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ALEX RITCHIE*

On Local Fracking Bans: Policy and Preemption in New Mexico

ABSTRACT

In the midst of the hydraulic fracturing revolution, elected officials in Mora County, New Mexico recently banned all oil and gas production within the county. But the officials went even further, stripping corporations of constitutional rights and declaring the constitutions of the United States and the state of New Mexico illegal if interpreted as inconsistent with the ordinance. Why would a small rural county like Mora with no oil and gas operations to speak of adopt such an extreme ordinance? This article applies economics, political choice, and localism theories to argue that Mora County's decision may be at least partly explained by special interest group influence. The severance of land into separate surface and mineral estates exacerbates the influence disparity by concentrating votes in residents with little to no participation in the proceeds of production. Reasonable, traditional land use restrictions certainly have a place to protect truly local interests. This article maintains, however, that outright bans and extreme restrictions improperly infringe upon state interests.

INTRODUCTION

On April 29, 2013, the county commissioners of Mora County, New Mexico, adopted an ordinance "protecting the right of human communities, nature, and natural water, by establishing a local bill of rights for Mora County." The "Mora County Community Water Rights and Local Self-Government Ordinance" not only prohibits "the extraction of oil, natural gas, or other hydrocarbons within Mora County," but also makes it unlawful to extract water from any surface or subsurface source within the county for use in the extraction of oil and gas, of the business of the county for use in the extraction of oil and gas, to bring water,

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^{1.} Mora Cnty., N.M. Ordinance 2013-01, Preamble (Apr. 29, 2013), available at http://celdf.org/downloads/Mora_Co_Community_Rights_Ordinance_042913.pdf [hereinafter Mora County Ordinance].

^{2.} Id. § 1.1, 5.1.

^{3.} Id. § 5.2.

sand, or other substances into Mora County for use in the production of oil or gas;⁴ to deposit, store, or transport produced water, brine or other materials used in oil and gas production within Mora County;⁵ or to construct or maintain "infrastructure" relating to oil and gas production in Mora County, including pipelines and "other vehicles of conveyance." If read broadly, the ordinance presumably prohibits transporting materials used in oil and gas production through Mora County on Interstate 25, the only federal interstate highway running north and south through New Mexico.

The ordinance does not, however, simply regulate oil and gas operations. It grants "[n]atural communities and ecosystems . . . inalienable and fundamental rights to exist and flourish within Mora County against oil and gas extraction." If a permit or other right or privilege to operate is granted by a state or federal agency that would violate the ordinance, then the permit or right is declared invalid. Even the United States Constitution and the New Mexico Constitution are declared to be illegal if they are interpreted as inconsistent with the ordinance, or "otherwise elevate property interests over rights secured by [the] Ordinance." The ordinance was originally directed solely at corporations and their agents, denying corporations any United States or New Mexico constitutional rights of personhood that would violate the ordinance. The ordinance was then amended shortly after adoption to extend its prohibitions to individuals.

The ordinance also contains a number of protective provisions, including a severability clause.¹² In order for it to be repealed, the ordinance requires both the unanimous agreement of the county commission and a two-thirds vote of the Mora County electorate to approve the repeal.¹³ The overturning of the ordinance triggers a six-month moratorium on oil and gas extraction. During that moratorium, the county commission is required to adopt another ordinance that permanently bans oil and gas extraction.¹⁴ If other levels of government attempt to

^{4.} Id.

^{5.} Id. § 5.3.

^{6.} Id. § 5.4.

^{7.} Id. § 4.3.

^{8.} Id. § 5.7.

^{9.} Id. § 5.8.

^{10.} Id. § 5.5.

^{11.} See April Reese, N.M. County on Fracking Ban: 'We're Not Done Yet', E&E Publishing, LLC, June 12, 2013, available at http://www.eenews.net/stories/1059982712.

^{12.} See Mora County Ordinance, supra note 1, § 13.

^{13.} Id. § 10.

^{14.} Id. § 8.5.

preempt or overturn the ordinance, the county must consider measures to expand local control, which "may include" secession from the state or the nation if such other levels of government attempt to preempt or overturn the ordinance.¹⁵

Mora County is not the only local governmental entity to adopt such an ordinance. The first "community rights" ordinance to ban oil and gas activity was adopted by the city of Pittsburgh, Pennsylvania on November 16, 2010. Then on April 2, 2012, the Las Vegas, New Mexico became the first New Mexico county or municipality to adopt such an ordinance. Mayor Alfonso E. Ortiz Jr., however, refused to certify what he believed was an illegal ordinance. Altogether, the Community Environmental Legal Defense Fund (CELDF), the lead author and promoter

^{15.} Id. § 11.

^{16.} See Pittsburgh Ordinances No. 37-2010 (eff. Dec. 1, 2010) (codified at Pittsburgh, Pa., Code of Ordinances §§ 618.01-618.09). Political activity and litigation have been very active in Pennsylvania as to the rights of cities and townships to regulate oil and gas drilling. After the city of Pittsburgh acted, a number of other municipalities in Pennsylvania adopted local drilling ordinances, prompting the state legislature to adopt Act 13 of 2012 (Act 13), 58 Pa. C.S. §§ 2301-3504 (Feb. 14, 2012), which provided inter alia that oil and gas development shall be allowed as a permitted use in any municipal zoning district, and that restrictions placed on oil and gas development by municipalities shall be no greater than those placed on other industrial uses. Id. at § 3304. On July 26, 2012, the Commonwealth Court of Pennsylvania determined that Section 3304 of Act 13 (providing for uniformity of local ordinances), and Section 3215(b)(4) of Act 13 (allowing the state Department of Environmental Protection to grant waivers from the setback requirements for oil and gas wells from certain water sources) were unconstitutional in violation of substantive due process. Robinson Twp. v. Commonwealth of Pennsylvania, 52 A.3d 463 (July 26, 2012). On appeal, the Pennsylvania Supreme Court struck down Sections 3303, 3304, and 3215(b) of Act 13 on state constitutional grounds, remanding the case back to the lower court to determine whether other provisions of Act were unseverable and thus also invalid. Robinson Twp. v. Commonwealth, 2013 Pa. LEXIS 3068 (Pa. 2013). According to the court, the Environmental Rights Amendment 27 to the Pennsylvania Constitution, PA. CONST. art 1, § 27, creates a public trust that requires the state and local governments to affirmatively enact environmental protections, and to refrain from allowing the degradation of the public trust. Robinson Twp., 2013 Pa. LEXIS 3068 at *141-43. By prohibiting local governments from enacting restrictions on fracking, the state has effectively forced local governments to breach their public trust duties to their citizens. Id. at *205-206.

^{17.} See Minutes of the City of Las Vegas City Council Special Meeting on Monday, Apr. 2, 2012 at 4:00 p.m. in the City Council Chambers (Apr. 2, 2012) available at http://www.lasvegasnm.gov/cc%20minutes/cc_min_04022012specail.pdf [hereinafter Las Vegas Council Minutes].

^{18.} Las Vegas, N.M., Exec. Order No. 2012-3(2012) ("I, Alfonso E. Ortiz, Jr. . . . hereby conclude that I will not sign nor publish proposed Ordinance 12-06."). In response to the Mayor's refusal to certify the ordinance, a petition to recall the Mayor was circulated, but the petition failed to garner sufficient signatures for his removal. *See* Certification of Casanadra Fresquez, City Clerk (July 2, 2013), *available at* http://www.lasvegasnm.gov/Certification%20of%20Names%20on%20Petition.pdf.

of these community rights ordinances, claims that more than 150 of them have been adopted by cities and counties throughout the country, relating to topics as varied as civil liberties, elections, mining, and oil and gas matters. ¹⁹

At one level, the Mora County community rights ordinance seeks to advance ideals of water conservation and environmental protection in the face of the potential threat of fracking. At another level, it directly defies legal structures that establish federal supremacy over states and state supremacy over counties and municipalities. As the impacts of oil and gas operations clearly cross state lines, the federal government has the right under the Supremacy Clause²⁰ (as applied through the Commerce Clause²¹) to preempt the regulation of drilling operations should it ever choose to do so. Similarly, municipalities and counties derive their powers from those granted to them in state constitutions and authorizing legislation, powers that are subject to preemption by the state legislature.²² Why then would a tiny county such as Mora, with a little under 5,000 residents,²³ or a small city such as Las Vegas, with approximately 14,000 residents,²⁴ invite litigation over the terms of such radical ordinances?

One obvious explanation is the desire of counties such as Mora to address the risk of local negative externalities associated with oil and gas production. Economists describe externalities as the direct imposition of costs or the imparting of benefits on third parties that are not internalized by industry. Environmental pollution is the classic example of a negative externality, whereby a cost is imposed on society in the form of air, water, or other resource pollution but that cost is not absorbed by

^{19.} Community Environmental Defense Fund, Community Rights, http://www.celdf.org/section.php?id=423 (last visited Apr. 3, 2014).

^{20.} See U.S. Const. art. VI, cl. 2 ("This Constitution, and the Laws of the United States . . . shall be the supreme Law of the Land.").

^{21.} See U.S. Const. art. I, \S 8, cl. 3 ("The Congress shall have Power . . . to regulate Commerce . . . among the several States").

^{22.} Although New Mexico provides for home-rule municipalities, even those municipalities are prohibited from legislative functions and powers that are expressly or impliedly denied by general law of the state legislature. N.M. Const. art. X, § 6(D); Casuse v. City of Gallup, 746 P.2d 1103 (N.M. 1987).

^{23.} See Mora County, New Mexico, City-Data.com, http://www.city-data.com/county/Mora_County-NM.html (last visited Apr. 5, 2014).

^{24.} Las Vegas, N.M. (New Mexico) Houses and Residents, CITY-DATA.COM, http://www.city-data.com/housing/houses-Las-Vegas-New-Mexico.html (last visited Apr. 5, 2014).

^{25.} Nicholas A. Ashford & Charles C. Caldart, Environmental Law, Policy, and Economics: Reclaiming the Environmental Agenda 132 (2008).

industry.²⁶ In Part III, this article discusses many of the potential negative externalities associated with oil and gas production, including air pollution, water use, water contamination, truck traffic and noise, and how those externalities currently are regulated.

Another likely explanation relates to the manner by which oil and gas tax and royalty revenues in New Mexico are allocated. Oil and gas production generates tax and royalty revenue that is applied by the state to fund schools, buildings, and other infrastructure. Free-rider problems arise when market participants enjoy the benefits associated with a public good without having to pay their fair share for the good.²⁷ In New Mexico, oil and gas tax and royalty revenue is raised from operations in counties where externality costs are incurred, and then allocated without consideration of those costs to counties where no production occurs, thus incentivizing bans or severe restrictions on future drilling operations.²⁸

Simple politics is yet another explanation. As rational politicians, county commissioners might ban or severely restrict oil and gas drilling in response to community outcry from voters. Such was the case in Santa Fe County, which adopted its highly detailed, 110-page zoning-type oil and gas ordinance in 2008 in response to the threat of oil and gas drilling.²⁹ The Santa Fe County ordinance has been highly effective at preventing drilling and also deterring legal challenges. This is in part due to the cost and burdens required to navigate its permitting process before an as-applied challenge might be brought in court.³⁰ Logically, voters should prefer an ordinance, such as the Santa Fe County ordinance, that is less likely to be challenged and more likely to survive such a legal challenge.³¹ The simple desire for votes does not then explain why the commissioners of Mora County chose to adopt its extreme community rights ordinance, rather than a more legally-defensible ordinance. Something else motivated the Mora County Commissioners.

The Mora County ordinance offers an interesting case study in an era of more frequent attempts to regulate the oil and gas industry. This article explores the motivations of local governments that act to ban or several restrict fracking or other oil and gas operations. It also addresses the broader policy issue of whether counties and municipalities should

^{26.} Id.

^{27.} Robert Cooter & Thomas Ulen, Law and Economics 109 (1988).

^{28.} See infra Part IV.A.

^{29.} See infra note 62 and accompanying text.

^{30.} See infra note 276 and accompanying text discussing county administrative proceedings and denial by county of mining permit as required by the court before a challenge to a county mining ordinance.

^{31.} Jonas Armstrong, What the Frack Can We Do? Suggestions for Local Regulation of Hydraulic Fracturing in New Mexico, 53 Nat. Resources J. 357, 380 (2013).

have the right to ban oil and gas operations or particular methods entirely, and if not, where the lines might be drawn.

As background for the discussion, Part I begins with a brief explanation of the process of hydraulic fracturing and what is meant by the term "fracking." Part II then contrasts the community rights model and the circumstances surrounding its adoption in Mora County with the highly detailed Santa Fe County zoning model. Part III examines the significant state and primarily local interests in the benefits and externalities of oil and gas production. It proceeds from the admittedly debatable viewpoint that one layer of governmental control (as opposed to overlapping and duplicative regulation) is appropriate and preferable for the regulation of particular types of externalities associated with oil and gas operations. Certain types of externalities associated with oil and gas production have primarily local effects, including those relating to noise, light, traffic, and proximity to existing residential and commercial structures. While localities have important interests in controlling these local effects, this article argues that the significant legal and policy interests of the state favor statewide control over many of the activities sought to be banned or controlled by local governments.

