effect an economic maximum ultimate recovery of oil and gas from a pool.”¹¹¹ Similarly, Texas does not authorize its commission to consider economic waste, instead treating the drilling of unnecessary wells as “a political virtue, not a sin.”¹¹² Other states, like Utah, define waste more expansively to include the drilling of unnecessary wells to recover the same resource, thus resulting in an inefficient allocation of capital.¹¹³ This waste, called “economic waste,” results in increased costs of production, higher costs to the consumer, and unnecessary consumption of surface resources. Still other states include “market demand waste,”¹¹⁴ the abuse of correlative rights,¹¹⁵ or the burning of natural gas for uses deemed wasteful, such as the manufacture of carbon black.¹¹⁶

In limited situations, waste may also be defined as an otherwise lawful activity that would result in undue environmental degradation. Wyoming’s statute prohibiting the waste of gas through flaring provides that:

¹⁰⁷ See, e.g., LA. REV. STAT. ANN. § 30:4(A); see also Martin, *supra* note 92, at 3-5.

¹⁰⁸ See *Union Pac. Res. Co. v. Texaco, Inc.*, 882 P.2d 212, 223 (Wyo. 1994); *Voss v. Lundvall Bros., Inc.*, 830 P.2d 1061, 1067 (Colo. 1992); *Larsen v. WOGCC*, 569 P.2d 87, 89–90 (Wyo. 1977).

¹⁰⁹ See LA. STAT. ANN § 30:31 (1950); OKLA. STAT. ANN. tit. 52, §§ 86.2, 86.3 (West 2018); UTAH CODE ANN. § 40-6-2(27) (West 2018).

¹¹⁰ TEX. NAT. RES. CODE ANN. § 85.046(6) (1995) (defining waste as “physical waste or loss incident to or resulting from drilling, equipping, locating, spacing or operating a well or wells in a manner that reduces or tends to reduce the total ultimate recovery of oil and gas from any pool.”).

¹¹¹ *Larsen v. WOGCC*, 569 P. 2d 87, 92–93 (Wyo. 1977) (quoting proposed statutory language that was not ultimately enacted); see generally Houston G. Williams & George M. Porter, *Practice Before the Wyoming Oil and Gas Conservation Commission*, 10 LAND AND WATER L. REV. 403 (1975).

¹¹² See JACQUELINE LANG WEAVER, *UNITIZATION OF OIL AND GAS FIELDS IN TEXAS: A STUDY OF LEGISLATIVE, ADMINISTRATIVE, AND JUDICIAL POLICIES* (2013).

¹¹³ UTAH CODE. ANN. § 40-6-2(27) (2017).

¹¹⁴ MICH. COMP. LAWS §§ 319.2 (1), 319.5 (4) (1948).

¹¹⁵ ARK. CODE ANN. § 15-72-102 (2005).

¹¹⁶ See Saint-Paul, *supra* note 63, at § 4:38.

it shall be unlawful to allow or permit such natural gas to pollute or contaminate the atmosphere to such an extent that injury or damage is sustained by growing crops, vegetation, livestock, wildlife, or domestic fowls, or to such an extent that the human health, welfare, or safety is in anywise impaired or damaged.¹¹⁷

This approach expands on Wyoming’s general definition of waste in Wyo. Stat. § 30-5-101 and is reminiscent of early state police power justifications on the right of a mineral owner to capture and dispose of its property. Whereas flaring is neither per se defined as waste nor outright prohibited,¹¹⁸ it is considered to be waste where it results in environmental degradation or other imperils the public interest. Agencies however have not embraced statutory prohibitions on waste as authorizing consideration of landscape scale impacts or those related to climate change. However, courts may expansively read waste and oil and gas conservation statutes in a manner that authorizes agencies to prevent damage to the environment. Waste has been defined by courts as having an “ordinary and generally accepted meaning and . . . whatever dictates of reason, fairness, and good judgment would lead a person to conclude is a wasteful practice in the production, storage, or transportation of oil and gas is included within the term.”¹¹⁹ A Michigan Court interpreted its Oil Conservation Act’s prohibition on waste to include “spoliation or destruction of the land, including flora and fauna.”¹²⁰ Waste of natural resources, as defined in the Outer Continental Shelf Lands Act, has been interpreted to include injury to animals and plants within the marine environment.¹²¹

Ironically, despite very clear statutory prohibitions on waste, conservation agencies have not been expected to stop or prevent waste altogether. In fact, waste has largely been accepted as a necessary and unavoidable component of development.¹²² For example, flaring—the process of combusting gas that is produced from oil wells but that cannot be immediately or profitably captured and sold—is undeniably wasteful. However, it is widely accepted that some flaring is necessary in order to test and equip wells,¹²³ and the majority of state conservation statutes permit flaring for limited periods of time to permit operators to case or tube wells.¹²⁴ Further, capture of all gas may be inefficient. In situations where the capture of casinghead gas may be so costly so as to make recovery of the oil uneconomic, agencies largely consider such gas to be “unavoidably lost”¹²⁵ and permit the flaring of gas so as not to “waste” the oil by making its production

¹¹⁷ WYO. STAT. ANN. § 30-5-121 (1950).

¹¹⁸ See *id.* at § 30-5-101(a)(i)(G) (defining “waste” to include “[t]he flaring of gas from gas wells except that necessary for the drilling, completing or testing of the well”). See also Kramer & Martin, *supra* note 1, at § 5.01.

¹¹⁹ 38 Am. Jur. 2d *Gas and Oil* § 153 (2018) (citing RRC v. Shell Oil Co., 206 S.W.2d 235, 240 (Tex. 1947)).

¹²⁰ Michigan Oil Co. v. Nat. Res. Comm’n, 276 N. W. 2d 141 (Mich. 1979).

¹²¹ Gulf Oil Corp. v. Morton, 493 F. 2d 141, 145 (9th Cir. 1973) (interpreting 43 U.S.C. § 1334(a)(1)).

¹²² While beyond the scope of this paper’s analysis, oil and gas leases and the mineral developer’s implied easement to access the surface imply duties not to commit waste. Tort and contract remedies may be available against lessors who unreasonably permit waste of surface or subsurface resources.

¹²³ U.S. Gov’t Accountability Off., GAO-11-34, *Federal Oil And Gas Leases* 5 (2010).

¹²⁴ E.g., KAN. STAT. ANN § 55-102(a) (2002).

¹²⁵ U.S. Geological Survey, *Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas*

impractical.¹²⁶ For example, North Dakota permits operators to obtain an exception from the North Dakota Industrial Commission’s flaring rules if they can demonstrate it is “economically infeasible” to connect to a gas gathering line or “that a market is not available and that equipping the well with an electrical generator. . . . is economically infeasible.”¹²⁷ Though one could argue that an absolute prohibition on flaring might be consistent with some state’s enabling legislation, with few limited exceptions, states have not imposed “no flare” rules on oil wells.¹²⁸ Were a state to do so, they would likely face claims that absolute prohibitions on flaring or waste presented an unreasonable restriction on the mineral owner’s right to capture oil and gas and make use it property and a violation of their correlative rights in the reservoir.

2. *Protecting Correlative Rights*

Conservation commissions are also tasked with protecting the correlative rights of owners within the common pool.¹²⁹ Correlative rights refer to each mineral owner’s co-equal interest in the common source of supply.¹³⁰ The doctrine of correlative rights emerged as one of the core justifications for modification of the rule of capture by legislative action.¹³¹ Waste by any owner within a pool or common source of supply imperils the correlative rights of others within that reservoir community. The protection of correlative rights and prevention of waste are complementary functions of state conservation agencies. Without statutes prohibiting and limiting waste, excessive use by one owner would diminish the property interests of all others. Accordingly, correlative rights are necessary to both protecting the state’s interest in production and the rights of other mineral owners within the field.¹³² Although some states have created a hierarchy that prioritizes the prevention of waste,¹³³ both functions are necessary to assure fair and efficient

Leases (NTL 4-1) (1980), available at <http://www.blm.gov/style/medialib/blm/ak/aktest/energy/ogforms.Par.32669.File.dat/ntl4a.pdf>.

¹²⁶ The BLM’s “venting and flaring rule” discourages this practice on federal lands by requiring payment of royalty on flared gas, among other changes. *See* 43 C.F.R. § 3179.7, *partially stayed by* Wyoming v. DOI, No. 2:16-cv-00285, slip op. (D. Wyo. Apr. 4, 2018), *appeal docketed*, No. 18-8027 (10th Cir. Apr. 6, 2018); *see also* Bradley N. Kershaw, *Flames, Fixes, and the Road Forward: The Waste Prevention Rule and BLM Authority to Regulate Natural Gas Flaring and Venting*, 29 COLO. NAT. RESOURCES, ENERGY, & ENVTL. L. REV. 115 (2018).

¹²⁷ N.D. CENT. CODE § 38-08-06.6 (1985).

¹²⁸ Bret Wells, *Please Give Us One More Oil Boom—I Promise Not to Screw It Up This Time: The Broken Promise of Casinghead Gas Flaring in the Eagle Ford Shale*, 9 TEX. J. OIL GAS & ENERGY L. 319, 325 (2014). There are some examples of successful field-wide no-flare rules in Texas. For example, a 1934 “no-flare” order imposed by the Texas Railroad Commission on the Agua Dulce field was upheld. *See* Clymore Prod. Co. v. Thompson, 13 F. Supp. 469 (W.D. Tex. 1936).

¹²⁹ The U.S. Supreme Court has recognized correlative rights. *See* Ohio Oil Co. v. Indiana, 177 U.S. 190, 203 (1900).

¹³⁰ Interstate Oil Compact Comm’n, *A Study of Conservation of Oil and Gas in the United States* 187 (1964).

¹³¹ Kramer and Anderson, *supra* note 55 at 914–15.

¹³² *See generally* Kramer & Martin, *supra* note 1, at § 5.01.

¹³³ *See* Sw. Kan. Royalty Owners v. State Corp. Comm’n, 769 P.2d 1, 9 (Kan. 1989); Gilmore v. Oil & Gas Conservation Comm’n, 642 P.2d 773, 779 (Wyo. 1982); Denver Producing & Refining Co. v. State, 184 P.2d 961, 963 (Okla. 1947); Wilson, *supra* note 70, at 18–7.

development of oil and gas resources. A disproportionate focus on prevention of waste could diminish the property interests of some mineral owners, whereas an absolute adherence to strict principals of proportionality or rights of capture would be contrary to public interests in efficient production.

3. *Administering UIC and Waste Control Programs*

Oil and gas conservation agencies may also be charged with implementation of programs in addition to the conservation of oil. For example, the WOGCC has jurisdiction over carbon dioxide sequestration¹³⁴ and the RRC has regulatory and enforcement responsibilities under the Safe Drinking Water Act, the Resource Conservation and Recovery Act, and the Clean Water Act.¹³⁵ These delegated duties may require the agency to engage in fact finding relative to the extent of drinking water sources, the mechanical integrity of wells, or the containment capacity of proposed storage reservoirs.¹³⁶ These interests may, at times, contrast with interests in production. For instance, an agency may be required to both protect water quality and permit wells for hydraulic fracturing or wastewater injection – activities which could result harm to drinking water sources. It is impossible in this instance for the right hand to be ignorant of what the left hand is doing. Agency duties with respect to administration of these programs permit the argument that conservation agencies’ authorization to restrict the use of private property to protect public interests extends beyond the prevention of waste and protection of correlative rights interests and that agency’s must treat their environmental protection obligations as co-equal with the obligation to promote development of oil and gas.

4. *Encouraging Efficient Development*

Make no mistake however: despite statutory prohibitions on waste and administration of environmental programs, historically the key aim of conservation law has been to promote development. Encouraging the efficient and orderly development of natural resources is a critical objective of conservation law, and one that is in direct contrast to environmental movements such as “keep it in the ground.”¹³⁷ The rule capture, though now constrained by doctrines of nuisance, and limited by regulations to protect correlative rights and prevent waste, is as alive and well as ever. While regulations may, at times, render specific properties undevelopable due to lack of a legal location, conservation agencies are not empowered to block, stop, or hinder private mineral owners from developing their property and reducing oil and gas to possession. Legislatures have not found that oil and gas production, *ipso facto*, endangers the public and welfare or is wasteful. In fact, in many states it is presumed to have a high public value, such that private property can be

¹³⁴ WYO. STAT. ANN. § 35-11-313 (2016).

¹³⁵ TEX. WATER CODE ANN. § 26.131 (1991).

¹³⁶ *Id.*

¹³⁷ Monika U. Ehrman, A Call for Energy Realism: When Immanuel Kant Met the Keep it in the Ground Movement (April 15, 2018). Utah Law Review, 2019 Forthcoming.

condemned to advance its purposes.¹³⁸ Accordingly, the imperative to prevent of waste and protect correlative rights is limited to the extent that those aims can be accomplished without substantially impeding development or making development wholly impracticable.¹³⁹

5. *Health, Safety, and Public Welfare*

A number of states including Arizona, Alaska, Colorado, and Kentucky authorize the commission to consider public safety, health, welfare, and responsible development in exercise of their delegated authority.¹⁴⁰ While these statements of public purpose are reminiscent of early justifications for conservation regulation, they also have meaning of their own. In most cases, statutes were amended to incorporate these public values long after adoption of the original conservation laws indicating that these duties are in addition rather than incidental to the agency's traditional regulatory purposes. For example, Colorado's commission has the authority to regulate oil and gas operations "so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource... to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources."¹⁴¹ Illinois and Oklahoma provide their conservation agencies with more limited authority to intervene only when there is an imminent threat to public health or environmental safety.¹⁴² As illustrated by a 2019 ruling of the Colorado Supreme Court, the addition of these mandates may introduce theoretical inconsistencies and presents challenging issues of statutory interpretation that become core to evaluations of an agency's determination of its duties pursuant to its governing statute.

B. *Judicial Review of Agency Decisions*

Agency decisions, including those of oil and gas conservation agencies, are afforded considerable deference upon judicial review. Under state administrative procedure acts modeled after the federal Administrative Procedure Act (APA) and Model State Administrative Procedure Act (MSAPA), a reviewing court will not overturn an agency decision absent some clear error in the agency's application of law or interpretation of its governing statute.¹⁴³ Generally, most state administrative procedure acts provide that a reviewing court may only set aside an agency decision upon a finding that: the decision is arbitrary, capricious, or not in accordance with law; the agency has exceeded the scope of its statutory authority; the agency violates the state or federal

¹³⁸ Alexandra Klass, *The Frontier of Eminent Domain*, 79 COLO. L. REV. 651, 691 (2008).

¹³⁹ See *Larsen v. WOGCC*, 569 P.2d 87, 90–91 (Wyo. 1977).

¹⁴⁰ ALASKA STAT. § 31.05.030(e) (2018); ARIZ. REV. STAT. ANN. § 27-515 (1995); COLO. REV. STAT. §§ 34-60-102, 106(2)(d); KY. REV. STAT. ANN. § 353.500 (2003).

¹⁴¹ COLO. REV. STAT. § 34-60-106(2)(d) (2013). The scope of the text is presently being litigated in *Martinez v. Colo. Oil & Gas Conservation Comm'n*, see, *infra*, notes 122–38 and accompanying text.

¹⁴² 225 ILL. COMP. STAT. ANN. 725/1.2 (West 2018); OKLA. STAT. TIT. 17, § 52 (West 2018).

¹⁴³ See REVISED MODEL STATE ADMIN. PROCEDURE ACT (NAT'L CONFERENCE OF COMM'RS ON UNIF. STATE LAWS 2010) [hereinafter 2010 MSAPA]. Pursuant to its own terms, the APA does not apply to state administrative agencies. Thus, a state agency's obligation to respond to a petition for rulemaking is governed by each state's respective administrative procedure act. 5 U.S.C. § 701(b)(1).

constitution or denies a person of constitutional rights; or the agency decision was made upon unlawful procedure.¹⁴⁴ Courts justify this deference to commission decisions based on the legislatures delegation of authority to the and the agencies substantial expertise.¹⁴⁵

If the legislature has not spoken directly to the question at hand, the remaining analysis left to the reviewing court turns solely on whether the agency has based its decision upon a permissible reading of its governing statute.¹⁴⁶ A court may find that an agency has exceeded its statutory authority when its rulemaking resolves a question of law rightfully within the province of the judiciary.¹⁴⁷ In the context of oil and gas permitting by an agency, a reviewing court begins its analysis with the presumption that an agency's action was valid.¹⁴⁸ As a result, it is challenging to overcome the inertia of entrenched views within conservation agencies that consideration of environmental impacts is outside of the agency's authority and second to considerations of waste or correlative rights. At times courts have overturned agency decisions that they lack authority to consider environmental issues whereas other times those determinations have been affirmed. Advocacy on this front however has presented new opportunities for environmental constituencies to have their voices heard.

III. REDEFINING OIL AND GAS CONSERVATION

Conservation agencies, particularly in the Marcellus Shale region and in Colorado, have encountered new and growing pressures to exercise their rulemaking, adjudicative, and enforcement authorities to afford greater consideration to environmental matters. This trend is neither nascent nor should it be unexpected. Following the Michigan Supreme Court's interpretation of the state's waste prevention statute as including damage to natural resources, wildlife, and the environment, Professor Owen Anderson predicted in 1985 that conservation commissions would play an increasing role in regulating oil and gas activities to protect the environment.¹⁴⁹ Since then, the economies of many oil-producing states have diversified to include

¹⁴⁴ *Larsen v. Oil & Gas Conservation Comm'n*, 569 P.2d 87, 92 (Wyo. 1977).

¹⁴⁵ *Murray Energy Corp. v. Div. of Mineral Res. Mgt.*, 2013-Ohio-4162, ¶ 14, 998 N.E.2d 872, 876 (noting justification for this presumption, that, “[w]e recognize that the legislature has delegated certain authority to the Commission and that the Commission has accumulated substantial expertise.”).

¹⁴⁶ *See Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984). A number of states have adopted the Chevron approach to agency deference, or identical versions of it. *See Michael Pappas, No Two-Stepping in the Laboratories: State Deference Standards and Their Implications for Improving the Chevron Doctrine*, 39 MCGEORGE L. REV. 977, 984 (2008) (“[a] survey of the fifty states' equivalents to the Chevron doctrine shows an array of different announced standards, ranging from strong deference to an agency interpretation to completely de novo review explicitly discouraging deference.”).

¹⁴⁷ *Chevron*, 467 U.S. at 838 (1984).

¹⁴⁸ *See Larsen v. Oil & Gas Conservation Comm'n*, 569 P.2d 87, 92 (Wyo. 1977). In states that have closely adhered to *Chevron*, courts award strong deference to agency decisions given that the action is not contrary to the scope or purpose of the agency's delegated authority. Pappas, *supra* note 144, at 985.

¹⁴⁹ Owen Anderson, *New Directions in Oil and Gas Conservation Law*, 18A RMMFL-INST. 14, 8 (1985) (citing *Michigan Oil Co. v. Natural Resources Commission*, 276 N. W. 2d 141 (Mich. 1979)). Professor Anderson also anticipated increased conflicts over water pollution and local government regulation. *Id.*

a greater emphasis on high-tech industries and recreational tourism.¹⁵⁰ Despite significant economic contributions,¹⁵¹ the oil and gas industry is no longer perceived as the lynchpin to some state economies.¹⁵² As a result, public interest has shifted away from assuring the vitality of the industry and the maximization of development. Instead, citizens and environmental groups have pushed for more openness and democratization of agency proceedings and increased regulation of the environmental and social impacts of oil and gas operations.

Responses to heightened public concern have emerged from all areas of government and have had a profound impact on the regulation of oil and gas production. Legislatures have amended conservation laws to include statements in favor of environmental stewardship and proposed legislation to alter the scope of oil and gas conservation agency authority. Citizens have brought proposals before conservation agencies and to the ballot box requesting increased surface setbacks from occupied dwellings and schools and to mandate greater consideration of the climate impacts of their permitting decisions.¹⁵³ Local governments have emerged as leaders in land use determinations associated with oil and gas and the protection of health, safety, and environmental interests, and are intervening in proceedings within their borders.¹⁵⁴ These responses have culminated in pressures on oil and gas conservation agencies to exercise their rulemaking authority in new ways and to increase the consideration given to environmental matters in implementing their permitting authority. Where conservation agencies have refused, a frontier of litigation has emerged, seeking to clarify commissions' authority and obligations with respect to environmental matters. The confluence of these cases has birthed new opportunities for conservation groups and municipalities to influence the oil and gas permit approval and regulatory process.

A. *Before the Agency: Petitions for Rule Making*

Citizen petitions for rulemaking are a primary pathway for members of public to gain access to administrative rulemaking proceedings before a conservation agency, and may force a reluctant agency's hand on a particular issue. A "petition for rulemaking," as its name would suggest, refers to the process by which an interested person can file a proposal that a federal or state agency promulgate a particular rule.¹⁵⁵ Although citizen petitions regarding oil and gas are

¹⁵⁰ Alexandra Klass, *supra* note 138 at 691; *Colorado Profile Analysis*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/state/analysis.php?sid=CO#1>.

¹⁵¹ Kevin J. Duffy, *Regulating Hydraulic Fracturing Through Land Use: State Preemption Prevails*, 85 U. COLO. L. REV. 817, 834–37 (2014).

¹⁵² *Id.* at 834.

¹⁵³ *See infra* notes 176–89 and accompanying text.

¹⁵⁴ Heidi Gorovitz Robertson, *When States' Legislation and Constitutions Collide with Angry Locals: Shale Oil and Gas Development and Its Many Masters*, 41 WM. & MARY ENVTL. L. & POL'Y REV. 55, 59, n. 6, 7 (2016) ("[i]n 2012 alone, fourteen states enacted or refined comprehensive oil and gas legislation, which in each state restricted local control to at least some degree."); Nathaniel L. Foote, *Not in My Backyard: Unconventional Gas Development and Local Land Use in Pennsylvania and Alberta, Canada*, 3 PENN. ST. J. OF L. & INT'L AFF. 235, 245 (2015)

¹⁵⁵ *See* Off. of the Fed. Reg., *A Guide to the Rulemaking Process* (2011), available at https://www.federalregister.gov/uploads/2011/01/the_rulemaking_process.pdf.

fairly common among federal agencies,¹⁵⁶ oil and gas conservation commissions were long viewed as being closed and dealing only with “seemingly mundane well spacing and related conservation proceedings.”¹⁵⁷ Recently however, environmental groups have begun petitioning conservation agencies to initiate rulemaking on a variety of environmental subjects.

Citizen petitions for rulemaking are expanding the scope of parties who are involved in proceedings before the conservation agency. The majority of proceedings before an oil and gas conservation agency are limited to “operators or royalty owners of land” within the area affected by a drill permit or well spacing order.¹⁵⁸ Whereas a party within the boundaries of a spacing unit can protest and application or challenge a decision, a neighbor who lives nearby the proposed drilling location or a group of people who enjoy recreating in the area could not. Although exact definitions in state administrative procedures acts differ, an “interested person” may “include[] any person who may be aggrieved by agency action.”¹⁵⁹ Although the citizen petition process would not all protest of individual well location, citizen petitions are being used to ask conservation agencies to initiate new rulemakings for oil and gas rules.

The availability of petitions to initiate rulemaking dates to the passage of the federal APA and most state administrative procedure acts. States that have adopted the Model Administrative Procedure Act, or a version of it, generally require “each agency to give an interested person the right to petition for the issuance, amendment, or repeal of a rule.”¹⁶⁰ Indeed, agencies at the state and federal levels receive hundreds of petitions for rulemaking each year, while others receive none whatsoever.¹⁶¹

A state agency’s obligation to affirmatively respond to a citizen petition for rulemaking—in oil and gas contexts and otherwise—arises from the state’s unique administrative procedure act.¹⁶² In the same way that this duty to respond pursuant to applications of the federal APA is unclear, the duty of state agencies to respond to citizen petitions for rule making is often imprecise.¹⁶³ Although the action on the petition is within the discretion of the agency, generally,

¹⁵⁶ See e.g., *Citizen Pet. Requesting the Completion of a Programmatic Environmental Impact Statement* (filed Apr. 4, 2011), available at <http://www.cbf.org/document-library/cbf-misc-documents/FINAL-Petition-to-CEQ-Apr-4-201176ff.pdf>.

¹⁵⁷ Pierce, *supra* note 3, at 776.

¹⁵⁸ See, e.g., 25 PA. CODE ANN. § 79.23 (West 2018).

¹⁵⁹ COLO. REV. STAT. ANN. § 24-4-102(6.2) (West 2018).

¹⁶⁰ See *supra* note 156 and accompanying text.

¹⁶¹ Jason A. Schwartz and Richard L. Revesz, *Petitions for Rulemaking, Final Report to the Administrative Conference of the United States* (Nov. 5, 2014), available at <https://www.acus.gov/sites/default/files/documents/Final%20Petitions%20for%20Rulemaking%20Report%20%5b11-5-14%5d.pdf>.

¹⁶² See *infra* notes 97—107 and accompanying text.

¹⁶³ Aram A. Gavoort & Daniel Miktus, *Public Participation in Nonlegislative Rulemaking*, 61 Vill. L. Rev. 759, 761 (2016) (“[e]ven when [judicial] review is available, the federal courts employ inconsistent standards to evaluate both agency inaction and unreasonable delay in adjudicating a petition.”). See also Admin. Conf. of the United States, *Petitions for Rulemaking*, https://www.acus.gov/recommendation/petitions-rulemaking-0#_ftnref8

the agency may not simply ignore the petition and must issue a response either declining or adopting the proposed rule within a reasonable time.¹⁶⁴ Under the revised 2010 Model State Administrative Procedure Act, the state agency must deny the petition with explanation or initiate rulemaking within 60 days of receiving the petition.¹⁶⁵

Rejection of a petition may also create standing for environmental advocates to challenge the agency's decision and ask for judicial clarification of the agency's duties with respect to the environment. Depending on the state statute under which an interested party petitions for rulemaking, the denial of a citizen's petition for rulemaking may lend standing for judicial review on the agency's denial after all administrative remedies have been exhausted.¹⁶⁶ Administrative procedure acts in states including Colorado, Montana, and Texas—for instance—grant to aggrieved and interested parties standing to appeal petition denials, along with other final agency actions, for judicial review.¹⁶⁷ In Wyoming, conversely, “[t]he action of the agency in denying a petition is final and *not* subject to review.”¹⁶⁸ An agency's refusal to initiate rulemaking in response to a petition is “at the high end of the range of levels of deference.”¹⁶⁹ However, where refusals are based on an agency's assertion that it lacks jurisdiction to consider the issue, the review process has provided opportunities for reinterpretation of agency's enabling statutes including an evaluation of the agency's obligations with respect to environmental protection.