Part IV delves into explanations for local attempts to regulate oil and gas production in the face of fracking. It borrows from economic theory, including public choice theory, applies concepts of exclusionary localism, and offers a comparison to illustrate why a failure in Mora County might be viewed as a "successful failure" by advocates of its ordinance. Such explanations for local actions banning or restricting oil and gas production lend further support for policy favoring state-level control.

Part V then departs from policy and examines preemption law in New Mexico and how it might be applied in challenges to local oil and gas regulation. The article concludes by offering some potential solutions to the state/local question, none of which will satisfy all of the constituent interests. Despite such limitations, a legislative solution is necessary in light of the effects a continued spread of fracking bans will have on significant state interests.

I. WHAT IS HYDRAULIC FRACTURING?

A. A Brief History and Explanation of the Fracking Process

Fracturing of some sort or another has been performed on oil and gas wells to stimulate production for almost as long as oil and gas has

been produced in the United States.³² Hydraulic fracturing, meaning the use of water to fracture rock formations to produce oil and gas, was first tested in 1903 and first used commercially in 1948.³³ However, the modern revolution of shale development did not officially begin until 1997, when Mitchell Energy effectively combined slick-water hydraulic fracturing with horizontal drilling techniques to allow the injection of water at a sufficient pressure to crack the Barnett Shale in Texas.³⁴ As conventional reservoirs of oil and gas are depleted, horizontal drilling and hydraulic fracturing have become the primary means to obtain production from low-permeability shale and other "tight" reservoirs that were previously inaccessible, reinvigorating the oil and gas industry.³⁵ Now more than 1.1 million fracturing jobs have been completed, and almost 90 percent of onshore oil and gas wells in operation undergo some sort of fracturing operation.³⁶

To simplify the process greatly, slick-water hydraulic fracturing is a multi-stage technique involving the pumping of fluid into the horizontal wellbore at a very high pressure and flow rate. The fluid itself is approximately 99.5-percent water and "proppant," a solid material designed to keep the fractures open, while the remaining 0.5 percent consists of a mix of chemical additives applied to lubricate the wellbore, prevent microorganism growth, and prevent casing corrosion.³⁷ Although the process varies depending on site-specific conditions, it may

^{32.} Oil was first discovered in commercial quantities on August 27, 1859, in Titusville, Pennsylvania, by a crew led by Edwin L. Drake. *See* Daniel Yergin, The Prize: The Epic Quest for Oil, Money, and Power 27 (1990). A few years later, on November 20, 1866, Col. E. A. L. Roberts was granted U.S. Patent No. 59,936 for an explosive "torpedo" filled with gunpowder (or later, nitroglycerin) used to restore production in wells that had, it was then supposed, become "clogged." Shooters—A "Fracking" History, American Oil & Gas Historical Society, http://aoghs.org/technology/shooters-well-fracking-history/ (last visited Apr. 5, 2014).

^{33.} Thomas E. Kurth, Michael J. Mazzone, Mary S. Mendoza & Christopher S. Kulander, *American Law and Jurisprudence on Fracing*, 58 Rocky Mt. Min. L. Inst. 4–1, 4–7 (2012).

^{34.} Lanier Yeates & Andrew M. Abrameit, Current Issues in Oil & Gas Shale Development 6 (2001). The first commercially viable horizontal well using slick-water fracturing was completed in 2001. *Id.*

^{35.} See Mary Tiemann & Adam Vann, Hydraulic Fracturing and Safe Drinking Water Act Regulatory Issues (2013); Hydraulic Fracturing 101, Halliburton, http://www.halliburton.com/public/projects/pubsdata/Hydraulic_Fracturing_101.html (last visited Apr. 5 2014).

^{36.} See Tiemann & Vann, supra note 35, at 2.

^{37.} See Ground Water Protection Council, Modern Shale Gas Development in the United States: A Primer 61–62 (2009), available at http://www.netl.doe.gov/technologies/oil-gas/publications/EPreports/Shale_Gas_Primer_2009.pdf [hereinafter Shale Gas Primer].

involve up to three phases. In the "pad" phase, fluid is pumped into the target formation to instigate the fractures, typically without proppant.³⁸ In the "proppant" phases, proppant—which is usually sand but may also be ceramic or sintered bauxite—is added to hold the fractures open and allow hydrocarbons to flow into the wellbore.³⁹ In the third phase, the borehole is flushed to remove the excess proppant.⁴⁰ This extremely technical process is referred to in shorthand as "fracking" (or "fracing" in industry parlance).⁴¹

B. The Broader Term "Fracking"

The term "fracking" may be intended to describe something much broader than the discrete process of hydraulic fracturing, depending on the speaker and the context. The word "fracking" sounds like and is spelled much like a common dirty word. That similarity may or may not be a coincidence, ⁴² but it underlies the emotional connotation of the word and furthers an issue of semantics. Environmental interests arguably have sought to broaden the term "fracking" to include any oil and gas operations such as trucking and noise; incursions into residential or other areas; completion and production operations involved in all or most oil and gas drilling (including activities that do not technically involve hydraulic fracturing); and even the entire onshore oil and gas industry itself.⁴³

^{38.} American Petroleum Instit., Hydraulic Fracturing Operations—Well Construction and Integrity Guidelines 16, 18 (1st ed. 2009).

^{39.} Id. at 15.

^{40.} Id. at 12.

^{41.} As originally drafted, this article used the word "fracing" as referring to the technical process and "fracking" as a pejorative label used by some to refer to all oil and gas drilling. The editors of the *Natural Resources Journal* insisted that the word "fracking" be used throughout the article, in part because the conflict over the spelling of the word has been won in the media by those that support the "k" and oppose what it stands for, as well as search engine optimization of these articles and phonetic issues with the alternative spelling, "fracing." Regardless, the spelling of a word arguably has little import over its meaning so long as the meaning is properly ascribed.

^{42.} For a particularly colorful use of the word "fracking" connoting another word, see David Holmes et al., *My Water's On Fire Tonight (The Fracking Song)*, YouTube (May 20, 2011), http://www.youtube.com/watch?v=timfvNgr_Q4 ("What the frack is going on with all this fracking going on.").

^{43.} See Michael D. Holloway & Olive Rudd, Fracking: The Operations and Environmental Consequences of Hydraulic Fracturing (Wiley & Sons, Inc. and Scrivener Publishing LLC, 2013) (describing the contrasting views of the term). Environmental groups, including Clean Water Action, recently launched a campaign to restrict "fracking" in California, only to realize that other oil and gas recovery methods might be used that would not be covered by proposed moratoriums and other restrictions. Rock Zierman, CEO of the California Independent Petroleum Association responded, "[i]f they're wanting to define

The intensity of the debate over "fracking" can partly be explained by the change in our energy landscape. Plentiful new U.S. domestic supplies of oil and gas have hushed talk of ideas such as peak oil.⁴⁴ To the detriment of climate change policy, the U.S. consumer no longer is forced to wean himself from oil- and gas-based fossil fuels.⁴⁵ In response, environmental organizers have stepped up efforts to end "fracking" in its broad sense, with much of the effort aimed at local municipalities and counties.⁴⁶ Even when local regulation is targeted only at the hydraulic fracturing process itself, these restrictions are a convenient way to block oil and gas development altogether because shale and other unconventional "tight" formations cannot currently be developed without the process.⁴⁷ It is in this context that Mora County determined to ban oil and gas production (or "fracking," in the broad sense of the word).

II. CONTRASTING APPROACHES TO LOCAL FRACKING REGULATION

A. The Community Environmental Legal Defense Fund Model

The Mora County ordinance and its provisions banning oil and gas activities, stripping corporations of rights, and suspending government procedures have been enumerated in this article's Introduction.⁴⁸ Some background on the organization that authored the ordinance, however, sheds light on how such an ordinance was created. The Community Environmental Legal Defense Fund Model ("CELDF") is dedicated to "[b]uilding sustainable communities by assisting people to assert their

the moratorium bills beyond hydraulic fracturing, then I assume they're wanting to ban all domestic oil production." Anne C. Mulkern, *Hydraulic Fracturing: Calif.'s Proposed Moratoriums Might Not Apply to Other Drilling in Monterey Shale—Activists*, E&E Publishing (May 20, 2013), *available at* http://www.eenews.net/stories/1059981451.

- 44. See G. Tracy Mehan III, Is the Theory of 'Peak Oil' Dead?, AMERICAN SPECTATOR (Mar. 5, 2013), available at http://spectator.org/archives/2013/03/05/is-the-theory-of-peak-oil-dead. Under this theory, petroleum extraction will peak and then decline, causing demand to permanently exceed supply. *Id*.
- 45. See Bryan Walsh, The IEA Says Peak Oil Is Dead. That's Bad News for Climate Policy, Time (May 15, 2013), http://science.time.com/2013/05/15/the-iea-says-peak-oil-is-dead-thats-bad-news-for-climate-policy/.
- 46. According to one anti-fracking website, as of September 7, 2013, there were 62 bans, 111 moratoria, and 86 movements for prohibitions (bans or moratoria) by local governments in the state of New York alone. Current High Volume Horizontal Hydraulic Fracturing Drilling Bans and Moratoria in NY State, http://www.fractracker.org/maps/ny-moratoria/ (last visited Sept. 7, 2013).
- 47. David E. Pierce, *Developing a Common Law of Hydraulic Fracturing*, 72 U. Pitt L. Rev. 685, 686 (2011).
 - 48. See supra Introduction and text accompanying footnotes 1-24.

right to local self-government and the rights of nature."⁴⁹ Founded in 1995 by environmental lawyer Thomas A. Linzey and Stacey Schmader, the group offers "free and affordable legal services to community groups."⁵⁰

CELDF attempts to convince local citizens that their rights are being violated through a process of "rights-based organizing,"⁵¹ and educates legislators and citizens in a series of "democracy schools" that it conducts and funds.⁵² According to CELDF, corporations are afforded privileged protections under (1) state and federal statutes that preempt local governments, (2) Dillon's Rule,⁵³ (3) the Contracts and Commerce Clauses of the United States Constitution, and (4) the personhood rights of corporations.⁵⁴ A basic tenant of CELDF is "that the people affected by governing decisions should be the ones who make them, and that governing decisions made without the consent of the governed are fundamentally unjust."⁵⁵

As CELDF's Executive Director and Chief Counsel, Mr. Linzey states, "[o]ver the past 150 years, the . . . Courts have bestowed upon corporations immense constitutional powers of the Fourteenth, First, Fourth, and Fifth Amendments, and the expansive powers afforded by the Contracts and Commerce Clauses." Despite this acknowledgement, CELDF nevertheless pressures local governments to adopt community rights ordinances that purport to strip corporations of their constitution-

^{49.} Community Environmental Legal Defense Fund, Mission Statement, http://celdf.org/mission-statement (last visited Apr. 20, 2014).

^{50.} Community Environmental Legal Defense Fund, *History*, http://celdf.org/history (last visited Apr. 20, 2014).

^{51.} Community Environmental Legal Defense Fund, Campaign in Your Community, http://celdf.org/campaign-in-your-community (last visited Apr. 20, 2014).

^{52. &}quot;The Daniel Pennock Democracy School is a stimulating and illuminating course that teaches citizens and activists how to reframe exhausting and often discouraging single issue work (such as opposing toxic dumps, quarries, factory farms, etc.) in a way that we can confront corporate control on a powerful single front: people's constitutional rights." Community Environmental Legal Defense Fund, What Is Democracy School?, http://celdf.org/what-is-democracy-school (last visited Apr. 20, 2014).

^{53.} See infra Part IV.D.

^{54.} Kathleen Dudley, *Op-Ed: Mora County Community Rights Law: Self-Determination*, Green Fire Times (June 2013), http://greenfiretimes.com/2013/05/op-ed-mora-county-community-rights-law-self-determination/#.UiUdJzaTh8E.

^{55.} Community Environmental Legal Defense Fund, Campaign in Your Community, http://celdf.org/campaign-in-your-community (last visited Apr. 20, 2014).