The prevalence of petitions for rulemaking concerning health and environment in the oil and gas and other resource development contexts is comparatively nascent and accompanies a broad sweep of attempts to embolden barriers to many types of resource developments.¹⁷⁰ Over the last several years, conservation groups and concerned citizens have used petition procedures to push oil and gas and other conservation agencies to exercise their rulemaking authority by

(last visited Jan. 26, 2019) (noting that few federal agencies have delineated clear procedures for responding to petitions for rulemaking).

¹⁶⁴ See, e.g., *Larry Koch, Inc. v. Texas Nat. Conservation Comm'n*, 52 S.W.3d 833, 838 (Tex. App. 2001).

¹⁶⁵ 2010 MSAPA, *supra* note 141, at § 318.

¹⁶⁶ See *id.* at § 506 (“a person may file a petition for judicial review under this [act] only after exhausting all administrative remedies available within the agency the action of which is being challenged and within any other agency authorized to exercise administrative review.”).

¹⁶⁷ COLO. REV. STAT. ANN. § 24-4-106 (West 2018); MONT. CODE ANN. § 2-4-702 (West 2018); TEX. GOV'T CODE ANN. § 2001.176 (West 2018). The 2010 MSAPA also grants broad standing to petitioners on judicial review. *Id.* at § 501.

¹⁶⁸ WYO. STAT. ANN. § 16-3-106 (West 2018) (emphasis added).

¹⁶⁹ *Defenders of Wildlife v. Gutierrez*, 532 F.3d 913, 919 (D.C. Cir. 2008).

¹⁷⁰ Experiments concerning the potential of administrative agencies to embolden environmental barriers to development have emerged also in realms like water appropriation, where citizens and tribes have petitioned state agencies to block new appropriations for the conservation of instream flows. See Lindsey Schromen-Wawrin, *Adopting Instream Flow Rules in Washington State: Can Citizens Jumpstart the Process Through the Administrative Procedure Act?*, 48 GONZ. L. REV. 561 (2013).

proposing new rules.¹⁷¹ These proposals suggest changes to increase the consideration of environmental impacts in oil and gas regulation and to provide more stringent rules to protect surface landowners from the health, safety, and environmental impacts of drilling and production.¹⁷²

1. *Increased Setbacks*

Several oil and gas conservation agencies have seen citizen-initiated petitions to increase setbacks from schools, homes, and other occupied structures, as well as from environmentally sensitive areas such as streams and wetlands. Setbacks from drilling locations are a significant area of concern to surface landowners and conservation groups alike.¹⁷³ In the absence of regulation, a severed mineral owner has no obligation to offset a well location from a home or residence,¹⁷⁴ though there is a strong custom of doing so. While some states have codified or implied an obligation to accommodate the existing uses of the surface owner,¹⁷⁵ traditionally mineral owners' use of the surface was constrained only by the bounds of reasonableness as determined by custom and practice in the industry.¹⁷⁶ Landowner tolerance for the externalities of drilling and production has diminished as a result of changing social norms and increased development in urbanized areas and on split estates.¹⁷⁷ In those areas, the surface owner may have no interest in, or control of, the underlying minerals.¹⁷⁸ Thus, surface landowners in suburban areas, who have and little to no participation in the leasing and permitting process or the economic benefits of production, are experiencing the brunt of the localized impacts of development.¹⁷⁹ To buffer the most localized impacts of development, citizens and conservation groups have petitioned oil and gas commissions

¹⁷¹ Our Children's Trust, *Other Proceedings in All 50 States*, <https://www.ourchildrenstrust.org/other-proceedings-in-all-50-states> (last visited Jan. 24, 2019) (since 2011, Our Children's Trust (among other groups) has submitted petitions for agency rulemaking regarding oil and gas development in all fifty states).

¹⁷² See, e.g., *Pet. Kids vs Global Warming to the Wyo. Dep't Env't'l Qual. & Wyo. Env't'l Qual. Control* (May 4, 2011) (seeking promulgation of rule to mandate protection of atmosphere as public trust resource).

¹⁷³ See, e.g., N.D. CENT. CODE § 38-08-05 (2013); MD. CODE REGS. 26.19.01.09(G) (2018); see also Hannah J. Wiseman, *Risk and Response in Fracturing Policy*, 84 U. COLO. L. REV. 729, 797–98 (2013).

¹⁷⁴ See Clarence A. Brimmer, *The Rancher's Subserving Surface Estate*, 5 LAND & WATER L. REV. 49, 54 (1970).

¹⁷⁵ See, e.g., WYO. STAT. ANN. §§ 30-5-401 to -410; Ernest E. Smith, *The Growing Demand for Oil and Gas and the Potential Impact upon Rural Land*, 4 TEX. J. OF OIL, GAS, & ENERGY L. 1, 6 (2008).

¹⁷⁶ See *Harris v. Currie*, 176 S.W.2d 302, 305 (Tex. 1943); Christopher M. Alspach, *Surface Use by the Mineral Owner: How Much Accommodation Is Required Under Current Oil and Gas Law?*, 55 OKLA. L. REV. 89, 91 (2002).

¹⁷⁷ See Ernest E. Smith, *Urbanization and the Surface Development of Mineral Land: The Conflict Between the Dominant and Servient Estates*, in *SELECTED WORKS*, TEX. J. OF OIL, GAS, & ENERGY L. (2013).

¹⁷⁸ See Wiseman, *supra* note 170, at 778–79 (2013).

¹⁷⁹ See Alex Ritchie, *On Local Fracking Bans: Policy and Preemption in New Mexico*, 54 NAT. RESOURCES J. 255, 297–98 (2014).

to adopt new rules increasing well setbacks from occupied structures, schools, streams, and other public resources.¹⁸⁰

In Montana, Colorado, and Wyoming, new surface setback and notification rulemakings were initiated only after citizen groups had proposed more stringent rules to the conservation agencies.¹⁸¹ Regardless of whether the precise petition is accepted or denied, conservation agencies have demonstrated responsiveness to the petition process.¹⁸² For example, in 2012, the COGCC commenced rulemaking regarding surface setbacks following a proposal from the Colorado Environmental Coalition.¹⁸³ The contentious process resulted in adoption of Rule 604, which creates a buffer zone setback prohibiting location of a well within 1,000 feet of a building unit.¹⁸⁴ In order to obtain an exception from the 1,000-foot setback, oil and gas operators must have engaged in consultation with landowners and local governments and agreed to “site specific mitigation measures as necessary to eliminate, minimize or mitigate potential adverse impacts to public health, safety, welfare, the environment, and wildlife.”¹⁸⁵ This provision empowers both surface landowners and local governments and provides opportunities for private governance approaches to development conditions and stipulations to mitigate impacts of development. Similarly, in July of 2018, the COGCC voted in favor of a petition brought by League of Oil and Gas Impacted Coloradans to alter oil and gas well setbacks from schools and initiated rulemaking proceedings that lead to adoption of a rule in December.¹⁸⁶

Montana and Wyoming followed similar processes, but with more constrained outcomes. In 2013, following a petition from the Powder River Basin Resource Council, the WOGCC commenced rulemaking to modify its occupied structure setbacks to require a 500-foot setback from an occupied structure.¹⁸⁷ Although the new rules doubled the previous setbacks, they were

¹⁸⁰ See, e.g., Rebuttal Statement of Colorado Environmental Coalition, *et. al*, COGCC SETBACK RULEMAKING (2012).

¹⁸¹ See Pat Bellinghausen, *Gazette Opinion: Put Some Distance Between Oil Wells and Montana Homes*, BILLINGS GAZETTE (Aug. 6, 2015); Stephanie Joyce, *Draft Rule Proposes Increased Buffer Between Drilling and Homes*, WYO. PUB.MEDIA (Sept. 5, 2014).

¹⁸² See WOGCC, STATEMENT OF PRINCIPAL REASONS FOR AMENDMENT OF RULES (Apr. 23, 2015), <http://wyoleg.gov/arules/2012/rules/ARR14-077.pdf>.

¹⁸³ Rebuttal Statement of Colo. Env'tl. Coal. et al., *COGCC Setback Rulemaking* (2012).

¹⁸⁴ 2 COLO. CODE REGS. § 404-1:604.a.(2).

¹⁸⁵ *Id.*

¹⁸⁶ Broomfield Concerned, *School Setback Cogcc Rulemaking Going Forward After Logic Petition* (Jul. 30, 2018), available at <https://broomfieldconcerned.org/blog/author-jean-lim/school-setback-cogcc-rulemaking-going-forward-after-logic-petition/>.

¹⁸⁷ WYO. RULES & REGS. OIL GEN ch. 3, § 47(a); see Dustin Bleizeffer, *Homeowners Upset at State's New Oil and Gas Rule*, WYOFILE (Apr. 15, 2015), <https://www.wyofile.com/homeowners-upset-states-new-oil-gas-rule/>; Lynne J. Boomgaarden, *The Regulators' Perspective on Oil & Gas Surface Uses: Managing Stakeholder Expectations*, OIL AND GAS AGREEMENTS: SURFACE USE IN THE 21ST CENTURY 11B-1, 11B-5 (Rocky Mt. Min. L. Fdn. 2017).

far lower than the 1,000 feet or more that landowner advocates had requested.¹⁸⁸ In Montana, the Montana Board of Oil and Gas commenced rulemaking on setbacks and occupied structure notice requirements following action by the Northern Plains Resource Council.¹⁸⁹ The Board ultimately declined to adopt setback rules but implemented new notice requirements for all occupied structures within 1,320 feet of a proposed well.¹⁹⁰ Through advocacy for new setbacks, landowners have successfully pushed conservation agencies to adopt new rules to mitigate the most immediate impacts of drilling. This may demonstrate agency responsiveness to citizen petitions, even where those petitions are denied.

2. Landscape Scale Impacts

Conservation groups and concerned citizens have also pressed commissions to limit drilling activities based on the consideration of cumulative, landscape-scale impacts.¹⁹¹ One such petition in Colorado has resulted in litigation regarding the obligation of the COGCC to consider the impact of drilling on public health, safety, and welfare and the environment.¹⁹² In November 2013, a group of Colorado teens petitioned the COGCC to initiate rulemaking.¹⁹³ The proposed rule required the COGCC to refrain from issuing new oil and gas drilling permits for operations, including hydraulic fracturing, until the “best available science” confirmed that the drilling would not “cumulatively, with other actions, impair Colorado’s atmosphere, water, wildlife, and land resources, . . . adversely impact human health [or] contribute to climate change.”¹⁹⁴ The teens argued that under Colorado’s Oil and Gas Conservation Act,¹⁹⁵ the COGCC is tasked with ensuring that development of oil and gas is “responsible [and] balanced” and that production is “consistent

¹⁸⁸ See John Robitaille, *Robitaille: Increasing Setbacks to 500 Feet Is Reasonable*, CASPER STAR TRIB. (Mar. 29, 2015).

¹⁸⁹ See Renée Jean, *New Setback Rule Could Face Setbacks of Its Own: MPA President Says Board Didn’t Have Rulemaking Authority*, WILLISTON HERALD (Dec. 26, 2016), available at https://www.willistonherald.com/news/new-setback-rule-could-face-setback-of-its-own/article_986042d0-c7e4-11e6-9d51-03b516a8e3c6.html.

¹⁹⁰ MONT. ADMIN R. 36.22.620(2) (2017). Legislation which would have reduced the notice requirements adopted by the Montana Board of Oil and Gas were vetoed by the Governor in 2017. In a statement that confirmed the Board’s authority to enact the rule, Governor Steve Bullock affirmed the Board’s lauded the “heavily vetted” rulemaking process that resulted in a “compromise between landowners’ and the industry’s interests. S. 93, 65th Leg., Reg. Sess. (Mont. 2017); Governor Steve Bullock, “Statement of Veto” (May 8, 2017).

¹⁹¹ Env’tl. Def. Fund, *Railroad Commission Petitioned to Replace Local Oil and Gas Rules Threatened by House Bill 40* (Apr. 7, 2015), available at <https://www.edf.org/media/railroad-commission-petitioned-replace-local-oil-and-gas-rules-threatened-house-bill-40>; Env’tl. Def. Fund, *EDF Calls for New Safety Measures to Prevent Oil and Gas Explosions in Texas’ Coastal Area* (Jun. 18, 2015), available at <https://www.edf.org/media/edf-calls-new-safety-measures-prevent-oil-and-gas-explosions-texas-coastal-areas>.

¹⁹² Colorado Oil & Gas Conservation Comm’n v. Martinez, 2019 Colo. 3, 2019 WL 179037 (2019).

¹⁹³ See *In re* Petition for Rulemaking Filed with the COGCC, Cause No. 1, Order No. 1-187 (May 29, 2014); see also Blair Miller, *Colorado Supreme Court to Hear Appeal of Case Involving Oil and Gas Regulators, Environmentalists*, THE DENVER CHANNEL (Jan. 29, 2018), <https://www.thedenverchannel.com/news/politics/colorado-supreme-court-to-hear-appeal-of-case-involving-oil-and-gas-regulators-environmentalists>.

¹⁹⁴ *In re* Petition for Rulemaking Filed with the COGCC, Cause No. 1, Order No. 1-187 (May 29, 2014).

¹⁹⁵ COLO. REV. STAT. ANN. §§ 34-60-101—130 (West 2018).

with protection of public health, safety, and welfare, including protection of the environment and wildlife resources.”¹⁹⁶ In May 2014 the COGCC unanimously rejected the teens’ rulemaking petition. The COGCC determined that the proposed rule was beyond its authority and would require it to “readjust the balance crafted by the General Assembly,” and that delegating review of COGCC’s rulemaking to a third-party organization would be an unlawful violation of the non-delegation doctrine.¹⁹⁷ The COGCC also found that many of the issues raised in the petition were already being addressed by the Colorado Department of Public Health and Environment and the legislature and related more closely to air quality than to oil and gas.¹⁹⁸

In January of 2019, the Colorado Supreme Court affirmed the COGCC’s rejection of the teens’ petition and overturned an appellate court decision that had found for the petitioners. The outcome of the decision shouldn’t be surprising: courts frequently defer to an agency’s interpretation of its statutory enabling program and afford an agency broad discretion with respect to “how best to marshal its limited resources and personnel to carry out its delegated responsibilities.”¹⁹⁹ Although the court declined to read the Commission’s order as a conclusion that it lacked subject matter jurisdiction, it found that the agency’s decision was reasonable in light of the court’s construction of Colorado’s Oil and Gas Act. What is significant is that the petitioners were able to argue for a statutory re-interpretation of the act to conform with its stated environmental values. The court declined to find that “that the pertinent provisions of the Act allow the Commission to condition one legislative priority (here, oil and gas development) on another (here, the protection of public health and the environment).”²⁰⁰

B. At the Ballot Box

Advocates have advanced ballot initiatives to revise the authority of conservation agencies, impose new duties on states to protect the environment, or to directly regulate oil and gas activities. In November of 2018, voters across the western united states had the opportunity to vote on ballot initiatives relative to energy and the environment: Washington voters considered a carbon tax, Arizona and Nevada voters evaluated renewable energy mandates, and voters in Montana considered restrictions on hard rock mining.²⁰¹ In states with the power of initiative or referendum, voters have sought to use the power of direct democracy to bypass legislatures and agencies and

¹⁹⁶ *Martinez v. Colorado Oil & Gas Conservation Comm’n*, 2017 COA 37, *cert. granted*, No. 17SC297, 2018 WL 582105, ¶ 16 (Colo. Jan. 29, 2018), *and rev’d*, 2019 CO 3 (emphasis omitted) (quoting COLO. REV. STAT. ANN. § 34-60-102(1)(a)(I) (West 2018)).

¹⁹⁷ *In re* Petition for Rulemaking Filed with the COGCC, Cause No. 1, Order No. 1-187 (May 29, 2014).

¹⁹⁸ *Id.*

¹⁹⁹ *Massachusetts v. EPA*, 549 U.S. 497, 527 (2007); *see also* *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 844 (1984). *But see* *Mobile Oil Corp. v. State Corp. Comm’n*, 608 P.2d 1327, 1328 (Kan. 1980); *Martin*, *supra* note 92, at 3-10.

²⁰⁰ *Martinez*, 2017 COA 37, ¶ 50.

²⁰¹ David Roberts, *Fossil fuel money crushed clean energy ballot initiatives across the country*, VOX (Nov. 11, 2018), *available at* <https://www.vox.com/energy-and-environment/2018/11/7/18069940/election-results-2018-energy-carbon-fracking-ballot-initiatives>.

create new laws dictating what kind of energy will be used and produced, how to address climate change and carbon taxes, and where energy production can occur. The “democratization of energy law” through voter initiatives and referenda is underway,²⁰² and oil and gas has been no exception.

Voters in Alaska, Colorado, and Florida proposed propositions to limit the locations in which oil and gas development can occur and imposed additional restrictions on development in environmentally sensitive areas or areas where public safety or health are of greater concern. In Alaska, voters rejected a proposition which would have charged Alaska Department of Fish and Game commissioner with enacting standards and permitting requirements for certain activities that would affect salmon and other Anadromous fish habitat and which would have had serious impacts on oil and gas construction activities.²⁰³ Florida voters conversely considered and passed an amendment banning offshore drilling in state waters.²⁰⁴ In Colorado, voters responded to concerns about development near occupied structures were heightened after an explosion resulting from a flowline leak near an occupied structure that resulted in two fatalities in Firestone, Colorado, in 2017.²⁰⁵ In addition to actions by the Governor,²⁰⁶ cities and counties,²⁰⁷ and the COGCC,²⁰⁸ voters also put forth ballot initiatives that would provide additional local control and increase setbacks beyond those established by the COGCC.²⁰⁹ In 2018, Colorado Rising for Health and Safety (Colorado Rising) put forward Ballot Proposition 112 proposing a 2,500-foot setback from occupied structures.²¹⁰ Like a similar measure proposed in November of 2016, had it passed over 90% of the land in some counties would have been unavailable to future oil and gas development.²¹¹ After a contentious election season, Proposition 112 was defeated.²¹²

In anticipation of more restrictive state and local land use regulation, including setbacks and zoning, industry and royalty owners proposed amending the Colorado Constitution to qualify

²⁰² Shelley Welton, *Grasping for Energy Independence*, 116 MICH. L. REV. 581, 590 (2018).

²⁰³ *Id.*

²⁰⁴ FLA. CONST. art II, sec. 7, art. X, sec. 20 (“Amendment 9”) (2018).

²⁰⁵ See Bruce Finley, *Deadly Firestone Explosion Caused by Odorless Gas Leaking from Cut Gas Flow Pipeline*, DENVER POST (May 2, 2017), <https://www.denverpost.com/2017/05/02/firestone-explosion-cause-cut-gas-line/>.

²⁰⁶ See News Release, Office of Governor John Hickenlooper, *Gov. Hickenlooper Directs Review of Statewide Oil and Gas Operations Following Firestone Home Explosion Investigation* (May 2, 2017).

²⁰⁷ See Natalie Spiess, *A Cause Worth Fighting For: The Battle for Local Control over Colorado’s Oil and Gas Industry*, 95 DENV. L. REV. ONLINE 71 (2018).

²⁰⁸ See COGCC, *Flowline Rulemaking*, Docket No. 171200767 (adopted Feb. 13, 2018).

²⁰⁹ See Nora Olabi, *Anti-Fracking Initiative Gathering Signatures for November Ballot*, WESTWORD (Apr. 11, 2018), <https://www.westword.com/news/colorado-supreme-court-approves-colorado-rising-ballot-initiative-on-oil-and-gas-setbacks-for-circulation-10184589>.

²¹⁰ See Colo. Sec’y of State, *Results for Proposed Initiative #97*, <https://www.sos.state.co.us/pubs/elections/Initiatives/titleBoard/results/2017-2018/97Results.html>.

²¹¹ See COGCC, *2500’ Mandatory Setback from Oil and Gas Development*, at 2 (May 27, 2016).

²¹² <https://www.bizjournals.com/denver/news/2018/11/06/colorado-prop-112-defeated.html>

losses in market value resulting from new laws or regulations as compensable takings.²¹³ This amendment would have provided compensation for economic losses resulting from government regulation that reduces the fair market value of property or prevents property from being used for purposes allowable at the time the owner acquired its interest. The amendment did not pass, but had it, it would have provided not only avenues for compensation for diminution of the value of the mineral estate due to city or county ordinances, but also potentially for new restraints on the rule of capture including changes to compulsory pooling laws or rulemaking by the Commission.²¹⁴

Of the several oil and gas initiatives on the ballot nationwide in November of 2018, only Florida’s ban on offshore drilling in state waters was passed. This may indicate that, at least in the realm of energy, the initiative process is driven more by “wealthy individuals and special interests” than distrust of the legislature.²¹⁵ Despite this, the trend of voters looking to direct democracy to regulate activities should not be ignored.²¹⁶ Legislatures, agencies, and judges are responsive to initiatives.²¹⁷ As a result, in states where they are authorized voter initiatives are eclipsing legislatures as powerful forces in driving public policy. Even failed initiatives can have powerful indirect impacts on state policy. In states with initiative processes, “the threat of an initiative can cause the legislature to revise its policy decisions.”²¹⁸

C. In the Courts

Courts have played an important role in independently shaping the development of conservation law and determining to what extent agencies can and must consider environmental impacts in agency decisions. Courts frequently review conservation agency decisions regarding oil and gas permitting to resolve conflicts between mineral owners, surface interests, local governments and conservation advocates. These decisions largely concern issues of statutory interpretation and whether an agency has complied with its state’s administrative procedure act and other state laws. Recent decisions in Pennsylvania and Ohio indicate a trend towards affording greater deference to environmental concerns and have affirmed the standing of individuals, municipalities, and advocacy groups to challenge agency decisions that do not adequately consider or protect environmental values.

1. Matters of Fairness

²¹³ See Colo. Sec’y of State, *2017-2018 Initiative Filings, Agendas & Results*, <https://www.sos.state.co.us/pubs/elections/Initiatives/titleBoard/index.html> (Initiatives #108–113).

²¹⁴ Kevin J. Lynch, *Guest Post: Amendment 74 – A Pandora’s box of property rights*, THE COLO. INDEPENDENT (Oct. 12, 2018), available at <https://www.coloradoindependent.com/2018/10/12/guest-post-amendment-74-property-rights/>.

²¹⁵ DAVID BRODER, *DEMOCRACY DERAILED: INITIATIVE CAMPAIGNS AND THE POWER OF MONEY* 243 (2000).

²¹⁶ Vann r. Newkirk II, *American Voters Are Turning to Direct Democracy*, THE ATLANTIC (April 18, 2018).

²¹⁷ John Matsusaka, *Popular Control of Public Policy: A Quantitative Approach*, 5 Q. J. POL. SCI., 133 (2010).

²¹⁸ John Matsusaka, *The Eclipse of Legislatures: Direct Democracy in the 21st Century*, 124 PUBLIC CHOICE 157, 161, 174 (2005).

In the majority of matters before a state oil and gas commission, the only parties with standing to challenge an agency decision are parties who own a real property interest that is affected by the agency decision.²¹⁹ For example, in many states, an application for a drill spacing unit and permit to drill can be challenged by the state, mineral interest owners within the proposed spacing unit or within a specified distance of the wellbore, and the surface owners within the unit. These interested parties have the right to protest an applicant's proposal, whereas others, such as adjoining landowners do not.

While objections on the basis of waste or injury to the protestants correlative rights are common, landowners are increasingly objecting to proposed agency actions due to concerns regarding health safety and the environment. Courts have upheld regulatory and common law limitations on oil and gas development and the rule of capture to protect public safety since the earliest days of development. For example, in *People's Gas Co. v. Tyner*, the Indiana Supreme Court granted a preliminary injunction to an adjacent landowner to prevent shooting the well with nitroglycerine on the basis that that use of explosives in a residential area might constitute a nuisance.²²⁰ Conservation agencies, however, have been disinclined to based decisions on landowners' objections to the disruption and loss of enjoyment that industrial development can render. Agencies rarely engage in separate factfinding relative to the safety, health, or welfare impacts of the proposed activity. However, dissenting landowners are beginning to raise these concerns in administrative processes and to appeal to courts where those concerns are ignored. As a result, these, and other non-economic factors, may become a progressively important component of agency decisions.²²¹

In one Ohio case, *Simmers v. City of North Royalton*, health and safety concerns featured prominently in a commission decision relative to forced pooling.²²² In that case, the operator sought to force pool two tracts owned by the City of North Royalton after the city unanimously voted to deny a proposed lease. The City objected on the basis of operator's poor safety record.²²³ In December 2013, the Ohio Department of Natural Resources' Division of Oil and Gas Resources Management issued the drilling permit and mandatory pooling order.²²⁴ The Division found that pooling was necessary to meet the state's spacing requirements and that an offer had been made to voluntarily pool on a just and equitable basis.²²⁵ On appeal, however, the Ohio Oil and Gas

²¹⁹ See, e.g., ARK. CODE ANN. § 15-72-106 (West 2018); COLO. REV. STAT. ANN. § 34-60-108 (West 2018); MONT. CODE ANN. § 82-11-144 (West 2018); WYO. STAT. ANN. § 30-5-109 (West) (extending to interested persons the right to be heard on objections to proposed drilling units).

²²⁰ 31 N.E. 59 (Ind. 1892).

²²¹ See Robertson, *supra* note 151, at 105–09; Alan Romero, *Local Regulation of Mineral Development in Wyoming*, 10 WYO. L. REV. 463 (2010).

²²² 65 N.E.3d 257 (10th Dist.).

²²³ See *id.*

²²⁴ *Id.* Interestingly, there is no discussion of Ohio Stat. § 1509.06 (2015) which grants the chief authority to deny “a permit if the chief finds that there is a substantial risk that the operation will result in violations of this chapter or rules adopted under it that will present an imminent danger to public health or safety or damage to the environment.”