^{56.} Community Environmental Legal Defense Fund, CELDF Model Brief to Eliminate Corporate Rights, http://www.celdf.org/celdf-model-brief-to-eliminate-corporate-rights (last visited Apr. 20, 2014).

ally protected rights.⁵⁷ CELDF claims it has never had to defend its anticorporation community rights provisions in court, but such provisions have been struck down at least twice.⁵⁸

B. The Santa Fe County Model

In contrast to the "community rights" model, Santa Fe County clearly adopted its 2008 oil and gas ordinance⁵⁹ with preemption in mind, taking advantage of any room that may be available under New Mexico law for concurrent jurisdiction.⁶⁰ The path toward the adoption of the 110-page zoning ordinance (plus exhibits) began on October 23,

57. The rights of corporate personhood are viewed as originating with Dartmouth College v. Woodward, 17 U.S. 518 (1819), where Chief Justice John Marshall held that the state was bound contractually by the charter it granted to a corporation. Id. at 643-44. Then in 1886, the court reporter included in the published opinion for Santa Clara County v. Southern Pacific Railroad, 118 U.S. 394 (1886), the announcement that Chief Justice Morrison Wate made before oral argument that "[t]he court does not wish to hear argument on the question whether the provision in the Fourteenth Amendment to the Constitution, which forbids a State to deny to any person within its jurisdiction the equal protection of the laws, applies to these corporations. We are all of opinion that it does." Id. at 396. This offhand comment eventually became settled law. See, e.g., Louis K. Liggett Co. v. Lee, 288 U.S. 517, 536 (1933) (In addressing tax laws, "[c]orporations are as much entitled to the equal protection of the laws guaranteed by the Fourteenth Amendment as are natural persons."). Historically, businesses used the constitutional protections under the Fourteenth Amendment to protect property and contract rights, rather than resort to the Bill of Rights. See Carl J. Mayer, Personalizing the Impersonal: Corporations and the Bill of Rights, 41 Hastings L. J. 577, 590 (1990); Robert Sprague & Mary Ellen Wells, The Supreme Court as Prometheus: Breathing Life into the Corporate Supercitizen, 49 Am. Bus. L. J. 507, 524-35 (2012). Only recently has the Supreme Court applied Bill of Rights protections to corporations. See Mayer, supra note 57, at 577-78. Now fast forward to 2010 and Citizens United v. Fed. Elect. Comm'n., where Justice Kennedy, writing for the majority, held that "political speech does not lose First Amendment protection 'simply because its source is a corporation.'" 558 U.S. 310, 342 (2010) (quoting First Nat'l Bank of Boston v. Bellotti, 435 U.S. 765, 784 (1978)). For a nice summary of the constitutional protections afforded to corporations, see Mayer supra note 57, at Appendix I, II.

58. Citing Cooper v. Aaron, 358 U.S. 1, 18 (1958), the court in Penn Ridge Coal, LLC v. Blaine Twp., 2009 U.S. Dist. LEXIS 84428 (W.D. Pa. Sept. 16, 2009), held that the corporate rights ordinance at issue in that case was invalid and unenforceable, stating that "the Township does not have the legal authority to annual constitutional rights conferred upon corporations by the United States Supreme Court." *Id.* at *17-*18. See also Range Resources – Appalachia, LLC v. Blaine Twp., 2009 U.S. Dist. LEXIS 100932 (W.D. Pa. Oct. 29, 2009) (striking down a similar community rights ordinance on the same grounds). CELDF states that "not a single, rights-based ordinance has been attacked by the drilling corporations." Community Environmental Legal Defense Fund, *Non-Rights Based Fracking Ordinances*, http://archive.today/dQgjm (last visited Apr. 20, 2014).

^{59.} Santa Fe Cnty., N.M., Ordinance 2008–19 (Dec. 9, 2008) [hereinafter Santa Fe Ordinance].

^{60.} See infra Part V.A.

2007, when Tecton Energy, a Houston wildcatter,⁶¹ leased mineral rights under 65,000 acres of land in the Galisteo Basin, prompting the Santa Fe County Board of County Commissioners to quickly approve an emergency, three-month moratorium on drilling in response to the outcry. ⁶² By January 2008, then-Governor Bill Richardson had ordered a sixmonth moratorium prohibiting the New Mexico Oil Conservation Division (NMOCD) from approving new permits to drill in the Galisteo Basin.⁶³ After a one-year extension of the County moratorium, the County finished its massive ordinance on December 2, 2008, drafted primarily by land use attorney Dr. Robert Freilich, with the aid of other consultants.⁶⁴

The Santa Fe ordinance is a three-step process that requires (1) an application for a discretionary zoning classification where the oil and gas facility will be constructed; (2) a discretionary special use and development permit with further conditions and requirements for well sites and structures; and (3) applications for building or grading permits and a certificate of completion.⁶⁵ In connection with the application for an overlay zoning district, the Santa Fe ordinance requires the preparation of eight detailed "studies, plans, reports and assessments," including a National Environmental Policy Act-type environmental assessment that considers such matters as natural wildlife and vegetation habitats, air and water pollution, and global warming.66 The applicant must pay the County for the cost of these studies (performed by consultants engaged by the County) at the time of the application. 67 If this incredibly complex application is incomplete, the applicant has but 30 days to submit additional information requested by the County (unless the County agrees in writing to a longer period).68

The ordinance sets the maximum well density in the Galisteo Basin at 10 percent of the number of wells that may be drilled under state

^{61.} A "wildcatter" is an operator who drills an exploratory well in a general area or formation where there is no other production. *See* Patrick H. Martin & Bruce M. Kramer, Williams and Myers Manual of Oil and Gas Terms 1152 (13th ed. 2006).

^{62.} Phaedra Haywood, Commissioners Approve Oil-Gas Drilling Moratorium, Santa Fe New Mexican, Nov. 28, 2007, at C-1.

^{63.} Raam Wong, Gov. Orders Halt on Galisteo Basin Drilling, Albuquerque J., Jan. 12, 2008, available at http://www.abgjournal.com/news/state/276665nm01-12-08.htm.

^{64.} Phaedra Haywood, *Panel Gives Green Light to Drilling Ordinance*, Santa Fe New Mexican, Dec. 10, 2008, at C-1.

^{65.} Santa Fe ordinance, supra note 59, at § 8.

^{66.} These include a general and area plan consistency report, an environmental impact report, a fiscal impact assessment, an adequate public facilities and services assessment, a water availability assessment, an emergency service and preparedness report, a traffic impact assessment, and a geohydrologic report. *Id.* § 9.6(3)(a)–(g).

^{67.} Id. § 9.6(3).

^{68.} Id. § 9.6.10.2.

rules in "high sensitivity areas," 30 percent in "moderate sensitivity areas," and 40 percent in "low sensitivity areas." In each case, the ordinance states that "fewer or no" oil and gas wells may be authorized "based upon the unique requirements of the project area's mitigation requirements to avoid adverse public nuisance effects and impacts from oil and gas specific well locations."

If the applicant actually survives the overlay application stage, he must then enter into one or more development agreements with the County. The development agreements (1) cover the financing of capital facilities and public services (as provided in the ordinance); (2) include the applicant's proportionate share of the construction and maintenance of roads;70 (3) involve plans to fund the public water system's total projected water supplies (taking into account the applicant project's existing and planned water use) over a 50-year period;⁷¹ and (4) consider the project's impact on the county's fire, police, and emergency services.⁷² Once operations are commenced, the ordinance details a further set of requirements: closed-looped systems; baseline water quality testing, including at least three monitoring wells and samples from all water wells and surface water within three miles of the proposed well site;⁷³ annual water sampling to compare to the baseline,74 operating between the hours of 8:00 a.m. to 5:00 p.m. only;⁷⁵ expanded set-back requirements;⁷⁶ and, subject to a minor exception, using nothing in the fluid component of hydraulic fracturing material other than fresh water,77 making modern high-volume slick-water fracturing impossible.

The ordinance even expressly addresses the potential of a regulatory taking of property under either the U.S. or the New Mexico Constitutions, stating that each applicant who is denied at the overlay or development permit stage must "exhaust all administrative remedies by applying for a beneficial use and value assessment" that describes the extent of the diminution of use and value of the property, the distinct investment-backed expectations, the availability of transferable development rights, and "any variance or relief necessary to relieve any unconstitutional hardship or regulatory taking created." ⁷⁸

^{69.} *Id.* § 9.4.1.1(d)(3)(B).7.

^{70.} Id. § 9.6.6.5.9.

^{71.} Id. § 9.6.5.3.

^{72.} Id. § 9.6.3.5.

^{73.} Id. § 11.22.

^{74.} Id. § 11.25.4.

^{75.} Id. § 11.25.2.

^{76.} Id. § 11.26.

^{77.} Id. § 11.25.4.

^{78.} Id. § 5.

The results of the outcry in Santa Fe County did not end, however, with the ordinance. In response to an Executive Order from Governor Richardson, on July 16, 2009, the New Mexico Oil Conservation Commission (NMOCC)—the board that oversees the NMOCD—adopted a special rule applicable to Santa Fe County and the Galisteo Basin that requires detailed exploration and development plans, detailed public notice and public hearing requirements, a provision for the imposing of additional conditions, and other special requirements that are not applicable to other areas of the State. ⁷⁹ It also specifically provides that the approval of an exploration and development plan "does not relieve an operator of responsibility for complying with any other applicable federal, state or local statutes, rules or regulations or ordinances." ⁸⁰ In other words, the NMOCC's special rule specifically contemplated (without endorsing or attempting to validate) the Santa Fe ordinance.

III. FEDERAL, STATE, AND LOCAL INTERESTS IN OIL AND GAS PRODUCTION

If we accept the presumption that a governmental entity has an interest in both the benefits of an activity and the related costs and risks of the activity, then there appears to be room for fracking regulation at the federal, state, and local levels. One might argue that where states have a significant state-level interest, states should be entitled to determine the appropriate level of regulation. But surely there are some externalities that affect mostly local interests where local regulation might be more appropriate. After briefly describing some of the significant federal interests involved in fracking regulation, this Part examines various local and state interests in the economic benefits and negative externalities associated with fracking.

A. Significant Federal Interests and Implications for State and Local Interests

Identifying significant federal interests in fracking narrows the outer boundaries of the sphere of regulation that remains appropriate for state and local governments. Further, if national interests should be relevant to regulation at state and local levels, then states are better positioned than localities to take into account those national interests because states cooperate with the federal government in a number of programs to manage environmental externalities.

^{79.} N.M. Code R. § 19.15.39.9 (2013).

1. Federal Interests in the Benefits of Fracking

The federal economic interests in hydraulic fracturing are undeniable. Onshore U.S. production of crude oil and petroleum products increased by more than 2 million barrels a day, from 7.6 million barrels to 9.6 million barrels, between February 2010 and February 2013. ⁸¹ Between 2011 and 2040, U.S. natural gas production is expected to increase from 23.51 to 33.87 quadrillion British Thermal Units. ⁸² This 44 percent increase will be almost entirely due to growth in shale gas production made possible by horizontal drilling and hydraulic fracturing. ⁸³ Recent prices of natural gas have been so low that the Department of Energy has been debating new exports of liquefied natural gas⁸⁴ at the same time chemical and other companies are relocating manufacturing facilities powered by natural gas back to the United States. ⁸⁵

Fracking may have national environmental benefits as well, at least in the short-term. The impact of fugitive methane emissions from oil and gas operations is debated, but the burning of natural gas generates 53 percent less greenhouse gas emissions than the burning of coal.⁸⁶

^{81.} U.S. Energy Info. Admin., *U.S. Field Production of Crude Oil and Petroleum Products*, http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTFPUS2&f=M (last visited Apr. 20, 2014).

^{82.} U.S. Energy Info. Admin., Annual Energy Outlook 2013 21(Apr. 2013), available at http://www.eia.gov/forecasts/aeo/pdf/0383(2013).pdf.

^{83.} *Id.* at 79. The nation's interest in increased production also extends to national security issues. The United States' historical reliance on foreign sources of energy has long been cited as a national security concern affecting the complexity of its involvement in international conflicts. For a general discussion of various energy and national security issues, see Michael A. Levi, *Energy Security: An Agenda for Research*, Council on Foreign Relations (June 2010), *available at* http://www.cfr.org/energy-policy/energy-security/p22427; *see also* Amy Myers Jaffe et al., *The Experts: How the U.S. Oil Boom Will Change the Markets and Geopolitics*, Wall St. J. (Mar. 27, 2013), *available at* http://online.wsj.com/article/SB10001424127887324105204578382690249436084.html.

^{84.} See Adam Eldean, Can the U.S. Control its Natural Gas?: International Trade Implications for Restrictions on LNG Exports, 54 Nat. Resources J. __ (2014).

^{85.} See Alex Ritchie, Scattered and Dissonant: The Clean Air Act, Greenhouse Gases, and Implications for the Oil and Gas Industry, 43 Envtl. L. 461, 495 (2013); John W. Miller, Cheaper Natural Gas Lets Nucor Factory Rise Again on Bayou, Wall St. J., Feb. 1, 2013, at B1 ("Chemical and fertilizer companies, which use gas as both a feedstock and energy source, say lower prices have reduced costs and made the U.S. a more competitive manufacturing location.").

^{86.} Ian J. Laurenzi & Gilbert R. Jersey, Life Cycle Greenhouse Gas Emissions and Freshwater Consumption of Marcellus Shale Gas, 47 Environ. Sci. Technol. 4896 (2013), available at http://marcelluscoalition.org/wp-content/uploads/2013/04/es305162w.pdf; see also Executive Office of the President, The President's Climate Action Plan 19 (June 2013) ("Burning natural gas is about one-half as carbon-intensive as coal, which can make it a critical "bridge fuel" for many countries as the world transitions to even cleaner sources of energy.").