²²⁵ *Id.*

Commission revoked the mandatory pooling order on account that the Division had not adequately considered the owner’s legitimate safety concerns.²²⁶ The Ohio Court of Appeals affirmed the Commission’s decision, holding that a commission could consider safety concerns as part of its evaluation of whether an offer for voluntary pooling was just and equitable in light of the impact of oil and gas operations on the nonconsenting landowner, including “the negative impact of drilling activity on streets and other infrastructure, or the safety of a municipal water supply”²²⁷ The Court agreed that the oil and gas operator had not used all reasonable efforts to reach an agreement for voluntary pooling because it had not provided the dissenting landowner, the city, with a sufficient opportunity to consider the offer and propose a reasonable alternative.²²⁸

Simmers is significant for two reasons: first, *Simmers* is notable for the significance it places on the surface-based concerns of the dissenting landowner.²²⁹ While much of the case focuses on whether Cabot had used “all reasonable efforts” to obtain a voluntary agreement, it also looks at whether the agreement Cabot proposed was reasonable. Rather than focusing its analysis solely on whether the city’s allocation of production was fair and equitable based on the amount of oil and gas estimated to be under its property, the Ohio Court of Appeals takes a more expansive view by considering safety-based concerns of the mineral owner as part and parcel of an evaluation of the value of its correlative rights.²³⁰ The objections of the plaintiffs in *Simmers* are not anomalous. A group of homeowners in a recent case filed in Colorado district court similarly ask the court to overturn the state’s forced pooling law and enjoin application of the statute to their interests on the basis of threats to health, safety, and the environment including “well pad and pipeline fires and explosions; debilitating air pollution only seen through infrared cameras; well failures and “spills” causing groundwater pollution; unregulated dumping of radioactive waste; destruction of water supplies; permanently scarred landscapes; [and] soil contamination”²³¹ *Simmers* indicates that courts may be less likely to defer to agency decisions where the surface and environmental concerns of dissenting landowners are not considered.

Second, *Simmers* is significant for its acknowledgement of the unique interest of the city as a landowner in preventing safety or other environmental harms from coming to bear.²³² Conflicts between state local governments, conservation agencies, and legislatures regarding the regulation of oil and gas date back to at least the 1930s when the Oklahoma Supreme Court found that a municipality was not preempted by the State’s establishment of the Oklahoma Corporation Commission from establishing bonding for wells drilled within the city.²³³ Cases regarding the

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ *Id.*

²²⁹ Heidi Robertson, *Get Out From Under My Land! Hydraulic Fracturing, Forced Pooling or Unitization, and the Role of the Dissenting Landowner*, 30 GEO. ENVTL. L. REV. 633, 669 (2018).

²³⁰ *Id.*, 263 (Sadler, J., concurring in part, dissenting in part).

²³¹ Wildgrass Oil and Gas Committee, *supra* note 91, at 121.

²³² Robertson, *supra* note 229, 669 (2018).

²³³ Martin, *supra* note 92, at 3-27 (citing *Gant v. Oklahoma City*, 6 P. 2d 1065 (Okla. 1931), *aff’d*, 289 U.S. 98 (1933)).

authority of cities to establish drilling blocks or to impose conditions on development have reached disparate results. Courts sometimes invalidate city actions,²³⁴ at other times uphold them,²³⁵ and occasionally attempt to harmonize the two.²³⁶ Courts have consistently emphasized the important role of local governments' use of traditional zoning authority to regulate land use to protect the health, safety, and welfare of their citizens and the interests of communities in which oil and gas development occurs.²³⁷ Frequently, however, these delegations of authority are overlapping and not exclusive, and might interfere or conflict with state delegations of authority to conservation agencies, thus leading to confusion about the extent of local government authority to regulate oil and gas activities.²³⁸ In those cases, states have largely been successful in bringing preemption challenges against local ordinances that attempt to outright ban drilling or hydraulic fracturing.²³⁹ As a result, cities and counties have found themselves limited from regulating much of the oil and gas development within their domain.²⁴⁰ Thus, effective use of administrative processes to raise environmental concerns may become increasingly necessary where the city has the standing to do so.

2. *Matters of Process*

Conservation agencies may also be subject to state procedural statutes requiring consideration of environmental impacts. As of 2006 at least sixteen states, the District of Columbia, and Puerto Rico have some version of procedural environmental acts, although the substantive effect, the threshold tests for when a full environmental review is needed, and the provisions for judicial review differ among them.²⁴¹ In New York, the State Environmental Quality Review Act (“SEQRA”), has also be applied to the decisions of its state conservation agency, the Bureau of Oil and Gas Permitting and Management, part of the New York State Department of Environmental Conservation.²⁴² In California, the California Environmental Quality Act (CEQA)²⁴³ applies to decisions of the Division of Oil, Gas, and Geothermal Resources (DOGGR). CEQA provides that “it is the intent of the Legislature that all agencies of the state government

²³⁴ *Id.* at 3-28 (citing *Indian Territory Illuminating Oil Co. v. Larkins*, 31 P.2d 608 (Okla. 1934)).

²³⁵ *Id.* at 3-29, 3-31 (citing *Unger v. State*, 629 S.W.2d 811, 812 (Tex. App.—Fort Worth 1982); *Klepak v. Humble Oil & Ref. Co.*, 177 S.W.2d 215 (Tex. Civ. App.—Galveston 1944)).

²³⁶ *Id.* at 3-30 to 3-31 (citing *Oborne v. Bd. of Cnty. Comm’rs of Douglas Cnty.*, No. 84CV109 (Colo. Dist. Ct. July 25, 1985)).

²³⁷ Robertson, *supra* note 151, at 61–62.

²³⁸ See Jacob E. Gersen, *Overlapping and Underlapping Jurisdiction in Administrative Law*, 2006 SUP. CT. REV. 201, 203, 207–09 (2006); Ritchie, *supra* note 190, at 271–72.

²³⁹ See, e.g., *City of Fort Collins v. Colorado Oil*, 369 P.3d 586 (2016); *City of Longmont v. Colo. Oil & Gas Ass’n*, 2016 CO 29, 369 P.3d 573 (Colo. 2016); Robertson, *supra* note 151, at 111–12; Ritchie, *supra* note 190, at 257–58.

²⁴⁰ *Id.*

²⁴¹ Daniel Selmi, *Themes in the Evolution of the State Environmental Policy Acts*, 38 URB. LAW. 949, 951 (2006).

²⁴² *Wiser v. Enervest Operating, L.L.C.*, 803 F.Supp.3d 109 (U.S.D.C. N.Y. 2011).

²⁴³ CAL. PUB. RES. CODE §§ 21000-21189.3 (2015).

which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian.”²⁴⁴ Like NEPA, state environmental procedure acts require state agencies to consider the environmental effects of proposed project and to consider options to mitigate or avoid significant impacts.²⁴⁵ Litigants have challenged the adequacy of these environmental analyses in the context of hydraulic fracturing and the issuance of well permits²⁴⁶ Thus, a state environmental procedure act may impact conservation proceedings by requiring costly and timely preparation of environmental impact reports²⁴⁷ and providing opportunities for judicial review.

3. *Matters of Rights*

Environmental advocates in Pennsylvania are challenging agency decisions relative to oil and gas on the basis that they violate the citizens’ constitutionally protected rights to a clean environment and abrogate the state’s duties with respect to public trust resources. These efforts have realized some success regarding oil and gas leasing and development on state land and provide a new avenue for judicial challenges to agency decisions regarding oil and gas activities on private land.

In the early 1970’s, during the birth of the environmental law movement, Pennsylvania voters amended their constitution to provide additional protections for the environment and natural resources. Article 1, Sec. 27 provides:

The people have a right to clean air, pure water, and the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.²⁴⁸

This provision incorporates a modern version of the public trust doctrine into the state constitutions, granting citizens an “inalienable” right to a clean environment.²⁴⁹ As such, it operates as a powerful limitation on state actions that “would infringe upon such rights”²⁵⁰ and

²⁴⁴ CAL. PUB. RES. CODE § 21000(g) (2018 West).

²⁴⁵ CAL. PUB. RES. CODE § 21003 (2018 West).

²⁴⁶ Ass’n of Irrigated Residents v. Department of Conservation, 11 Cal.App.5th 1202 (2017).

²⁴⁷ *Notice of Determination, Draft EIR for Revisions to the Kern County Zoning Ordinance*, (filed Nov. 10, 2015), available at http://www.co.kern.ca.us/planning/pdfs/eirs/oil_gas/oil_gas_NOD_final.pdf.

²⁴⁸ PA. CONST. art. I sec. 27 (West 2018).

²⁴⁹ Cmty. Coll. of Delaware Cnty. V. Fox, 20 Pa Cmwlth. 335, 342 A 2d 368, 473 (1975); Alexandra Klass, *The Public Trust Doctrine in the Shadow of State Environmental Rights Laws: A Case Study*, 45 ENVTL. L. 431, 439–41 (2015).

²⁵⁰ Com. By . Shapp v. Nat’l Gettysburg Battlefield Tower, 454 Pa. 193, 311 A 2d 588, 592 (1973).

permits legal challenges on the basis that “the government has failed in its trustee obligations.”²⁵¹ While not intended to be “read in absolutist terms so as to prohibit development,” the ERA requires policy makers to consider conflicting environmental and social concerns.²⁵² While this provision had been viewed as a merely “aspirational” statement,²⁵³ litigants in Pennsylvania have recently rejuvenated the ERA.²⁵⁴

The Environmental Rights amendment experienced a renaissance following the successful challenge of a 2012 state law that attempted to expressly preempt all local regulation of oil and gas. Pennsylvania, like many states,²⁵⁵ sought to clarify the division of authority between conservation agencies and municipalities and preempt local regulation of oil and gas operations with the passage of Act 13 of 2012 (Act 13).²⁵⁶ Act 13 was designed to promote uniformity of regulation across the state, including imposing uniform setback and zoning requirements, by replacing the state’s 1984 Oil and Gas Act with a statutory framework.²⁵⁷ In so doing, the legislature “attempted to entirely foreclose the ability of municipalities to afford their residents environmental protections, via the enactment of any zoning ordinances tailored to address unique local environmental needs and conditions, whenever those ordinances ‘might be perceived as affecting oil and gas operations.’”²⁵⁸ In March 2012, municipalities and individuals challenged the constitutionality of Act 13 claiming that it violated the Environmental Rights Amendment (ERA) of the Pennsylvania Constitution.²⁵⁹ The court in *Robinson Township v. Commonwealth (Robinson II)* affirmed the standing of a municipality in a legal action to enforce environmental standards and overturned several provisions of Act 13 on the basis that they violated deprived municipalities of their constitutional authority to conserve and maintain public natural resources.²⁶⁰

Subsequent litigation regarding the ERA has affirmed the state’s public trust duties regarding protection of the environment and the disposition of public natural resources. In *Pennsylvania Environmental Defense Foundation v. Commonwealth (PEDF)* the Commonwealth Court found that the DCNR’s decision to lease state property within the public trust implicated

²⁵¹ *Robinson Twp., Washington Cty. v. Com.*, 623 Pa. 564, 83 A.3d 901, 950–51 (2013) (*Robinson II*).

²⁵² *Payne v. Kassab*, 361 A.2d 263, 273 (1976); *Payne v. Kassab*, 312 A.3d 86, 94 (1973).

²⁵³ *Pa. Env’tl. Def. Found. v. Commonwealth (PEDF)*, 161 A.3d 911, 940 (Pa. 2017) (Baer, J., concurring in part, dissenting in part).

²⁵⁴ *See Funk v. Wolf*, 144 A.3d 228 (Pa. Commw. Ct. 2016), *aff’d*, 638 Pa. 726, 158 A.3d 642 (2017).

²⁵⁵ OKLA. STAT. TIT. 52, § 137.1(2016); TEX. NAT. RES. CODE ANN. § 81.0523; *Riverstone-Newell*, *supra* note 87.

²⁵⁶ 58 PA. CONS. STAT. ANN. §§ 2301–3504.

²⁵⁷ *Id.* § 3303, *abrogated by Robinson Twp. v. Commonwealth (Robinson II)*, 83 A.3d 901 (Pa. 2013).

²⁵⁸ *Robinson Twp. v. Commonwealth (Robinson IV)*, 147 A.3d 536, 561 (Pa. 2016) (quoting *Robinson II*, 83 A.3d at 978). The Supreme Court of Pennsylvania recently affirmed in part and reversed in part a preliminary injunction granted by the commonwealth court that barred enforcement of some of the Act 13 regulations relative to unconventional gas operations. *See Marcellus Shale Coal. v. PADEP*, 185 A.3d 985 (Pa. 2018).

²⁵⁹ PA. CONST. ART. I, § 27; *see Robinson II*, 83 A.3d at 915–16.

²⁶⁰ *See Robinson II*, 83 A.3d at 999–1000.