Based on emissions reductions, even some environmentalists at one time or another have tacitly endorsed natural gas as a bridge fuel away from coal until the use of renewable sources becomes more widely accepted and economical.⁸⁷ The recent switch by power plants from coal-fired generation to natural gas-fired generation units⁸⁸ could be explained as purely an economic phenomenon, but will likely accelerate now that the President has made natural gas a key component of his Climate Action Plan to reduce U.S. greenhouse gas emissions.⁸⁹

2. Federal Interests in the Negative Externalities of Fracking

The federal government also has an interest in controlling negative environmental externalities associated with fracking, at least to the extent those externalities cause extraterritorial impacts. While the federal government has not promulgated a comprehensive regulatory regime that applies specifically to fracking, at least on non-federal lands, ⁹¹

- 87. See, e.g., Nat. Resources Defense Council, The Role of Natural Gas in America's Energy Mix (June 2012), available at http://www.nrdc.org/energy/files/energymixII.pdf ("Because power plants burning natural gas produce less air pollution than coal-burning plants, in the near term natural gas can actually serve to diminish a number of public health threats caused by generating electricity."); Zack Coleman, NRDC Chief: Fracking 'Most Complicated Thing I've Encountered', The Hill (June 11, 2013, 6:30 PM), http://thehill.com/blogs/e2-wire/e2-wire/304785-nrdc-chief-fracking-most-complicated-thing-ive-encountered (stating natural gas contains half the carbon content of coal, but it is still a fossil fuel).
- 88. In 2005, natural gas comprised 18.8 percent and coal comprised 49.6 percent of the feedstock fuel for electricity generation. In 2012, natural gas comprised 30.4 percent and coal comprised 37.4 percent. U.S. Energy Info. Admin., Short-Term Energy Outlook 20 (June 2013), available at http://www.eia.gov/forecasts/steo/archives/Jun13.pdf. U.S. natural gas is anticipated to fall to 27.6 percent for 2013 due to rises in natural gas prices. *Id*.
- 89. EXECUTIVE OFFICE OF THE PRESIDENT, *supra* note 86, at 6 ("The Environmental Protection Agency's proposal reflects and reinforces the ongoing trend towards cleaner technologies, with natural gas increasing its share of electricity generation in recent years, principally through market forces . . .").
- 90. "Extraterritoriality" is the effect of a law beyond its jurisdiction of origin. Stephen Michael Sheppard, The Wolters Klumer Bouvier Law Dictionary 412 (Compact ed. 2011).
- 91. On May 11, 2012, the Bureau of Land Management (BLM) published a proposed rule to govern hydraulic fracturing activities on federal lands that contained, *inter alia*, a well casing and flowback water management plan, and fluid disclosure requirements. Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27691 (May 11, 2012). On June 10, 2013, BLM published a revised rule that, *inter alia*, expanded trade secret protections for fluid chemicals modeled on regulations promulgated by the state of Colorado. Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 34611 (June 10, 2013). The rules were justified by U.S. Department of the Interior Secretary Sally Jewell in part because "The states vary in their understanding of hydraulic fracturing." *See* Mark Drajem, *Interior Chief Defends Federal Fracking*

the federal government regulates fracking in a number of ways, focusing on interstate activities consistent with its geographic and other interests.

The emission of air pollutants, now including greenhouse gases, ⁹² is regulated by the Environmental Protection Agency (EPA) under the Clean Air Act (CAA). ⁹³ Discharge of pollutants into the waters of the United States and into water treatment facilities is regulated under the Clean Water Act (CWA). ⁹⁴ The injection of produced water into underground injection wells is regulated under the Safe Drinking Water Act (SDWA). ⁹⁵ Oil and gas operations where endangered or threatened species might be located, or migratory birds might be affected, are subject to the Endangered Species Act ⁹⁶ and the Migratory Bird Treaty Act. ⁹⁷ Although subject to federal regulation and control, many of these programs, including the CAA title V air permitting program, the CWA national discharge elimination system permitting program, and the SDWA Class II injection well program, are routinely administered by states pursuant to federally-approved systems of "cooperative federalism."

Despite what may appear at first glance to be a comprehensive federal regulatory regime, Congress has provided for a number of statutory exemptions for the oil and gas industry. For example, while the SDWA controls injection of produced water from fracking, it contains an exemption for the fracking process itself.⁹⁹ Most oil and gas waste is exempt from the federal Resource Conservation and Recovery Act, which regulates the disposal of hazardous wastes.¹⁰⁰ This overlap of federal reg-

Regulations, Bloomberg (Jul. 17, 2013, 11:13 AM), http://www.bloomberg.com/news/2013-07-17/interior-chief-defends-federal-fracking-regulations.html.

- 92. See Massachusetts v. EPA, 549 U.S. 497 (2007); see generally Ritchie, supra note 85.
- 93. 42 U.S.C. §§ 7401 et seq.
- 94. Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (commonly referred to as the "Clean Water Act").
 - 95. See 42 U.S.C. §§ 300h-300h-8.
 - 96. 16 U.S.C. §§ 1531-1544.
 - 97. 16 U.S.C. §§ 703-712.
- 98. See Robert Fischman, Cooperative Federalism and Natural Resources Law, 14 N.Y.U. Envil. L. J. 179, 183 (2005).
- 99. In the Safe Drinking Water Act, the definition of "underground injection" was amended pursuant to the Energy Policy Act of 2005 to exclude "the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities." Pub. L. No.109-58, 119 Stat. 594, § 322 (codified at 42 U.S.C. § 300h(d)(1) (2012)).
- 100. RCRA specifically exempts "drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas . . ." 42 U.S.C. § 6921(b)(2)(A) (2006). The exemption does not apply to the transportation or manufacturing of materials used in the production of oil and gas. *See* Envil. Prot. Agency, Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazard-

ulations and exemptions means that specific regulation of the fracking process and of the management and disposal of fracking water and other drilling waste is primarily left to the states.

3. Implications for States

Particular to fracking, some commentators have taken the position that because Congress has chosen not to regulate certain aspects of the process, "policymakers in gas rich states . . . are under unusually high pressure to make difficult trade-offs between significant economic benefits and uncertain harms to public health and the environment" ¹⁰¹ The result, it is argued, is that hydraulic fracturing is under-regulated and that more regulation would allay fears and actually allow for more production. ¹⁰² To correct this problem, an "adaptive federalism" approach would overlap national and state jurisdiction to provide a system of checks and balances. ¹⁰³

While state legislatures certainly confront hard choices in balancing economic and other benefits against risk, environmental or otherwise, compromise in the face of competing interests is precisely a legislature's role. Legislatures must take into account economic concerns that directly and indirectly affect jobs, education, healthcare, and public services. So long as existing regulations are appropriately enforced, overlapping regulation may result in little benefit, but will increase deadweight transaction costs. In the presence of overlapping—but inevitably inconsistent—federal, state, and local requirements, industry must expend considerable effort to reconcile its compliance obligations.

Assuming there is an optimal governmental level (i.e. federal, state, or local) at which various aspects of oil and gas operations should be regulated, federalism scholarship may provide the policy mechanisms needed to resolve the state/local regulatory question. Professor David Spence recently examined a similar question between states and the federal government.¹⁰⁴ One federalism approach he discussed focuses on the geographic scope of the externalities, and he advocates for regulation at the lowest level of government that incurs the geographic costs and ben-

OUS WASTE REGULATIONS 5 (Oct. 2002), available at http://www.epa.gov/osw/nonhaz/industrial/special/oil-gas.pdf.

^{101.} Emily C. Powers, Note and Comment: Fracking and Federalism: Support for an Adaptive Approach that Avoids the Tragedy of the Regulatory Commons, 19 J. L. & Pol'y 913, 914 (2011).

^{102.} Id. at 915-16.

^{103.} Id. at 916-17.

^{104.} David B. Spence, Federalism, Regulatory Lags, and the Political Economy of Energy Production, 161 U. PA. L. REV. 431, 431–32 (2013).

efits of the regulated activity. Another approach provides for regulation at the federal level when the nation has a substantial interest in the regulated activity and in controlling or stimulating its development. Adopting the latter approach for the state/local question may be consistent with a state preemption analysis that seeks to identify significant state interests.

Professor Spence concluded that most aspects of the fracking process should be regulated at the state level, primarily because the most important impacts of shale production are matters of "local" concern. 107 When Professor Spence speaks of "local" concern, however, he does not generally differentiate between statewide concerns and concerns that primarily affect municipal or county-level interests. 108 The remainder of this Part seeks to draw some distinctions between these state and municipal or county concerns.

B. State and Local Economic Benefits of Oil and Gas Production

Like other states that face local bans and restrictions on fracking, New Mexico is representative of the state and local economic benefits associated with oil and gas production. An associate professor in economics at New Mexico State University recently estimated that in 2012 the oil and gas industry provided New Mexico a total of 68,800 direct and indirect jobs, or approximately 9 percent of state employment, and \$9.4 billion—representing approximately 11.6 percent—of state gross domestic product.¹⁰⁹ As these figures indicate, the state of New Mexico re-

^{105.} Id. at 462 (2013); see also Wallace E. Oates, Thinking About Environmental Federalism, Resources, 130 Resources For Future 14, 14 (1998).

^{106.} Spence, supra note 104, at 465.

^{107.} Id. at 507 ("For now, the better option is for the federal government to restrict its regulation of fracking to those aspects of the industry that produce interstate effects or implicate established national interests."). In contrast, there are many commentators who argue for more oversight by the federal government over hydraulic fracturing operations. For example, Professor Craig argues that the federal government should assume a larger role in the water policy questions arising in the context of the nexus between energy development and water use and disposal. See, e.g., Robin K. Craig, Hydraulic Fracturing (Fracking), Federalism, and the Water-Energy Nexus, 49 Idaho L. Rev. 241, 263 (2013); see also Emily C. Powers, Comment, Fracking and Federalism: Support for an Adaptive Approach that Avoids the Tragedy of the Regulatory Commons, 19 J. L. & Pol'y 913, 954 (2011) ("[A]n analysis of New York's experience with hydrofracking to date suggests that state primacy may well result in under-protection and even hamper production activity.").

^{108.} See generally Spence, supra note 104, at 506-508.

^{109.} C. Meghan Starbuck Downes, Economic Impact of New Mexico's Oil and Gas Industry 2012, 13, 25 (Jan. 3, 2013) (prepared for Brothers and Co. under a consulting agreement), available at http://www.energyadvancesnewmexico.com/files/nmog_update_2012.pdf.

lies heavily on the jobs and other general economic benefits generated by the oil and gas industry.

In addition to these general benefits, the New Mexico state government and local governments throughout the state (whether or not they have oil and gas production facilities) receive revenue from the oil and gas industry. This revenue is paid in the form of oil and gas lease bonuses and royalties; corporate income, gross receipts, and employment taxes; and five categories of taxes assessed by New Mexico specifically relating to oil and gas production. 110 For fiscal year 2011, revenue estimates prepared by the New Mexico Secretary of Finance and Administration indicate that approximately \$830 million in state general fund revenue was paid by the oil and gas industry for "emergency" school taxes, conservation taxes, federal leasing royalties, and state land office lease bonus payments.¹¹¹ When direct and indirect gross receipts tax, state corporate income tax, and other state taxes are added to that number, the contribution by the oil and gas industry to the New Mexico general fund in 2011 was about \$1.3 billion, or 25 percent of all state of New Mexico general fund revenues.¹¹²

This is not to say all economic benefits in a producing county are allocated statewide. In addition to the jobs and economic growth created in producing counties, the state Secretary of Finance and Administration also estimated for 2011 that the industry contributed \$357 million to New Mexico local governments directly through ad valorem taxes and indi-

^{110.} New Mexico assesses an oil and gas severance tax at the rate of 3.75 percent of the taxable value of most production, N.M. Stat. Ann. § 7-29-4(A) (2005); an oil and gas conservation tax at the rate of 0.43 percent (when the spot price of West Texas Intermediate crude is above \$70 barrel, otherwise 0.19 percent) of the taxable value of production, N.M. Stat. Ann. 1978, § 7-30-4(A)–(B) (2010); an oil and gas "privilege" (emergency school) tax at the rate of 3.15 percent of the taxable value of most oil production and 4 percent of the taxable value of most natural gas production, N.M. Stat. Ann. § 7-31-4(A) (2005); an oil and gas ad valorem production tax on the assessed value of oil and gas severed and sold from each production unit, see N.M. Stat. Ann. §§ 7-32-15; and an oil and gas production equipment ad valorem tax on equipment used in the production of oil and gas. See N.M. Stat. Ann. §§ 7-34-1 to 7-34-9.

^{111.} Thomas Clifford, PhD, N.M. Sec. of Fin. & Admin., Annual Meeting of the Independent Petroleum Association of New Mexico: Oil and Gas Industry Contribution to State and Local Revenues, 13 (Aug. 19, 2012), available at http://www.nmoga.org/wp-content/uploads/2012/10/OG-Contribution-to-State-Local-Revenues-Tom-Clifford1.pdf. Approximately 80 percent of oil and gas was produced in New Mexico on public lands. Thus, in addition to direct taxes, oil and gas producers in New Mexico pay significant lease royalties to the state (approximately \$420 million in fiscal year 2011), and even more significant royalties to the federal government (approximately \$800 million in fiscal year 2011), 49 percent of which the federal government distributed to the state. *Id.* at 4.

^{112.} Id. at 16.

rectly through other local taxes.¹¹³ Compared with the revenue that is distributed statewide, however, the tax revenue earned directly by producing counties is modest.

The state allocates the majority of direct tax, lease bonus, and other revenues paid by the oil and gas industry to non-producing and producing counties alike. Severance tax revenue is used by the state to retire bonds issued for the construction of public schools and government buildings, with any balance added to a severance tax permanent fund and then distributed to the general fund at a specified rate. The New Mexico land grant permanent fund (also referred to as the "permanent school fund") allocates distributions almost entirely to fund public schools and universities. In 2011, approximately 96 percent (or approximately \$395 million) of the \$411 million in contributions to the land grant permanent fund came from the oil and gas industry. In total, the permanent fund distributed almost \$536 million in 2011, \$446 million of which funded New Mexico public schools. Land grant permanent fund revenues fund approximately one-quarter of the budgets for the 89 public school districts in New Mexico.

Further, the reliance by the state of New Mexico on oil and gas revenues is not expected to decline anytime soon. Oil production in New Mexico from February 2010 to February 2013 increased by 46 percent, and is expected to rise over time. A recent national study predicts New Mexico job growth in the mining, quarrying, and oil and gas extraction industry will increase 38 percent from 2010 to 2020, the highest expected growth rate of any industry in the state. While one can debate the prudence of such extensive state reliance on one particular industry, the state's interest in the economic benefits of oil and gas production, wherever it occurs in New Mexico, is significant.

^{113.} Id.

^{114.} See N.M. Const. art. VIII, § 10; N.M. Stat Ann. § 7-27-27 (2001).

^{115.} See N.M. Const. art. XIII, §§ 1, 2; N.M. Stat Ann. 1978, § 6-8-1 (1997); N.M. Stat. Ann. § 19-1-17 (2005).

^{116.} See State of N.M. Inv. Council, Inv. Office, Fin. Statements, 51, Ex. 1 (June 30, 2011), available at http://www.sic.state.nm.us/PDF%20files/NM%20State%20Investment%20Council%20June%202011%20FS.pdf.

^{117.} See New Mexico State Land Office, http://www.nmstatelands.org (last visited Apr. 20, 2014).

^{118.} Associated Press, NM Sees Oil Production Jump 46%, Albuquerque J., May 21, 2013, 5:22 PM, available at http://www.abqjournal.com/201600/news/nm-sees-oil-production-jump-46-percent.html.

^{119.} Anthony P. Carnevale et al., Georgetown Univ. Public Policy Inst., Recovery: Job Growth and Education Requirements Through 2020, 70 (June 2013), available at http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/New%20Mexico2020.pdf.

C. Externalities: Environmental Risks

In addition to the economic benefits, governments also have an interest in externalities, namely the environmental costs imparted on societies by oil and gas operations. ¹²⁰ Some of the externalities associated with fracking include air pollution, water use, water contamination, and excessive traffic and noise pollution.

1. Air Pollution

As discussed above, air emissions from the production of oil and gas are regulated primarily at the federal level under the Clean Air Act (CAA) and by the states through "cooperative federalism" programs and other statewide regulation. ¹²¹ CAA regulation includes recently promulgated air emissions performance standards specific to the oil and gas industry. ¹²² The comprehensive manner in which the federal government and the states regulate air emissions evidences their intent for uniform standards that would be undermined by conflicting local emissions regulations.

2. Water Use

The use of water that would otherwise be available for competing uses is a highly publicized environmental cost of fracking. The debate over competing uses of water is especially heightened in an arid state, such as New Mexico, that is prone to drought and "megadrought," even when excluding effects of human-caused climate change. ¹²³ Industry claims that less than one-quarter of one percent of fresh water is used for oil and gas operations in New Mexico, but government experts claim the state lacks current data. ¹²⁴ It is at least clear that drought and arid climate severely impact competing water users such as farmers and industrial facilities in New Mexico, highlighting the added burden new fracking operations place on the state's water supply. ¹²⁵

^{120.} See supra note 27 and accompanying text.

^{121.} See supra notes 92–98 and accompanying text; see also Air Quality Control Act, N.M. Stat. Ann. §§ 74-2-1 to 74-2-17 (2006).

^{122.} Oil and Natural Gas Sector: New Source Performance Standards and National Emissions Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49490 (Aug. 16, 2012) (codified at 40 C.F.R. Parts 60 and 63).

^{123.} See Reed D. Benson, Federal Water Law and the "Double Whammy": How the Bureau of Reclamation Can Help the West Adapt to Drought and Climate Change, 39 Ecology L. Q. 1049, 1057 (2012).

^{124.} John Fleck, Increased Fracking Raises Water Supply Issue, Albuquerque J., Aug. 30, 2013, at C1.

^{125.} In the face of drought, some New Mexico farmers are selling supplemental water rights to oil and gas companies when the water available under their aggregate water

Texas, however, has gathered data on the use of water for fracking that informs the issue in New Mexico. A recent report found that in 2011, hydraulically-fractured vertical wells in the West Texas portion of the Permian Basin used on average more than one million gallons per well, while slick-water fractured horizontal wells used approximately five million gallons per well. Given the geographic and atmospheric similarities between the two areas, water use in the West Texas Permian Basin may provide an indication of water use in the Eastern New Mexico Permian Basin, the most prolific oil-producing area in New Mexico. Producing area in New Mexico.

The amount of water required for oil and gas operations, however, should be kept in perspective. In 2005, for example, irrigated agriculture accounted for almost 78 percent of total water withdrawals in New Mexico, 128 while oil and gas accounted for less than three-tenths of one percent. 129 Although the percentage of water use by the oil and gas industry likely has increased with the more prevalent use of hydraulic fracturing, more recent 2010 calculations for Texas estimated water use for the practice at only 0.5 percent of overall state use, 130 a number consistent with current industry assertions in New Mexico. At least in 2005, it appears that more water was used to keep golf courses green in the state of New Mexico than was used by the entire oil and gas industry. 131

rights is insufficient for crop irrigation. See id.; see also Stella Davis, Farmers Sell Well Water for Thirsty Fracking, Albuquerque J., Jul. 15, 2013, at BO 17.

- 126. Jean-Philippe Nicot, et al., Oil & Gas Water Use in Texas: Update to the 2011 Mining Water Use Report 13 (Sept. 2012), http://www.beg.utexas.edu/water-energy/docs/Final_Report_O&GWaterUse-2012_8.pdf [hereinafter, 2011 Texas Water Update]. Water use per well was defined as the amount of water used during a given fracturing operation on a given well. *See id.* at 6.
- 127. A number of western states increased oil production since 2010. See U.S. Energy Info. Admin. (May 21, 2013), http://www.eia.gov/todayinenergy/detail.cfm?id=11351 (showing gains in New Mexico production mostly from Permian Basin). The Permian Basin may not be the only important oil play in New Mexico in future years. Encana Corporation has apparently invested \$100 million in the Mancos play, a shale play in Northwestern New Mexico that may contain up to 60 billion barrels of oil. See Al Pickett, New Mexico: Land of Enchanting Opportunities, Permian Basin Petrol. Assn. Magazine, June 1, 2013, available at http://pbog.zacpubs.com/new-mexico-land-of-enchanting-opportunities/.
- 128. John W. Longworth, P.E. et al., N.M. Office of the State Engineer, New Mexico Water Use by Categories 2005, 17 (June 2008), available at http://www.ose.state.nm.us/PDF/Publications/Library/TechnicalReports/TechReport-052.pdf [hereinafter 2005 New Mexico Water Use Report].
- 129. *Id.* at 37 (calculating oil and gas as 24 percent of the mining industry category, which represented in total 1.52 percent of the total).
 - 130. 2011 Texas Water Update, supra note 126, at ii.
- 131. Data from the New Mexico Office of the State Engineer (on file with the author) shows that in 2005, an estimated 16,859 acre-feet of water was used by 55 of the state's 86 golf courses, with data unavailable for the remaining 31 golf courses that used either treated municipal effluent water or water from a municipal supply. In comparison, oil and

Importantly, this data indicates that water use involves societal choices about higher and better competing uses.

Further, with few exceptions, states, not local governments, determine and define water rights. ¹³² New Mexico, for example, follows the prior appropriations doctrine, ¹³³ which subjects the right to use water after statehood to permits issued by the State Engineer. ¹³⁴ In addition to the legal right of the state to administer the system for water withdrawals, states arguably have a policy interest superior to localities in determining whether certain uses should be prohibited or severely restricted. Because the withdrawal of water (much like oil and gas) is geographically constrained, states must allocate water across county boundaries to ensure varied uses for agricultural needs, personal and family use, commercial use, industrial use, and conservation needs, for both citizens and ecological systems statewide.

3. Water Contamination

Drinking water contamination is probably the most frequently cited environmental concern arising in connection with fracking, whether due to spills on the surface, underground spills caused by improper well casing or cementing, or migration from the shale rock to the underground aquifer. ¹³⁶

Chemical additives used in the "slick-water" process may (depending on the particular formation, geologic conditions, and technology employed) include hazardous pollutants such as methanol, ethylene

gas extraction consumed an estimated 0.3648 percent of total water withdrawn in New Mexico, representing 14,411 of the 3,950,398 acre-feet used by the entire state. Longworth Et Al., *supra* note 128, at 37, V.

- 132. Waters and Water Rights § 4.03 (Amy L. Kelly, ed., 3d ed. 2011).
- 133. N.M. Const. art. XVI, § 2; see also Bounds v. State ex. rel D'Antonio, 2013-NMSC-037, \P 44, 306 P.3d 457 (New Mexico Constitution does not mandate any particular permitting procedure, allowing the State Engineer to determine how domestic well permits are administered).
- 134. See N.M. Stat. Ann. § 72-1-3 (1961); N.M. Stat. Ann. § 72-5-1 (1941). Although the federal government through the Bureau of Reclamation is involved in water supply, hydropower, flood control, wildlife preservation, and other "project water" projects, see Benson, supra note 123 at 1053, federal jurisdiction over water rights historically has been limited to navigable surface waters and associated wetlands regulation under Congress' Commerce Clause authority, see Waters and Water Rights § 35.02 (Amy L. Kelly ed., 3d ed. 2011), and water rights that are reserved by Congress under its Property Clause authority, see id. at § 35.03.
- 135. See David Knowles, New Mexico County First to Ban Fracking, Citing Water Contamination Fears, New York Daily News, May 29, 2013, http://www.nydailynews.com/news/national/new-mexico-county-bans-fracking-article-1.1358049.
 - 136. See Shale Gas Primer, supra note 37, at 1.

glycol, naphthalene, and hydrochloric acid. ¹³⁷ Industry argues that the fracking fluid chemicals constitute only 0.5 percent of the injected fluid (with water and sand or other "proppant" making up the other 99.5 percent). ¹³⁸ On a one million gallon operation, however, 0.5 percent equates to 5,000 gallons of chemicals. Rather than the dangers associated with the types of chemicals or the concentration of chemicals injected, consider the evidence that fracking fluid actually contaminates groundwater.

Researchers at Duke University conducted four studies of water wells, three of which reported a higher incidence of methane in wells near shale gas production in the Marcellus Shale, and one study, in the Fayetteville Shale, which did not report higher methane levels. ¹³⁹ None of the Duke studies, however, found evidence of contamination from the chemicals in the fluids. ¹⁴⁰ Preliminary results from a new Department of Energy study (one that attached tracers to the injected fluids) found that the fracking fluids stay well below ground. ¹⁴¹

Assuming the accuracy of these findings, the release of methane, whether because of faulty well construction or natural processes, ¹⁴² appears to be a more predominant risk for water contamination than the chemicals contained in the fluids. Methane consumed in water appar-

^{137.} See Office of Research and Dev., Envil. Prot. Agency, Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources: Progress Report, 29 tbl. 11 (Dec. 2012) [hereinafter EPA Progress Report].

^{138.} See Shale Gas Primer, supra note 37, at 62.

^{139.} See Higher Levels of Stray Gases Found in Water Wells Near Shale Gas Sites, Duke Environment (June 24, 2013), http://www.nicholas.duke.edu/news/higher-levels-stray-gases-found-water-wells-near-shale-gas-sites [hereinafter, Duke Study Summary]; Study Finds No Evidence of Water Contamination from Shale Gas Drilling in Arkansas, Duke Environment (May 15, 2013), http://www.nicholas.duke.edu/news/study-finds-no-evidence-of-water-contamination-from-shale-gas-drilling-in-arkansas.

^{140.} See Duke Study Summary, supra note 139.

^{141.} See Initial Findings of the Department of Energy's Study on Groundwater Contamination from Hydraulic Fracturing, Penn State Extension, (July 29, 2013), http://extension.psu.edu/natural-resources/natural-gas/news/2013/07/initial-findings-of-the-department-of-energy2019s-study-on-groundwater-contamination-from-hydraulic-fracturing.