“constitutional rights and duties” and was an “appropriate subject of judicial scrutiny.”²⁶¹ On appeal, the Pennsylvania Supreme Court enforced the duty of the State to protect the environment and serve as a trustee, rather than as a proprietor, of its “public natural resources.”²⁶² Following *PEDF*, the Environmental Hearing Board (EHB) has considered the extent of the Pennsylvania Department of Environmental Protection’s trustee obligations with respect to public natural resources. Thus far, it has not operated as a prohibition on development. In a recent case involving permit renewals, the EHB stated, “[o]ur understanding of the trustee responsibility does not require the Department to deny permits to any and all activity that will negatively impact the public natural resources and/or the people who use those resources,” and that “[t]o hold otherwise would essentially prevent any permitting activity since it is nigh impossible to have development without some environmental impact.”²⁶³ Consistent with the early balancing tests,²⁶⁴ the Board found it in ERA challenges to permit actions it must assess whether the agency considered the environmental effects of their permitting actions and correctly concluded that those actions would not cause an unreasonable degradation to the environment.²⁶⁵

The extent of the state’s constitutional obligation to protect environmental values in decisions related to private land is unclear.²⁶⁶ In *PEDF*, the DCNR acted relative to state-owned land, part of the public trust created by Section 27; thus, the ERA was found to be self-executing as to the Commonwealth’s trustee obligations.²⁶⁷ The amendment’s first clause, creating an individual right to a clean environment, creates no similar obligation on a government authority to “conserve and maintain.” Based on several early cases, the individual rights clause of the amendment has long been viewed as requiring implementing legislation to authorize the state to enforce the people’s rights against owners of private property.²⁶⁸ Agencies have not substantially changed their permitting processes or fact finding in response to *Robinson* or *PEDF*. However, the decisions in *Robinson* and *PEDF* have emboldened individuals and municipalities to challenge oil and gas and other industrial permitting activities and created a pathway by which these groups can challenge agency actions in which they were previously not considered interested parties.²⁶⁹ While

²⁶¹ Pennsylvania Env’tl. Def. Found. v. Commonwealth, 181 A.3d 1153 (Pa. 2018).

²⁶² Robinson Twp. v. Commonwealth (*Robinson II*), 83 A.3d 932 (Pa. 2013).

²⁶³ See Del. Riverkeeper, et. al. v. DEP and R.E. Gas Development, LLC., Re. EHB Docket No. 2014-142-B (2018).

²⁶⁴ Pa. Env’tl. Def. Found. v. Commonwealth (*PEDF*), 161 A.3d 911, 940 (Pa. 2017) (Baer, J., concurring in part, dissenting in part); Robinson Twp. v. Commonwealth (*Robinson II*), 83 A.3d 901 (Pa. 2013); Payne v. Kassab, 361 A.2d 263, 273 (1976); Payne v. Kassab, 312 A.3d 86, 94 (1973).

²⁶⁵ See Del. Riverkeeper, et. al., EHB Docket No. 2014-142-B, at 59.

²⁶⁶ The Pennsylvania Environmental Hearing Board (EHB) has begun to consider how the ERA applies to Pennsylvania Department of Environmental Protection (PADEP) decisions on private lands. See, *Center for Coalfield Justice v. DEP*, 2017 EHB 799 (Aug. 15, 2017); *Friends of Lackawanna v. PADEP et. al.*, EHB Docket No. 2015-063-L (2016).

²⁶⁷ See Robinson Twp. v. Commonwealth (*Robinson II*), 83 A.3d 901 (Pa. 2013).

²⁶⁸ John C. Dernbach, *The Potential Meanings of a Constitutional Public Trust*, 45 ENVTL. L. at 474–75. (2015).

²⁶⁹ Gorsline v. Board of Supervisors of Fairfield Township, 186 A.3d 375 (2018); Delaware Riverkeeper Network v. Sunoco Pipeline L.P., ___ A.3d ___ (Pa. Commw. Ct. 2018)., *Frederick v. Allegheny Twp. Zoning*

constitutional arguments thus far have not resulted in widespread reversals, cases brought to date concerning Section 27 indicate the numerous effects that environmental rights provisions²⁷⁰ may have on state law.

Whereas Pennsylvania is unique in its creation of a constitutional public trust, many states recognize their citizens' rights to a clean environment and acknowledge public trust principles either through state statute, the constitution, or common law.²⁷¹ For example, Article 9, Section 1 of the 1974 Montana constitution provides that “[t]he state and each person shall maintain and improve a clean and healthful environment” and “[t]he legislature shall provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources.” This has been found not merely to be an aspirational statement, but to create an inalienable right to a clean environment.²⁷² Environmental Rights Statutes in Michigan and Minnesota expressly grant any “private party, state, or local government the right to sue for declaratory or injunctive relief to protect air, water, land or other natural resources from pollution, impairment, or destruction.”²⁷³ In Minnesota, this statute has been used to protect natural resources beyond what is already mandated by state law and to enjoin development activities that would adversely impact protected natural resources.²⁷⁴ As such, these statutes and constitutional protections may form the basis for additional fact finding and environmental protection obligations on state oil and gas conservation agencies, and may prove significant in determining the outcome of state-local conflicts regarding oil and gas development.²⁷⁵

The impacts of these efforts should not be dismissed or diminished. True: these efforts have not resulted in a sea change at oil and gas conservation agencies. Only one ballot initiative – Florida’s Constitutional Amendment 9 – passed, and it related only to areas that had already been statutorily off limits to drilling. Courts continue to extend a high standard of deference to conservation agency decisions regarding permits and rulemaking. The Colorado Supreme Court affirmed the COGCC’s decision not to initiate rulemaking, and thus far the ERA and state environmental procedure acts have not resulted in blanket reversals of permitting decisions on

H’rg Bd., No. 2295 CD 2015 (Pa. Commw. Ct. Jan. 3, 2018); *Clean Air Council et al. v. Sunoco Pipeline L.P.* (Pa. Cmwlth Ct. Dkt. No. 1112 C.D. 2017, April 30, 2018).

²⁷⁰ In the absence of constitutional provisions creating a public trust, attempts to expand a common law public trust to oil and gas permitting decisions have been unsuccessful. *See Colorado Oil & Gas Conservation Comm’n v. Martinez*, 2019 Colo. 3, 2019 WL 179037 (2019).

²⁷¹ Alexandra Klass, *Fracking and the Public Trust Doctrine: A Response to Spence*, 93 TEX. L. REV. 47, 59 (2015).

²⁷² *State ex rel. Dep’t of Health and Env’tl. Sciences v. Green*, 739 P.2d 469,473 (Mont. 1987); *State v. Bernhard*, 568 P.2d 136, 138 (Mont. 1977); Illinois, Florida, and Virginia have similar provisions. *See, Tammy Wyatt Shaw, The Doctrine of Self-Execution and the Environmental Provisions of the Montana State Constitution: ‘They Mean Something*, 15 PUB. LAND L. REV. 219 (1994).

²⁷³ Klass, *supra* note 253, at 433–34 (citing MINN. STAT. ANN. § 116B.01 (2014)).

²⁷⁴ *Id.*; Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 NOTRE DAME L. REV. 699, 714-15 (2006).

²⁷⁵ *See* Klass, *supra* note 253.

private land. Collectively, however, these efforts are bringing questions about the nature of waste into the forefront. The concerns of landowners and municipalities are coming before courts and have the potential to reshape conservation law. And, perhaps more importantly, governors and state legislatures are listening.

IV. AMENDING AGENCY AUTHORITY

Elected politicians have considerable power to influence the political responsiveness of oil and gas conservation agencies through actual or proposed changes to the agency’s enabling legislation or through executive requests for rulemaking and the choice of political appointees. Oil and gas conservation agencies are not structurally independent.²⁷⁶ Nearly all of the members of oil and gas regulatory agencies are appointed by the governor, subject to confirmation by the state senate, and can be removed by the governor at any time.²⁷⁷ As a result, commissioners may be chosen not only for their technical competence and ability to make “dispassionate professional judgments” about reservoir characteristics, but also for their political judgment.²⁷⁸ This dependence may account for the responsiveness that conservation agencies show to political directives.

Although many agencies are permitted to act independently despite executive instruction,²⁷⁹ oil and gas conservation agencies have undertaken rulemaking on specific subject matter related to health and environment, such as hydraulic fracturing or flowline rules, after receiving instruction from state governors. For instance, in 2013 Wyoming Governor Matt Mead directed the WOGCC to initiate rulemaking for the adoption of a baseline water quality testing rule in areas of oil and gas drilling to establish a dataset of groundwater condition in areas of active drilling.²⁸⁰ In Colorado, the COGCC has at times received heavy-handed instruction from its gubernatorial offices, too. In 2014, Governor Hickenlooper convened an oil and gas development task force to improve local government involvement in permitting and other Commission decisions.²⁸¹ Following the 2017 explosion of underground flowlines in a Firestone, Colorado neighborhood, Governor Hickenlooper further directed the COGCC to conduct a comprehensive

²⁷⁶ Paul Verkuil, *The Purposes and Limits of Independent Agencies*, 1988 DUKE L. J. 257, 265–66 (1988) (describing the characteristics of independent agencies).

²⁷⁷ See, e.g., COLO. REV. STAT. ANN. § 34-60-104 (West 2018).

²⁷⁸ Lisa Schultz Bressman & Robert B. Thompson, *The Future of Agency Independence*, 63 VAND. L. REV. 599, 612 (2010).

²⁷⁹ Colo. Atty. Gen., *Letter to Gov. Hickenlooper Re. Request to Abandon Appeal* (May 18, 2018) (in response to request by Governor Hickenlooper for abandonment of appeal of *Martinez v. COGCC*, Attorney General Cynthia Coffman wrote, “[Governor Hickenlooper’s] request conflicts with an official decision of the Commission, which [he does] not have authority to countermand.”).

²⁸⁰ Off. Wyo. Gov. Mead, *Governor Mead Announces Updated Energy Strategy* (2013).

²⁸¹ Colo. Oil & Gas Ass’n, *COGCC Oil and Gas Task Force Rulemaking Summary* (Feb. 25, 2016), available at <http://www.coga.org/wp-content/uploads/2016/03/COGCC-Oil-Gas-TF-Rulemaking-Summary-Whitepaper.pdf>.

review of oil and gas regulations statewide.²⁸² While these policies are largely lauded as increasing environmental protection by states, the executive branch also may wield its position to dissuade conservation agencies from taking certain action.

Pressures for increased consideration of environmental and climate impacts have not gone unnoticed by legislatures. In response to local government action, citizen initiatives, conservation agency decisions and rulemakings, and litigation, state legislatures nationwide are considering new laws to clarify agency authority or to address specific environmental issues that have been brought before conservation agencies. These actions include proposals to amend agency authority or the composition of commissions to include experts on air quality and climate,²⁸³ and to modify state oil and gas conservation acts to harmonize with the changing economy and value systems of its citizens. These changes have been instrumental in providing commissions with authority regarding environmental issues and protection of public resources. In fact, while not fundamentally altering the scope of conservation commissions or the deference afforded to agency's technical determinations, these changes were precisely what provided environmental constituencies with statutory basis to argue for greater consideration of environmental impacts in *Simmers*, *Martinez*, and *PDEF*.

Colorado provides an illustrative case study in the evolution of oil and gas conservation law. The Colorado Oil and Gas Conservation Act was first passed in 1951 to establish the Oil and Gas Conservation Commission and to “define and prohibit the waste of oil and gas in Colorado²⁸⁴ and “to provide for the responsible development of the state’s oil and gas resources,”²⁸⁵ with an emphasis on increased production.²⁸⁶ Shortly thereafter the Act was amended to provide to declare that the policy goal of the conservation law as to “foster, encourage and promote the development, production and utilization of the natural resources of oil and gas in the state of Colorado.”²⁸⁷ These purposes gradually shifted towards an increased focus on environmental, health, and safety concerns. The act was amended three more times in 1985, 1994, and 2007, each relative to the protection of health, safety, public welfare and the environment.²⁸⁸ As a result, the Colorado Oil and Gas Conservation Commission (COGCC) has the authority to regulate oil and gas operations “so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or

²⁸² Grace Hood, *A Year After The Deadly Firestone Explosion, Neighbors' Emotions Are Mixed*, COLO. PUB. RADIO (Apr. 6, 2018), available at <http://www.cpr.org/news/story/a-year-after-the-deadly-firestone-home-explosion-emotions-are-mixed>.

²⁸³ S. 465, 2017–2018 Leg., Reg. Sess. (Cal., as amended by Assembly, July 13, 2017).

²⁸⁴ Colorado Oil & Gas Conservation Comm'n v. Martinez, 2019 Colo. 3, 2019 WL 179037, *19 (citing ch. 230, 1951 Colo. Sess. Laws 651, 651).

²⁸⁵ Chase v. COGCC, 2012 COA 94, ¶ 25, 284 P.3d 161 (footnote omitted).

²⁸⁶ *Id.* ¶ 26.

²⁸⁷ Colorado Oil & Gas Conservation Comm'n v. Martinez, 2019 Colo. 3, 2019 WL 179037, *19 (2019) (citing 1955 Colo. Sess. Laws 648, 657, Ch. 208, Sec. 10, §§ 100-6-22).