^{142.} The Duke scientists themselves indicated that poor casing and cementing problems, not hydraulic fracturing, are the cause of dissolved gas found in private water wells in Pennsylvania. Russell Gold, Sealing Cited in Leaks, Not Fracking, Wall St. J., June 26, 2013, at A3; see also R.D. Vidic et al., Structured Abstract: Impact of Shale Gas Development on Regional Water Quality, 340 Science No. 6134 (2013), available at http://www.sciencemag.org/content/340/6134/1235009.abstract. ("The most common problem with well construction is a faulty seal that is emplaced to prevent gas migration into shallow groundwater The incidence rate of seal problems in unconventional gas wells is relatively low (1% to 3%), but there is substantial controversy whether the methane detected in private groundwater wells in the area where drilling for unconventional gas is ongoing was caused by well drilling or natural processes.").

ently is not harmful,¹⁴³ but methane released in tap water could potentially ignite, presenting a fire or explosion risk.¹⁴⁴ While the media focuses on contamination from fracking fluid chemicals and methane, scientists may be as concerned with the total dissolved solids (including sodium, i.e. salt) in produced water and the related treatment options.¹⁴⁵

More should be known in a few years. EPA began planning an extensive study as to both surface and groundwater risks in 2010 and delivered a progress report in 2012. A draft report for peer review is expected to be delivered by the EPA in 2014, ¹⁴⁶ and a final report by 2016. ¹⁴⁷ EPA also conducted several high-profile investigations into potential groundwater contamination from fracking in places such as Pavillion, Wyoming, and Parker County, Texas, but those investigations have been marred by problems. ¹⁴⁸

In New Mexico, the NMOCD has adopted regulations to protect water sources from well integrity problems. NMOCD regulates well casing and tubing requirements to isolate water-bearing strata, 149 requires

- 143. Kenneth K. Eltschlager et al., Office of Surface Mining Reclamation and Enforcement, Technical Measures for the Investigation and Mitigation of Fugitive Methane Hazards in Areas of Coal Mining 37–38 (Sept. 2001), available at http://arblast.osmre.gov/downloads/Mine%20Gases%20and%20Dust/FINAL-Methane.pdf.
- 144. *Id.* Colorful images of tap water and garden hose water catching on fire have become the defining images for the anti-fracking Gasland documentary films. Gasland (International Wow Company 2009); Gasland 2 (International Wow Company 2013). The conservative media has argued these images have been faked. *See, e.g.,* Lachlan Markay, *Gasland Director Presents Anti-Fracking Hoax as Evidence in New Film,* Wash. Free Beacon (July 8, 2013, 10:00 AM), http://freebeacon.com/issues/gasland-director-presents-anti-fracking-hoax-as-evidence-in-new-film/.
- 145. See Sheila A. Olmstead et al., Shale Gas Development Impacts on Surface Water Quality in Pennsylvania, 110 Proc. Nat'l Acad. Sci. 4962, 4963 (2013) ("Average total dissolved solid (TDS) concentrations in shale gas waste range from 800 to 300,000 mg/L, typical ocean water concentration is 35,000 mg/L, and freshwater concentration is 100-500 mg/L").
- 146. Envil. Prot. Agency, EPA's Study of Hydraulic Fracturing and Its Potential Impact on Drinking Water Resources, http://www2.epa.gov/hfstudy (last visited Apr. 21, 2014).
- 147. See Bob Downing, EPA Study on Fracking Threat to Water Will Take Years, Akron Beacon J. (June 18, 2013, 11:11 PM), http://www.ohio.com/news/epa-study-on-fracking-threat-to-water-will-take-years-1.407046.
- 148. EPA issued a draft report in 2011 that linked contaminated groundwater in Pavillion, Wyoming to fracking. In 2012, the U.S. Geological Survey tried to replicate the results, but found unreliable data because of a poorly constructed monitoring well. In March 2012, EPA dropped its case against Range Resources alleging contamination in Parker County, Texas. See Mike Soragan, EPA Ends Water Pollution Case Against Range Resources, E&E Publishing, LLC (Mar. 30, 2012), http://www.eenews.net/eenewspm/stories/1059962302. In June 2013, EPA abruptly turned over its investigation to state officials. See Ellen M. Gilmer, EPA Abandons Investigation into Wyo. Water Contamination, E&E Publishing, LLC (June 21, 2013), http://www.eenews.net/energywire/2013/06/21/stories/1059983265.
 - 149. N.M. Code R. § 19.15.16.10(A) (2008).

cementing practices to be addressed in permits to drill,¹⁵⁰ and requires surface casing (the outermost layer of casing) to be cemented all the way to the surface unless an exception is granted.¹⁵¹ As to the treatment and handling of produced and flowback water, the NMOCD regulates the Class II Injection well program under the Safe Drinking Water Act (SDWA)¹⁵² and contains specific disposal requirements for produced water.¹⁵³

When spills occur, New Mexico regulations specify release notification and reporting requirements,¹⁵⁴ and require abatement of water pollution.¹⁵⁵ Finally, of the 21 states that regulate pits for the on-site storage of produced water and drilling wastes, New Mexico is one of 11 states that specify minimum liner-thickness requirements.¹⁵⁶ New Mexico also has siting requirements for pits.¹⁵⁷

While the risks of methane contamination and other risks will continue to be studied, the NMOCD provides data as to spills in New Mexico. NMOCD data shows that the oil and gas industry reported approximately 800 total spills in 2012 consisting of approximately 835,000 gallons of unrecovered brine and produced water and 190,000 gallons of unrecovered oil, condensate, diesel fuel, drilling mud, and "other" substances. Of those 800 reported spills, industry reported eight releases that impacted a waterway, representing a total of approximately 1,500 unrecovered gallons of produced water and 210 unrecovered gallons of

^{150.} See Oil Conservation Div., C-101, Application for Permit to Drill, Re-enter, Deepen, Plugback or Add a Zone, available at http://www.emnrd.state.nm.us/OCD/forms.html; see also, Oil Conservation Div., Form C-101 Instructions, available at http://www.emnrd.state.nm.us/OCD/forms.html.

^{151.} N.M. Admin. Code § 19.15.16.10(B) (2008); see also Peter Behr, Safety of Shale Gas Wells is Up to the States—and 'The Cement Job', E&E Publishing, LLC (Oct. 1, 2012), http://www.eenews.net/energywire/2012/10/01/1 ("The key to well integrity is a good cement job.").

^{152.} See N.M. Code R. §§ 19.15.26.1 to 19.15.26.15 (2008); see also Oil Conservation Div., New Mexico's Underground Injection Control (UIC) Program, available at http://www.emnrd.state.nm.us/OCD/documents/UICINJECTIONWELLBROCHURE.pdf.

^{153.} N.M. Code R. § 19.15.34.12 (2008).

^{154.} N.M. Code R. §§ 19.15.29.1 to 19.15.29.11 (2008).

^{155.} N.M. Code R. § 19.15.30.9 (2008).

^{156.} See N.M. Admin. Code § 19.15.17.11(F)(3), (G)(3), (J)(4); Nathan Richardson, Madeline Gottlieb, Alan Krupnick & Hannah Wiseman, State of State Shale Gas Regulation 50 (June 2013), available at http://www.rff.org/rff/documents/RFF-Rpt-Stateof-StateRegs_Report.pdf [hereinafter, State Shale Gas Report].

^{157.} N.M. Code R. § 19.15.17.10 (2008).

^{158.} Data was compiled by author from data available on the New Mexico Oil Conservation Commission website. *See Oil Conservation Div., Spill Search, https://www.apps.emnrd.state.nm.us/ocd/ocdpermitting//Data/Incidents/Spills.aspx* (last visited Apr. 4, 2014).

other materials. Industry also reported eight more releases that impacted groundwater, representing approximately 410 unrecovered gallons of diesel fuel and other materials. The reported spills that affected water supplies may not seem particularly significant, but opponents argue that any spill is too much, that industry may be underreporting spills, and that contamination from well integrity problems goes unnoticed. These arguments, however, are enforcement issues, not issues of underregulation.

As discussed in more detail below, stakeholders who desire no risk at all may view the State's regulations as insufficient. The salient question is whether local governments should be allowed to adopt more stringent ordinances when local residents disagree with decisions made at the state level. ¹⁶¹ Existing state regulations clearly evidence a statewide interest in controlling potential water contamination. One can debate the adequacy of those regulations, but not whether the state has exercised its authority to regulate to the degree that the state deems appropriate.

4. Traffic, Noise, and Other "Local" Externalities

Aspects of the oil and gas exploration and production process that generate primarily local effects, and for which the New Mexico state government has expressed no interest in regulating, include the local impacts of traffic, noise, light, and other visual impacts. Noise, for example, can occur from geophysical testing operations, road construction projects, fracking operations, and other equipment operation and repair. Many of these primarily local issues can be addressed with reasonable setback requirements between the well and a residence or other type of specified use, a common device in municipal regulations. Noise restrictions and landscaping and fencing requirements are also common, and appear reasonable and fairly related to local concerns. This is not to say the state could not seek to regulate such matters in furtherance of an interest in uniformity and regulatory certainty. Colorado, for in-

^{159.} Id.

^{160.} See, e.g., Mark Sardella, Ban Hydraulic Fracturing in New Mexico, Local Energy News (Mar. 10, 2013, 1:23 PM), http://www.localenergynews.org/news/2013/3/10/ban-hydraulic-fracturing-in-new-mexico.html.

^{161.} See infra Part IV.

^{162.} See David Persons, Noise Barriers Help Keep Sound Under Control, Greeley Trib., Feb. 24. 2013, available at http://www.greeleytribune.com/news/4940090-113/noise-oil-behr ens-tribune

^{163.} Bruce M. Kramer, Local Land Use Regulation of Oil and Gas Development 5-10 (Rocky Mt. Min. L. Fdn. 2008).

^{164.} *Id.* at 5–11.

stance, has developed statewide rules specifically aimed at noise levels, lighting, visual impacts, odors, and dust at drilling sites. 165

As to traffic, a 2010 North Dakota State University study estimated the total number of rig-related truck movements per well (for example, truck movements involved in the drilling of a well) at 2,024 oneway trips, 600 of which were attributable to inbound transportation of fresh water and outbound transportation of wastewater. The report also estimated that \$907 million would be required for investment in roads maintained by counties and townships in North Dakota from 2011 through 2030 to support oil and gas production. In response to the increased road impacts, some counties across the country have begun to assess impact fees on a per well basis to offset the cost of maintaining, repairing, and even improving county roads. Reasonable impact fees that are not recovered through other local taxes appear to be an appropriate response to such a burdensome, and primarily local, externality.

Local communities may also be concerned about the risk of a "boom and bust" cycle. The "boom" currently occurring in Southeast New Mexico, for example, has already increased the demand for housing, which may lead to price inflation, making affordable housing more scarce for non-industry residents. To Extreme growth can lead to oversupply in excess of demand when industry retreats, causing real estate devaluation. Local communities might address the risk of such cycles by reinvestment of local gains during the "boom" cycle to mitigate the risk of future downturns.

5. The Adequacy of New Mexico Regulation

One could argue that local oil and gas drilling bans are attempts to fill a void left by insufficient federal and state oil and gas regulation. As exploration and production operations spread throughout the nation,

^{165.} See Colo. Code Regs. § 801 to 805 (Aug. 1, 2013).

^{166.} Upper Great Plains Transp. Inst., N.D. St. Univ., Additional Road Investments Needed to Support Oil and Gas Production and Distribution in North Dakota 13 (Dec. 9, 2010), available at http://www.ugpti.org/resources/downloads/2010-12_roadin vestment.php.

^{167.} Id. at vi.

^{168.} See John Fryar, Boulder County will Asses Fees on Oil and Gas Industry Vehicles, Longmont Times—Call (May 18, 2013, 8:14 PM), http://www.timescall.com/news/longmont-local-news/ci_23262255/boulder-county-will-assess-fees-oil-and-gas.

^{169.} See, e.g., Jerry Pacheco, Small N.M. Cities Learn Boom-Bust Lessons, Albuquerque J., June 24, 2013, available at http://www.abqjournal.com/213684/biz/small-nm-cities-learn-boombust-lessons.html.

^{170.} See Stella Davis, Experts: Oil-Driven Growth to Continue in Southeastern New Mexico, EL Paso Times, Aug. 27, 2013, available at http://www.elpasotimes.com/newmexico/ci_239 53178/experts-oil-driven-growth-continue

those communities with drilling operations in place may bear a disproportionate brunt of the associated externalities, including economic booms and busts, increased truck traffic, noise, light, and emissions attendant with any industrial operations. At the same time, local communities may be concerned with perceived threats to water supplies from increased water use, the potential for methane leaks, and the potential for spills.