²⁸⁸ Colorado Oil & Gas Conservation Comm'n v. Martinez, 2019 Colo. 3, 2019 WL 179037, *20 (2019) (citing 1985 Colo. Sess. Laws 1129, 1129; 1994 Colo. Sess. Laws 1978, 1978, 2007 Colo. Sess. Laws 1357, 1357. 1994 Colo. Legis. Serv. S.B. 94-177 (amending COLO. REV. STAT. § 34-60-102(1)). 2007 Colo. Legis. Serv. ch. 320 (amending COLO. REV. STAT. § 34-60-102(1)).).

biological resource to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources.”²⁸⁹

Pennsylvania similarly amended its conservation act to respond to environmental concerns and to account for technological developments including horizontal drilling and hydraulic fracturing. Pennsylvania’s 1984 Oil and Gas Act governed the industry until 2012 when a proliferation of shale drilling in the Marcellus and local government regulation promoted passage of Act 13. Act 13 sought to protect public resources such as schools and parks, and also to preempt local regulation of oil and gas.²⁹⁰ Although several portions of Act 13 relative to preemption have been challenged and overturned, it substantially changed the authority of the oil and gas conservation agency to regulate oil and gas and required new procedures for the Department to consider the protection of public resources in the well permitting process.²⁹¹

Adoption of broad policy positions supporting public health, safety, and welfare have been critical to providing conservation agencies with the authority to promulgate rules for the regulation hydraulic fracturing, to require setbacks from occupied structures, and to respond quickly to new safety concerns including flowlines and idle and abandoned wells. However, they have not radically shifted the role of oil and gas conservation commissions away from promoting and encouraging the efficient regulation of oil and gas operations or a redefining of waste according to 21st century environmental norms. For example, the Supreme Court of Colorado in *Martinez v. OGCC*, found that Colorado’s amendments to its oil and gas conservation act evidence an “intent to prevent and mitigate significant adverse environmental impacts... but only after taking into consideration cost-effectiveness and technical feasibility.” Contrary to the petitioner’s arguments, the court found that the amendments do not create “a check on oil and gas development,” “a balancing test,” or condition “further oil and gas development on a finding of no cumulative adverse impacts to public health or the environment.”

Legislatures are accustomed and well positioned to respond to environmental concerns related to oil and gas development. Legislatures are required to make difficult decisions regarding the balance between the strong and often divisive public interests when considering the efficient development of oil and gas resources, the protection of the environment, and the impacts to surface owners. These decisions require consideration of both positive and negative impacts of oil and gas development on the economy, including jobs, education, and public services, and on the quality of life of their constituents. A redefining of waste to include environmental harms or impacts to climate, for example, would have significant impacts on established property interests and contracts. Thus, these are precisely the types of considerations legislatures, rather than courts,

²⁸⁹ COLO. REV. STAT. § 34-60-106(2)(d) (2013). Colorado is not entirely unique in this approach. Illinois and Oklahoma provide their conservation agencies with more limited authority to intervene only when there is an imminent threat to public health or environmental safety. See, Illinois and Oklahoma provide their conservation agencies with more limited authority to intervene only when there is an imminent threat to public health or environmental safety

²⁹⁰ *Pennsylvania Env'tl. Def. Found. v. Commonwealth*, 181 A.3d 1153 (Pa. 2018).

²⁹¹ 3215c) These regulations have proved burdensome for developers of conventional wells. Accordingly, in 2018, the legislature sought to further revise its oil and gas act to roll back the impact of shale drilling standards on conventional wells. See, PA. H.B 2154 (reg. sess. 2017-2018).

agencies, or special interest groups, are best equipped to address. Advocates for more radical changes to conservation regulation have petitioned lawmakers or introduced legislation to require conservation regulators to prioritize consideration of environmental impacts and to diminish the influence of industry voices.²⁹² Thus far, however, these efforts have proven unsuccessful.²⁹³ However, the introduction and discussion of bills regarding consideration of environmental impacts and the proper role of oil and gas conservation agencies is encouraging. Together with reasonable local regulation of traditional land use concerns and enforcement of existing environmental laws, legislatures can provide for the efficient and responsible development of oil and gas in light of the changing technologies, development methodologies, and impacts to the environment.

V. AN INCIDENTAL ENVIRONMENTAL AGENCY

Oil and Gas conservation agencies have played an inadvertent role in limiting the environmental impacts of oil and gas production. The drilling of unnecessary wells needlessly destroys surface resources.²⁹⁴ Each well pad requires clearing of brush and grading, development of roads and drilling pits, and may include waste water impoundment, trenching for flow lines, and construction of production facilities.²⁹⁵ These well sites can range from two to twenty acres of “non-habitat” with impacts to ecosystems that extend beyond the drill site itself.²⁹⁶ These facilities can contribute to erosion, introduction of noxious weeds, and can adversely impact wildlife habitat and migration.²⁹⁷ Further, the site construction and drilling and completion processes themselves require large energy and water inputs. Finally, abandoned and unplugged wells can pose significant environmental risks by acting as conduits between fresh water sources and deeper hydrocarbon bearing reservoirs.²⁹⁸ These impacts are limited by oil and gas conservation regulations prohibit development in areas smaller than can be reasonably drained by one well.²⁹⁹ Although the intent

²⁹² Jim Malewitz, *"Why Are You So Angry at the Railroad Commission?" Texas Lawmaker Asks Reviewers*, TEX. TRIB. (Aug. 22, 2016), available at <https://www.texastribune.org/2016/08/22/texas-lawmakers-push-back-railroad-commission/>.

²⁹³ See, for example, H.R. 18-1071, 71st Gen. Assemb., Reg. Sess. (Colo. 2018); S. 465, 2017–2018 Leg., Reg. Sess. (Cal., as amended by Assembly, July 13, 2017).

²⁹⁴ See Pierce, *supra* note 3, at 777–78.

²⁹⁵ Gregg P. Macey, *The Incomplete Ecology of Hydraulic Fracturing Governance*, 50 ARIZ. ST. L. J. 583, 585–89 (2018); Qingmin Meng, *Modeling and Prediction of Natural Gas Fracking Pad Landscapes in the Marcellus Shale Region, USA*, 121 LANDSCAPE & URB. PLAN. 109, 113 (2014).

²⁹⁶ Newly developed drilling and completion techniques have reduced the environmental footprint of some operations by allowing for multi-lateral and stacked-lateral well pads, see, Katie Mazerov, *Pad-drilling, on-site water treatment help reduce surface impact*, DRILLING CONTRACTOR, (Jan 14, 2014); Sarah J. Thompson et al., *Avoidance of Unconventional Oil Wells and Roads Exacerbates Habitat Loss for Grassland Birds in the North American Great Plains*, 192 BIOLOGICAL CONSERVATION 82, 86 (2015).

²⁹⁷ Macey *supra* note 295; Joel Minor, *Local Government Fracking Regulations: A Colorado case Study*, 33 STANFORD ENVTL. L. J. 61, 72–73 (2014).

²⁹⁸ See Matthew K. Trawick, *Note, Cooperative Mineral Interest Development in the Lone Star State: It's Time to Mess With Texas*, 4 MICH. J. ENVTL. & ADMIN. L. 385 (2015).

²⁹⁹ *Id.*

of those rules is to prevent waste, they also limit the number of well sites, wells drilled, and surface disturbances.³⁰⁰ Further, rules to limit venting and flaring in order to prevent waste have significantly limited the volumes of greenhouse gasses such as methane and carbon dioxide into the atmosphere. While it is not possible to fully eliminate the surface environmental impacts of oil and gas development, conservation regulation has been a driver in the movement to limit environmental impacts of oil and gas development.³⁰¹ These impacts however are incidental to the advancement of conservation law purposes: conservation agencies have not historically been considered environmental agencies, and the focus of conservation law has been on encouraging efficient production and maximizing the utility of the resources, not on the preservation of ecosystems, beauty, or a stable climate.

Although conservation agencies are alluring targets given their role in permitting, efforts to task them with widespread protection of the environment and to condition oil and gas permitting on no-impact findings are misguided. First the purposes of conservation statutes and environmental statutes conflict, and choosing between those inapposite ends would require agencies to exercise discretion and engage in non-technical public policy more appropriately reserved by the legislature. Second, oil and gas conservation agencies are vulnerable to agency capture. Third, conservation agencies, as presently constituted, lack the technical expertise to make fact findings that environmental mandates could require. Finally, pushing oil and gas conservation agencies into the role of an environmental regulator is unlikely to result in landscape and climate scale changes that advocates desire.

Environmental protection is not the primary goal of oil and gas conservation regulation and, at times, may conflict with the stated purposes of oil and gas conservation statutes.³⁰² Oil and gas conservation agencies are tasked with promoting the efficient development of hydrocarbon resources for the purpose of maximizing the total amount of production and protecting the rights of other mineral owners in the field. Although these purposes have expanded to include protection of groundwater and management of oil and gas wastes, typically a secondary state agency, such as the department of environmental quality, has primacy over state programs to regulate air or water.³⁰³ This segregation is logical. The Clean Water Act, for example, was enacted to “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”³⁰⁴ Those purposes may at times be in conflict with the purposes underpinning conservation law, thus requiring a reconciliation of opposites.

Principles of environmental law and conservation law may be unreconcilable. Although asking agencies to advance conflicting policy choices and find a “win-win” solution is appealing,

³⁰⁰ Innovations such as multi-well pads and stacked horizontal development have increased drainage areas and thus have further reduced these impacts.³⁰⁰

³⁰¹ Bruce Pendry, *BLM’s Retained Rights: How Requiring Environmental Protection Fulfills Oil and Gas Lease Obligations*, 40 ENVTL. L. 599 (2010)

³⁰² See *supra* notes XX—XX and accompanying text.

³⁰³ Hannah Wiseman, *Fracturing Regulation Applied*, 22 DUKE ENVTL. L. & POL’Y FORUM 361, 369 (2012).

³⁰⁴ 33 U.S.C. § 1251(a) (2018).

at times policy choices between development and the environment will create winners and losers.³⁰⁵ Environmental law by its very nature imposes costs and benefits on various stake holders.³⁰⁶ In contrast to the concept of co-equal and correlative rights, which seeks to protect each owner's rights to produce his just and equitable share of the resource, environmental law "is purposely and necessarily redistributive in a manner antagonistic to some private property interests."³⁰⁷ For example, a well that, from an engineering and geologic standpoint, is necessary to drain a portion of the reservoir may pose environmental risks. Whereas the prevention of waste and protection of correlative rights would dictate that the well was drilled, environmental law, through the imposition of additional costs or a prohibition on drilling, would make drilling infeasible. As such, the prevention of waste may be incompatible with the protection of environmental interests in air and water particularly as environmental interests are increasingly interpreted to include interests in esthetics, the atmosphere, and a stable climate. Agencies have high value in making the complex technical determinations necessary to the administration of current oil and gas conservation law, but are should not be involved in more subjective determinations such as the comparative public values in oil and gas production and the environment. Requiring conservation agencies to choose between these public purposes would overwhelm current permitting processes with a flood of challenges that would, in turn, result in litigation over agency decisions, thus pushing political questions regarding the appropriate balance between production and protection before courts.

Oil and gas conservation agencies may also be less effective at regulating for environmental impacts due to the potential for capture of the agency. It is well documented that regulatory agencies may be disproportionate influenced by the industries they are supposed to be regulating such that they become more responsive to the desires of industry than the public.³⁰⁸ Capture can result due to heavy involvement of the affected industries in the development of regulations,³⁰⁹ partisan appointments, and the likelihood that, given the expertise required to make technical determinations within the industry, agency officials may have previously worked in industry and likely plan on returning to those jobs.³¹⁰ Consolidating environmental regulatory functions within oil and gas conservation agencies may amplify the effects of industry influence in ways that requiring coordination between separate regulatory and conservation agencies would not.

³⁰⁵ Alison Peck, *Sustainable Development and the Reconciliation of Opposites*, 57 ST. LOUIS U. L. J. 151, 158 (2012).

³⁰⁶ *Id.*

³⁰⁷ Richard Lazarus, *Fairness in Environmental Law*, 27 ENVTL. L. 705, 725 (1997).

³⁰⁸ Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669, 1685 (1975).

³⁰⁹ For example, the IOGCC and American Exploration and Production Council were influential in crafting the proposal to exempt hydraulic fracturing from the SDWA, *see*, Amanda C Leiter, *Fracking, Federalism, and Private Governance*, 39 HARV. ENVTL. L. REV. 107, 140 (2015).

³¹⁰ Rachel E. Barkow, *Insulating Agencies: Avoiding Capture Through Institutional Design*, 89 TEX. L. REV. 15, 47–48 (2010)

Until recently, concerns of agency capture were rarely raised with respect to oil and gas conservation commissions. The statutory public purposes for which conservation commissions have historically regulated the industry are not in direct opposition industry interests. For the most part, the industry supports reasonable regulation to encourage efficient production, protect correlative rights, and limit drainage. However, as conservation agencies have taken on responsibility for environmental inspections and regulation of hydraulic fracturing, concerns relative to undue influence by the industry have heightened.³¹¹ Environmental laws have significant impacts on oil and gas development and private property rights that may be in direct conflict with industry interests. Agency capture has been cited among the contributors to the EPA's determination that further study of hydraulic fracturing was unwarranted,³¹² and the BP horizon tragedy in the gulf.³¹³ In fact, agency capture was among the principal reasons that following the gulf oil spill the Mineral Management Service was reorganized into two separate agencies – one with responsibilities for managing revenue and the other with responsibility for making inspections and assuring compliance.³¹⁴ Charging conservation agencies with environmental regulation of the industry risks creating the exact situation advocates have been working to undo in the banking industry and offshore.