In response, some oil and gas conservation agencies are moving toward more active regulation of hydraulic fracturing operations. ¹⁷¹ Colorado, for example, recently amended its rules to require groundwater sampling both before and after drilling operations. ¹⁷² In comparison, New Mexico recently relaxed requirements for waste pits to, among other changes, allow for large multi-well management pits. ¹⁷³ Overall, however, the environmental protections afforded by New Mexico laws and regulations appear at least somewhat above average. A recent report comparing oil and gas regulations in all producing states looked at 20 regulatory elements. New Mexico regulates 18 elements, compared to an average of 15.6 elements. ¹⁷⁴ Only New York and West Virginia regulated all 20 elements, while Texas regulated 17 elements. ¹⁷⁵ New Mexico was in the average range as to the stringency of the regulated elements. ¹⁷⁶

In summary, there are a number of public concerns with fracking. Many of those concerns are regulated by the federal government where it has an interest in nationwide standards. Many of those concerns also have been regulated, or at least considered for regulation, at the state level, although one could debate the adequacy of such regulations. As explained in the next Part of this article, when local interests conflict with statewide interests, policy considerations generally favor state preemption.

IV. POLICY RATIONALES FOR LIMITING LOCAL GOVERNMENT REGULATION OF OIL AND GAS

A view of New Mexico as under-regulating fracking (whether because regulations are not as stringent as the most stringent regulations of

^{171.} See Bruce M. Kramer, Federal Legislative and Administrative Regulation of Hydraulic Fracturing Operations, 44 Tex. Tech L. Rev. 837, 862 (2012).

^{172.} See Amy Wegner Kho, Groundwater Sampling Rules in Colorado, U. Denv. Water L. Rev. (Sept. 25, 2013), http://duwaterlawreview.com/groundwater-sampling-rules-in-colorado/.

^{173.} Oil Conservation Div., Order and Statement of Reasons, No. R-13506-D (2013).

^{174.} See State Shale Gas Report, supra note 156, at 12–13.

^{175.} Id

^{176.} Id. at 16-21.

other states or because New Mexicans desire more stringent regulations) would seem to invite regulations or bans by counties that bear the brunt of oil and gas drilling operations. These counties, after all, are faced with a disproportionate share of the externality costs of fracking, relative to its benefits. That view, however, does not explain why cities and counties with no drilling activity to speak of are leading the charge to ban oil and gas production. This Part examines some of the potential explanations why non-producing counties may seek to ban or severely restrict oil and gas production.

A. The Free-Rider Problem

Environmental regulation is considered economically efficient when the marginal cost of the environmental damage caused by one additional unit of pollution equals the marginal cost of controlling that damage. At some point, however, the marginal benefit of reducing pollution even further will exceed its marginal cost. One way that costs might be internalized by an industry that generates negative externalities is through direct regulation. Another way is through a taxation system that influences industrial activity through incentives and disincentives. In addition to raising revenue, which creates a public benefit, tax systems may also be used to address equity principles or, in the case of environmental harms, to fairly distribute environmental costs. However, when counties are permitted to ban or severely limit oil and gas production,

^{177.} See Spence, supra note 104, at 495-96.

^{178.} Ashford & Caldart, supra note 25, at 132.

^{179.} A cost-benefit analysis is the process of assigning costs and benefits of a proposed course of action in terms of dollars. Frank Ackerman, Lisa Heinzerling & Rachel Massey, *Applying Cost-Benefit to Past Decision: Was Environmental Protection Ever a Good Idea?*, 57 Admin. L. Rev. 155, 155 (2005). Some scholars argue against the application of cost-benefit analysis to environmental requirements because it "distorts, misrepresents, and narrows the priceless values of life, health, and nature, and belittles the widespread concern for the well-being of future generations," *id.* at 157, or because the data is "almost comically meaningless." Lisa Heinzerling, *Markets for Arsenic*, 90 Geo. L. J. 2311, 2313 (2002). Others argue that even a cost-benefit analysis using indeterminate numbers may be a valuable tool to think about risk or to organize disparate information. *See* Cass R. Sunstein, *In Praise of Numbers; A Reply*, 90 Geo. L. J. 2379, 2382 (2002); *see generally* Kenneth J. Arrow et al., *Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?*, 272 Sci. 221, 221–22 (1996).

^{180.} Ashford & Caldart, *supra* note 25, at 880 (defining direct controls and indirect controls).

^{181.} *Id.* at 916. Tax policy is only one type of indirect control, or incentive structure, that may be used to influence behavior. *See generally id.* at ch. 12.

^{182.} Id.

free-rider economics problems arise from the arguably unfair distribution by the state of oil and gas tax revenues and royalties.

As previously discussed, the total contribution to state government general fund revenue from oil and gas in 2011 was approximately \$1.3 billion, ¹⁸³ with an additional \$395 million that was contributed by oil and gas to the land grant permanent fund for statewide schools and universities. ¹⁸⁴ Production of oil and gas in New Mexico, however, occurs in only nine counties ¹⁸⁵ with a combined population of approximately 462,000 residents out of an entire state population of approximately 2 million. ¹⁸⁶ Oil and gas revenue collected directly by local governments totaled only \$357 million, or approximately 17 percent of the statewide government revenue generated from oil and gas in 2011. ¹⁸⁷

The vast majority of state revenue attributable to oil and gas production thus enures to the benefit of the entire state. Assuming statewide revenues are allocated in a roughly proportional manner based on population, most of this revenue is therefore diverted away from producing counties to non-producing counties. At the same time, local externality costs are borne only by the counties where oil and gas production occurs. The result is that highly disproportionate net benefits flow from producing counties to non-producing counties. Put another way, a county in New Mexico that bans oil and gas production has the ability to capture its proportionate statewide share of the benefits of drilling in other counties and essentially "free-ride" on other counties that bear the brunt of local-level negative externalities.

Mora and other counties that ban production might argue that the externality costs are simply too high to bear. The higher the expected costs of externalities, however, the wider the disproportionate impact on producing counties. One might then expect those New Mexico counties that bear the disproportionate cost of oil and gas production, such as Eddy, Lea, or Chaves Counties, to be the very counties that ban or severely restrict drilling, but that simply has not occurred. These produc-

^{183.} See supra text accompanying note 112.

^{184.} See supra text accompanying note 116.

^{185.} The Economic Impact Report states that oil and gas production occurs in the following nine New Mexico counties: Eddy, Lea, McKinley, Rio Arriba, Roosevelt, Sandoval, San Juan, Chaves, and Colfax. Downes, *supra* note 109, at 5.

^{186.} The United States Census reports the estimated 2012 populations of the following counties respectively: Eddy County, 54,435; Lea County, 66,165; McKinley County, 72,726, Rio Arriba County, 40,302; Roosevelt County, 20,318; San Juan County, 128,340; Chaves County, 65,727; Colfax County, 13,243; and Mora County, 4,701; and a total New Mexico population of 2,083,540. U.S. Dep't. of Commerce, U.S. Census Bureau, State & County QuickFacts, New Mexico, http://quickfacts.census.gov/qfd/states/35000.html.

^{187.} See supra text accompanying note 113.

^{188.} See supra Part III.C.4.

ing counties, therefore, must not view such externality costs as unacceptably exorbitant.

There certainly are valid arguments that drilling should be sited in such a manner to preserve valuable resources, including visual and recreational resources, wildlife, water, and cultural and historical resources. To the extent that individual counties are permitted to ban oil and gas production, however, those counties that do ban production arguably should be required to pay producing counties, or at least forgo all or some portion of the generated tax and royalty revenue, in exchange for the protection of their resources. 189 Such an approach would align with a Coasean view of economic theory, applying market factors to determine the extent to which conservation or production is the highestvalue use of the resource. 190 Otherwise, non-producing counties are incentivized to prohibit future production and free-ride on the economic benefits generated in producing counties. Over time this inequity may lead to county-versus-county conflict. The alternative, of course, would be to allow the state to decide what special places should be off-limits for oil and gas production, thereby prohibiting local governments from banning or zoning-out oil and gas operations.

B. Public Choice Theory Explanation

Despite problems of economic efficiency and fairness, counties and cities may nevertheless seek to justify their decisions to ban production based on the expressed will of the people. Consider, however, whether these justifications hold true in light of "pluralist" views of representative democracy that are advanced by some public choice theorists.

Public choice theory, and its examination of the impact special interest groups have on the political process, is a hybrid scholarly endeavor involving economics and political science that arose from relative

^{189.} Thirty New Mexico Republican legislators recently sent the Governor a letter requesting that state funding for projects in counties and municipalities be conditioned upon allowing oil and gas drilling. The Governor denied the request. *See Gov. Urged to Link Local Drilling Rules to Funding*, Albuquerque J., Feb. 16, 2013, at A4.

^{190.} See Ashford & Caldart, supra note 25, at 174–75. In contrast to a Coasean view, where industry and local residents would negotiate for the use of a resource, a strict version of the Polluter Pays Principle would require industry to absorb the costs of externalities. Id. Even if most local externality costs could somehow be absorbed in practice (a dubious proposition), the imposition of an additional "tax" in local communities to compensate for such externality costs would double-penalize industry so long as it continues to pay production taxes that are allocated statewide. Given the elastic demand for crude oil, drilling rigs would likely relocate to producing states with lower tax rates, thus lowering New Mexico statewide revenues and implicating statewide budgets.

obscurity when scholar James Buchanan won the Noble Prize in economics in 1986.¹⁹¹ Many public choice theorists have focused on the way in which special interest groups, especially well-funded special interest groups, and other minority factions may exert disproportionate influence in policy-making choices by legislatures.¹⁹²

A "pluralist" view of society under public choice theory holds that "[t]he basic assumption is that taxes, subsidies, regulations, and other political instruments are used to raise the welfare of more influential pressure groups." Early economic pluralists tended to focus on the power of corporations, which are assumed to be better organized, more focused on lobbying efforts, and better financed. More recent scholarship, however, rejects the view that group control is a simple formula, concluding that the less advantaged can benefit from the activities of narrower groups. Early economic pluralists tended to focus on the power of corporations, which are assumed to be better organized, more focused on lobbying efforts, and better financed. The formula concluding that the less advantaged can benefit from the activities of narrower groups.

Public choice economists generally assume that most persons are self-interested actors. It follows, then, that the key driver in legislative policymaking is that representatives are "interested in getting reelected—indeed, in their role here as abstractions, legislators are interested in nothing else." Mancur Olson used this notion of self-interest to attempt to explain the influence of public interest groups from an economic perspective. ¹⁹⁷ Under Olson's theory, while it may be difficult to

^{191.} See Daniel A. Farber & Philip P. Frickey, Law and Public Choice: A Critical Introduction 10 (1991) [hereinafter Introduction to Public Choice].

^{192.} See id. at 21-33.

^{193.} Gary S. Becker, A Theory of Competition Among Pressure Groups for Political Influence, 98 Q. J. Econ. 371, 373–74 (1983); see generally Jonathan R. Macey, Public Choice; The Theory of the Firm and the Theory of Market Exchange, 74 Cornell L. Rev. 43 (1989); see also Cass R. Sunstein, Interest Groups in American Public Law, 38 Stan. L. Rev. 29, 48 (1985) (discussing "mounting evidence that the pluralist understanding captures a significant component of the legislative process and that, at the descriptive level, it is far superior to its competitors.")

^{194.} This idea is associated with George Stigler, who opined that regulation is effectively acquired by industry and designed and operated primarily for its economic advantage. George J. Stigler, *The Theory of Economic Regulation*, 2 Bell J. Econ. & Mgmt. Sci. 3, 3 (1971). *See also* Charles E. Lindblom, Politics and Markets: The World's Political-Economic Systems 5 (1977) (theorizing that under American law, the corporation is treated as a person, but it has much more powerful than ordinary citizens in market-based systems).

^{195.} See Kay Scholzman & John Tierney, Organized Interests and American Democracy 403 (1986), for a comprehensive study of interest group politics.

^{196.} David R. Mayhew, Congress: The Electoral Connection 13 (1974). A more descriptive view opines that legislators have mixed motives that include reelection, gaining influence, and making good policy choices. *See* Richard Fenno, Congressmen in Committees I (1973).

^{197.} See generally Mancur Olson, The Logic of Collective Action: Public Goods and the Theory of Groups (1965).

organize large groups of individuals to advance a particular cause, small groups of individuals seeking benefits for themselves are more likely to dominate political activity at the expense of the public as a whole.¹⁹⁸ While legislators probably craft policy based on some mix of ideological beliefs, public interest group pressure, and other self-interested motivations that vary from issue to issue and legislator to legislator,¹⁹⁹ the Mora County ordinance may be a case of small group-pressure liberalism driving policy decisions.