Due to their different focus, oil and gas conservation agencies also lack the technical capability and expertise to make the necessary fact-findings environmental mandates would require. One of the chief benefits of legislative delegation to agencies is that agencies can develop the highly specialized expertise necessary to complete the fact-finding necessary to make decisions regarding drilling and permitting in the public interest. Oil and gas conservation commissions are usually staffed with experts in law, geology, engineering, and land.³¹⁵ These disciplines are chosen based on the ability of specialists within them to make determinations relative to the prevention of waste and protection of correlative rights. However, these specialties may not provide the requisite expertise to make findings relative to wildlife, or cumulative impacts such as those related to climate change.³¹⁶ In the absence of structural and legal changes, conservation agencies may not have the authority, procedures, or expertise necessary to gather information and require and monitor mitigation for landscape-scale impacts. Further, a fundamental reordering of conservation

³¹¹ Matthew McFeeley, *Falling through the Cracks: Public Information and the Patchwork of Hydraulic Fracturing Disclosure Laws*, 38 VT. L. REV. 849, 854 (2014)

³¹² Hannah 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, 180 (2009). *But see*, David B. Spence, *A Public Choice Case for the Administrative State*, 89 GEO. L. J. 97, 123 (2000) (suggesting that concerns of agency capture may be overstated).

³¹³ Peter Jan Honisberg, *Conflict of Interest that Led to the Gulf Oil Disaster*, 41 ENVTL. L. REP. NEWS & ANALYSIS 10414 (2011); Hari M. Osofsky, *Multidimensional Governance and the BP Deepwater Horizon Oil Spill*, 63 FLA. L. REV. 1077, 1100, (2011).

³¹⁴ Jacob D. Unger, *Note, Regulating The Arctic Gold Rush: Recommended Regulatory Reforms to Protect Alaska's Arctic Environment From Offshore Oil Drilling Pollution*, 31 ALASKA L. REV. 263, 277, (2014).

³¹⁵ *See, e.g.*, WYO. STAT. ANN. § 30-5-103 (2004).

³¹⁶ Proposed legislation in California has sought to amend the composition of the DOGGR to include equal representation by industry and by experts in air quality, water quality, and environmental justice, with additional membership by other research scientists. *See*, S.B. 465, 2017 Leg. Sess. (Cal. 2017).

agencies may diminish their technical capacity and expertise to make the fact findings necessary to preventing geologic waste and protecting correlative rights.

Despite these concerns, as the gatekeeper to drilling, conservation commissions can play an important role in verifying compliance with environmental protections as a condition to receiving administrative authority to drill. For example, prior to granting an APD, agencies are appropriately tasked with verifying compliance with setback regulations, split estate acts, and habitat barriers and seasonal drilling restrictions such as those incorporated into the Greater Sage Grouse Management Plan. By assuring that companies have appropriate plans for gas capture and pipeline infrastructure prior to drilling, agencies may be able to limit venting and flaring. Agencies also verify compliance with integrity management rules for flowlines and crude oil transfers and employ inspectors to assure proper plugging of inactive wells. These determinations buttress comprehensive environmental regulations but do not require discretion relative to conflicting public policy goals nor technical capacity beyond the agencies expertise to measure compliance. This suggests that, provided there is a proper hierarchy between the agency's statutory purpose, a nuanced approach to regulation by commissions can advance the dual purposes of environmental protection and conservation.

There are unrealized opportunities to prevent waste and limit harm to the environment through more targeted commission regulation and liberal conservation strategies. Exploratory unitization would reduce environmental impacts by maximizing recovery from the minimum number of wells.³¹⁷ Current well spacing rules are based on a fiction that all reservoirs are homogeneous and drain radially.³¹⁸ In contrast, unitization seeks to consolidate mineral interests across the reservoir such that production can be carried out in the most efficient manner based on geology and the maintenance of reservoir pressure, without regards to competition, lease lines, or individual well regulations.³¹⁹ This may increase total recovery – thus minimizing waste – and address the issues while reducing environmental impacts and conflicts with surface owners.³²⁰ For example, unitization would protect the correlative rights of owners who were restricted from drilling on their individual parcels because of species or water issues; under an area-wide unit

³¹⁷ See Pierce, *supra* note 3, at 778; Owen L. Anderson & Ernest E. Smith, III, *The Use of Law to Promote Domestic Exploration and Production*, 50 INST. ON OIL & GAS L. & TAX'N 2-1, 2-65 (1999); David E. Pierce, *Coordinated Reservoir Development—An Alternative to the Rule of Capture for the Ownership and Development of Oil and Gas*, 4 J. ENERGY L. & POL'Y 1, 78–79 (1983); Bruce Kramer, *Unitization: A Partial Solution To The Issues Raised by Horizontal Well Development in Shale Plays*, 68 ARK. L. REV. 295 (2015).

³¹⁸ Philip Norvell, *Prelude To The Future Of Shale Gas Development: Well Spacing And Integration For The Fayetteville Shale In Arkansas*, 49 WASHBURN L.J. 457, 468 (2010); David Pierce, *Sustaining the Unsustainable: Oil And Gas Development In The 21st Century*, 23-SPG KAN. J.L. & PUB. POL'Y 362, 372 (2014).

³¹⁹ Owen L. Anderson & Ernest E. Smith, *Exploratory Unitization Under the 2004 Model Oil and Gas Conservation Act: Leveling the Playing Field*, 24 J. LAND RESOURCES & ENVT'L L. 277 (2004).

³²⁰ Advocates of exploratory unitization posit that this will benefit all mineral owners through maximizing production. However, it may operate to the detriment of individuals since production is typically allocated on the basis of surface acreage rather than geologic structure. Further, mineral owners outside the participating area of the initial well may find their interests tied up before beginning to receive a share of production. See, Gideon Wiginton, Comment, *Addressing Perceptions of Procedural Unfairness in Compulsory Unitization by Appointing Neutral Experts*, 55 AM. U. L. REV. 1801, 1816 (2006).

agreement they would still share in production. Further, by determining operatorship of the unit up front, exploratory unitization has the potential to curb the “permit wars” that are presently underway in Colorado and Wyoming and which are overwhelming commissions.³²¹

These efforts would require legislative action. A majority of state oil and gas conservation commissions do not have statutory authority to force non-consenting owners into exploratory units. The 2004 amendments of the Interstate Oil & Gas Commission model form Oil and Gas Conservation Act included an express provision for exploratory unitization.³²² State conservation agencies would oversee this process to assure that the plan is feasible and results in additional recovery and that the proposed allocation formula is fair to all unit owners.³²³ However, many state agencies have not adopted the 2004 model act. Thus, although exploratory unitization has long been used to aid in conservation on federal lands, absent voluntary agreement of the parties, conservation agencies may not have the authority to compel early unitization.³²⁴ Appropriate legislative authorizations can thus enable conservation agencies to enhance environmental protections within the scope of their statutorily delegated purposes and consistent with the agency’s expertise and familiarity with the technical operation of the industry.

Legislatures can also address concerns related to industry or political influence and agency dependence through structural changes. For example, encouraging bi-partisan appointments and insulating commissioners from removal for reasons other than cause would insulate agencies from short term electoral interests. Similarly, separating agency funding from drilling permit fees, requiring consultation, or implementing employment restrictions are also cited as “equalizing factors.”³²⁵ In so doing however, legislatures should consider the balance between structural independence and preventing undue influence carefully. For instance, consultation requirements have been cited as an effective tool to limit or increase industry influence,³²⁶ but also as procedural change to reduce agency autonomy.³²⁷ By requiring an agency to consult with local governments or an advocacy group, for example, legislatures can incorporate processes that assure that environmental voices are given greater concern but may also interfere with independence when the agencies independent judgement conflicts with that of consulting interests. Employment restrictions may decrease industry and political influences, but also diminish the technical efficacy

³²¹ Heather Richards, *An inexperienced oil and gas commission faces a permitting war in Wyoming*, CASPER STAR TRIB. (Jan. 12, 2019), available at https://trib.com/business/energy/an-inexperienced-oil-and-gas-commission-faces-a-permitting-war/article_6750f9b6-4fb2-5569-8e3f-af655461304a.html.

³²² IOGC 2004 Model Oil and Gas Conservation Act, Part VII at §§ 22-28 (<http://www.iogcc.state.ok.us/docs/ModelAct-Dec2004.pdf>). However, although the model act offers a “laudable improvement” over prior versions it has not been adopted by all states, *see*, Pierce, *supra* note 3, at 766; *In re the Request for Agency Action of Petro-Hunt, LLC, for an Order Establishing the Wales Exploratory Unit*, Finding of Facts, Conclusions of Law, and Order, Docket No. 2006-015, Cause No. 176-04 (January 12, 2007).

³²³ D. Theodore Rave, *Governing the Anticommons in Aggregate Litigation*, 66 VAND. L. REV. 1183, 1228 (2013).

³²⁴ Pierce, *supra* note 3, at 777.

³²⁵ Barkow, *supra* note 326, at 42.

³²⁶ *Id.*

³²⁷ *See supra* notes 179–83 and accompanying text.

and expertise of the agency. Conversely, employment qualifications requiring substantial experience within the regulated industry almost guarantee influence from industry perspectives.

This is not to suggest that environmental regulation of the oil and gas industry is not necessary or should be subordinated to principals of conservation law. When properly applied by other agencies, environmental laws play an important role in determining where and how oil and gas should be produced. It should by now be evident that oil and gas operators will need to be aware of multiple stakeholder interests and that a purely capture-based system of legal entitlements cannot survive. Even so, only so much can be accomplished through legislative or voter-initiated revisions to commission authority. These efforts are a clunky substitute for actual legislation addressing climate impacts or greenhouse gas emissions on a national scale. Any commission authority will be inherently limited to a subset of one very narrow scope of activities on one type of property, and only as to new development or development requesting additional agency action. Producing wells will largely be unaffected by new regulations, as will contributions to climate from other industries engaged in surface land development. Thus, initiatives that incorporate subsidies for environmentally friendly development practices, create tradable mitigation credits, or otherwise use market mechanisms to encourage low-carbon and sustainable energy development practices³²⁸ may be more effective than efforts aimed at impacting the oil and gas permitting stage.

VI. CONCLUSION

Oil and gas conservation agencies have been instrumental in limiting waste and environmental externalities from oil and gas production activities through prohibitions on wild wells, well spacing regulations, and compulsory pooling.³²⁹ However, for most of its history, environmental protection has been an incidental benefit of conservation law rather than its underlying purpose. Instead, the oil and gas conservation statutes “in every state operate on a capture-based property model” that tacitly accepts environmental degradation and environmental drilling as normative.³³⁰ This model prioritizes the prevention of waste and the protection of each individual’s right to capture his share of the minerals.

After more than sesquicentennial since the first oil and gas regulations, environmental constituencies and landowners are questioning the primacy of capture-based paradigms. Concerned citizens, including surface owners and conservation and environmental groups, have pushed conservation commissions and legislatures to revise oil and gas conservation statutes to include provisions addressing surface impacts, requiring consideration of impacts to air quality, wildlife, and the environment, modifying common law dominance of the minerals within split estates, and establishing setbacks from residences, schools, streams, parks, and hospitals. The traditional hierarchy whereby the prevention of waste is paramount to all other public concerns is undeniably changing.

³²⁸ It is too early to determine how California’s cap and trade program, which first applied to upstream producers of oil and gas in 2015, will impact production and drilling activities in the state. *See* CAL. CODE REGS. tit. 17, §§ 95801–96022 (West 2018).

³²⁹ *See supra* notes 92–108 and accompanying text.

³³⁰ Pierce, *supra* note 3, at 764.

In recent years there has been an increase in environmental activism in administrative proceedings before oil and gas conservation agencies. Environmental groups have used citizen petitions and environmental review provisions of procedural statutes to open up conservation agencies and push for greater democratization of oil and gas regulation. As a result, conservation agencies have been forced to reconcile structural conflicts between broad aspirational directives of protecting health, safety, and public welfare, with specific and historically-entrenched mandates of preventing waste and protecting correlative rights. These proceedings have rarely overcome agency inertia, instead leading to activism in the courts, at the ballot box, and before the legislature. create standing for environmental advocates in agency proceedings. Limited success in those arenas have created standing for environmental advocates, pushed agencies to initiate rulemaking proceedings, and created new precedents by which agencies can afford greater consideration for environmental impacts. The result is that oil and gas regulators have emerged as inadvertent, and often reluctant, environmental agencies.

Legislatures and environmental constituencies can accomplish a better balance between efficient development and environmental protection. These means may include refinements of state oil and gas conservation statutes for spacing and pooling, and adoption of correlative-rights based laws authorizing commissions to engage in early stage exploratory unitization. These changes have the potential to expand the power of agencies to consider and mitigate environmental impacts, while actually increasing total reservoir recoveries and preserving the correlative rights of mineral owners. Further, enactment or expansion of state environmental or administrative procedure acts can increase environmental considerations in administrative proceedings and provide standing to more diverse groups to challenge agency rulings.

Changes to oil and gas conservation laws should be made judiciously. Legislatures should be wary of amending oil and gas conservation acts in a manner that requires agencies to exercise discernment between conflicting and co-equal policy goals. Without a clear hierarchy and guidance regarding the factors the agency are required to consider and the relative weights between them, these mandates may lead to disparate results and an increase in litigation regarding agency discretion. Expanded authority requires a corresponding expansion in expertise. Thus, legislatures should assure that agency composition assures that the agency has sufficient expertise to engage in fact finding relative to environmental factors and to mitigate the risk of undue industry influence. Legislatures should be aware that these changes may result in increased opposition to administrative proceedings and require conservation agencies to manage complex evidentiary and procedural issues. These changes may diminish the important role conservation agencies have historically played in making technical determinations regarding waste and correlative rights. By tasking conservation agencies with the dual and paradoxical purpose of both encouraging production and preventing and regulating environmental impacts of development, it is possible that neither will be achieved.