According to a resident group with a long history of community involvement in advancing environmental goals in Mora County, the "cookie-cutter" ordinance was adopted at a special meeting of the County Commission in advance of the next scheduled regular meeting, and most of the speakers who testified before the Commission were not Mora County residents, but instead were described as "parachute organizers." This is not to say most residents favored oil and gas drilling in their county. Instead, many residents appear to have wanted a "timeout" under a continued moratorium while they further educated themselves on an ordinance appropriate for the county. ²⁰¹

Concerned Citizens [] will not stand for Mora County being used, and we are disappointed by what should be a victory for Mora County A 33-month moratorium would have allowed the residents, workers, and landowners of Mora County to develop an ordinance best for our county. But, we were robbed of that right by the Democracy School based in Pennsylvania, outside liberal environmental interests employing activist drones into our county, and inside political opportunism. ²⁰²

Shortly after this community rights ordinance was adopted, Mora County sent out a letter on county letterhead to other county commissioners in the state, urging them to adopt a similar law. The letter was rebuffed by the chairman of the Chaves County Commission, citing the contributions of the oil and gas producing counties to the overall state

^{198.} See Introduction to Public Choice, supra note 191, at 40–41 (discussing Olson, supra note 197, at 132-34).

^{199.} Introduction to Public Choice, supra note 191, at 13, 17.

^{200.} Sofia Martinez, 'Parachute Organizers' Hurt County's Interests, Albuquerque J., June 16, 2013, available at http://www.abqjournal.com/211175/north/parachute-organizers-hurt-countys-interests.html. Although the author could not find a good definition of "parachute organizers," in context the word appears to mean a group of organizers that do not reside or originate in a jurisdiction, but that come to such jurisdiction for the purpose of changing the law in that jurisdiction to serve its cause. See id.

^{201.} Id.

^{202.} Id.

budget.²⁰³ Mora County Commissioner John Olivas, meanwhile, stated that he had no problem accepting oil and gas revenue from those operations located in producing counties,²⁰⁴ prominently highlighting the free-rider problem.

Despite running for the commission on an environmental platform, Commissioner Paula Garcia refused to sign the Mora County ordinance, citing its questionable legality. ²⁰⁵ CELDF then asserted its political pressure in response to her refusal, demanding that she resign. She did not. Commissioner Garcia stated that the county "never really had an open discussion about it," and that "she is not comfortable with the CELDF using the county as its 'soapbox.'" Legality, however, does not appear to have concerned CELDF, even if the defense of the ordinance burdened the county financially. ²⁰⁷ In contrast, some in the community actually believed that oil and gas could have provided much needed jobs; instead, much of the "community" appears to have been excluded from the decision-making process and overshadowed by an out-of-state interest group promoting national goals "no matter what the cost." ²⁰⁹

C. Successful Failure as Motivation

It may help explain why CELDF would push Mora County to adopt its extreme ordinance by comparing this effort to other seemingly futile attempts to challenge legal authority. For example, Professor Robert Fishman and Jeremiah Williamson artfully described how the "successful failure" of the *Kleppe v. New Mexico*²¹⁰ litigation coalesced into the

^{203.} See Marita Noon, A Vote for Permanent Poverty, Townhall Fin., May 26, 2013, http://finance.townhall.com/columnists/maritanoon/2013/05/26/a-vote-for-permanent-poverty-n1606537/page/full.

^{204.} Id.

^{205.} T.S. Last, *Group Seeks to Prohibit Fracking*, Albuquerque J., Sept. 27, 2012, *available at* http://www.abqjournal.com/133631/north/group-seeks-to-prohibit-fracking.html. When Major Alfonso Ortiz refused to sign a similar ordinance in Las Vegas, New Mexico, due to similar concerns of legality, community organizers confronted him wearing black T-shirts with the message "sign or resign." *Id.*

^{206.} Reese, *supra* note 11 (quoting Commissioner Paul Garcia).

^{207.} Id.

^{208.} *Id.* (quoting Mora County resident Audrey Keller, "I kind of feel like a few people took the power out of our hands," she said. "It just doesn't seem like a democracy here at all.").

^{209.} See Kay Matthews, Commentary on the Mora County Ordinance Banning Oil and Gas Development, La Jicarita, June 4, 2013, http://lajicarita.wordpress.com/2013/06/04/commentary-on-the-mora-county-ordinance-banning-oil-and-gas-development/.

^{210.} Kleppe v. New Mexico, 426 U.S. 529 (1976). Kleppe involved the unsuccessful challenge by the State of New Mexico of the Wild Free-Roaming Horses and Burros Act, which diminished state jurisdiction and rancher influence over public rangelands. *See generally*

Sagebrush Rebellion²¹¹ and the more recent "wise use" and "states rights" movements.²¹² According to Fishman and Williamson, these political movements of "uncooperative federalism" have served as powerful political tools for candidates who claim to represent private property rights against challenges from the federal government.²¹³

As to the protected interests involved, the Sagebrush Rebellion may appear antipodean to the Mora County ordinance. In the name of "private property," the Sagebrush Rebellion sought to elevate the private interests of ranchers and landowners over federal government authority of public lands. ²¹⁴ In contrast, the Mora County ordinance seeks to elevate the rights of individuals and ecological systems over private interests in oil and gas ownership and development. Further, the Sagebrush Rebellion represented a challenge to federal authority, while the Mora County ordinance is a local challenge to higher governmental authority of any kind.

Still, the Sagebrush Rebellion presents a helpful analogy for the proposition that political actors take positions that unreasonably challenge higher authorities in support of advancing political goals.²¹⁵ Why else would an admittedly small legislative body vote in favor of an action its members knew was illegal and potentially costly to the taxpayers of their jurisdiction? When considering a similar community rights ordinance, the Las Vegas, New Mexico City Attorney told the City Council that its ordinance was illegal before it was adopted,²¹⁶ and presented the City Council with the option to ban hydraulic fracturing without the legally suspect community rights language.²¹⁷ The City Attorney also told the City Council that the ordinance was so outrageous that an insurer

Robert L. Fishman & Jeremiah I. Williamson, *The Story of Kleppe v. New Mexico: The Sagebrush Rebellion as Un-Cooperative Federalism*, 83 U. Colo. L. Rev. 123 (2011).

^{211.} The Sagebrush Rebellion has been described as the conservative political movement in Western states in response to the increased assertion of control by the federal government over the vast public resources in those states. *See id.* at 125–26.

^{212.} See generally id. The term "wise use" is used to define the more recent movements to the earlier movements of the Sagebrush Rebellion, although both come under the banner of "states rights." See Robert B. Keiter, Keeping Faith with Nature: Ecosystems, Democracy, and America's Public Lands (2003) (discussing wise use movement).

^{213.} Fishman & Williamson, supra note 210, at 171.

^{214.} See id.

^{215.} See Lora Lucero, Another Perspective—A Revolution of the Spirit, Law Vegas Optic (July 21, 2013, 3:21 PM), http://www.lasvegasoptic.com/content/another-perspective-revolution-spirit.

^{216.} Las Vegas Council Minutes, supra note 17.

^{217.} Id. at 4.

would not defend the city or cover any judgments against the city relating to the ordinance.²¹⁸ The City Council adopted the ordinance anyway.

Alternatively, such ordinances could be described as an attempt by CELDF and its supporters to both raise political interest in the banning of oil and gas development and to elevate its own agenda and status. CELDF actually hopes the Mora County ordinance will be challenged in court.²¹⁹ The statement of the sponsor of the Las Vegas ordinance, Councilor Andrew Feldman, summed up the sentiment that "the success or failure of the ordinance is not going to be measured by court victories, but by how many other municipalities follow Las Vegas,"²²⁰ echoing the rhetoric of the CELDF democracy school.²²¹

Based on its asserted position, CELDF may claim victory, even though it may turn out to be nothing more than a "successful failure." 222 When and if the Mora County ordinance is challenged and struck down in court, CELDF will likely assert that it was right all along—that state and federal governmental institutions, including the judiciary charged with defending individual rights, want nothing more than to restrict the freedoms of local citizens and their ability to self-govern. A sufficient backlash, according to the argument, could lead the judiciary to soften the preemption doctrine to allow more local government control over the interstices between permissible and impermissible regulation.²²³ Of course, this argument fails to recognize the tradeoffs—including the legal, financial, and social benefits-involved in being part of a larger democratic state and country.²²⁴ It also fails to recognize the interests of local county residents who may bear a portion of the defense costs or the interests of landowner county residents who might benefit financially from oil and gas leasing transactions.

D. Cooley, Dillon, and Problems of Localism

The doctrine that U.S. localities have an inherent right to self-government, and the foundation for the principles of the CELDF, can be at-

^{218.} Id. at 2.

^{219.} Reese, supra note 11.

^{220.} Las Vegas City Council Minutes, supra note 17, at 2.

^{221.} See supra note 52 and accompanying text.

^{222.} See Fishman and Williamson, supra note 210, at 174 (quoting Eve S. Weinbaum, To Move a Mountain: Fighting the Global Economy in Appalachia 8, 10 (2004)) ("Nonetheless, Weibaum's research illustrates how disparate but organized, aggressive, [and] confrontational social movements can build institutions, activist networks, and long-term coalitions in losing battles, which created the conditions for later success.").

^{223.} See Jessica Bulman-Pozen & Heather K. Gerken, Uncooperative Federalism, 118 YALE L. J. 1256, 1302–03 (2009).

^{224.} See Lucero, supra note 215.

tributed to the 1871 concurring opinion of Justice Thomas Cooley in *People ex rel. Leroy v. Hurlbut*.²²⁵ Cooley, a treatise writer,²²⁶ was a Michigan justice, professor, and eventually the chairman of the Interstate Commerce Commission.²²⁷ In *Hurlbut*, the Michigan Supreme Court considered an act of the state legislature to create in the city of Detroit a Board of Public Works whose members were given permanent appointments.²²⁸ Although Cooley had no problem with the state creating the Board and even appointing its initial members, Cooley's dictum supported the unanimous decision of the court against the state's authority to grant permanent appointments to officials regulating city operations.²²⁹ In what has become a famous quote, Cooley stated:

The state may mould local institutions according to its views of policy or expediency; but local government is a matter of absolute right; and the state cannot take it away. It would be the boldest mockery to speak of a city as possessing municipal liberty where the state not only shaped its government, but at discretion sent in its own agents to administer it; or to call that system one of constitutional freedom under which it should be equally admissible to allow the people full control in their local affairs, or no control at all.²³⁰

Underlying these words is the notion that when drafting constitutions, the framers assumed principles of local self-governance, whether or not expressly stated, as an implied restriction on legislative power.²³¹ Cooley himself, however, failed to consistently defend the doctrine,²³² appeared to retreat from it,²³³ and likely never intended to imply unbridled powers

^{225. 24} Mich. 44, 93 (1871) (Cooley, J., concurring).

^{226.} See Thomas M. Cooley, A Treatise on the Constitutional Limitations (8th ed. 1927).

^{227.} Edwin A. Gere Jr., Dillon's Rule and the Cooley Doctrine: Reflections of Political Culture, 8 J. Urb. Hist. 271, 281 (1982).

^{228.} Hurlbut, 24 Mich. at 53 (Christiancy, J., opinion of the court).

^{229.} *Id.* at 108 (Cooley, J., concurring) ("The difficulty here is, that the appointments made by the legislature are for full terms, and do not assume to be provisional.").

^{230.} Id. at 108.

^{231.} Alan R. Jones, The Constitutional Conservatism of Thomas McIntyre Cooley: A Study in the History of Ideas 197 (1987).

^{232.} Cooley's own treatise, originally published in 1868 and republished by Cooley himself in subsequent editions through 1896, states: "The people of the municipalities, however, do not define for themselves their own rights, privileges, and powers . . . the local authorities can exercise those [powers] only which are expressly or impliedly conferred, and subject to such regulations or restrictions as are annexed to the grant." Cooley, *supra* note 226, at 391.

^{233.} Later Cooley opinions retreated to more accepted notions of the state/local relationship. See Bd. of Park Comm'rs of Detroit v. Common Council of Detroit, 28 Mich. 228,

of local self-government.²³⁴ In the end, the contrary "Dillon Rule" won out, subject only to the protections provided by municipal "home rule."²³⁵ Local governments thus have enjoyed only limited rights to self-government, other than the rights expressly or specifically implied by state statutes.²³⁶

The Dillon Rule can be traced to John Dillon—a state and federal judge, corporate lawyer, and president of the American Bar Association²³⁷—who in 1872 authored one of America's most famous treatises on municipal corporations.²³⁸ "Dillon's Rule" began as dictum in an Iowa Supreme Court legal opinion, explaining the court's unanimous decision holding that the Iowa legislature had the power to authorize and direct the construction of a railroad through the city of Clinton over the city's

240 (1873) ("We intended [in Hurlbut] to concede most fully that the State must determine for each of its municipal corporations the powers it should exercise, and the capacities it should possess, and that it must also decide what restrictions should be placed upon these."); People ex rel. Att. Gen. v. Common Council of Detroit, 29 Mich. 108, 109 (1874) (expressing his "serious embarrassment" as to the claim by the city of a constitutional right of self-government "because of the manifest impossibility of indicating any distinct boundary to the powers which may lawfully be exercised by the Legislature in matters of local concern" and deferring to the legislature's judgment); Jones, supra note 231, at 198 (discussing decision); Port Huron v. McCall, 46 Mich. 565, 574 (1881) ("There is a principle of law that municipal powers are to be strictly interpreted; and it is a just and wise rule. Municipalities are to take nothing from the general sovereignty except what is expressly granted."). Cooley's opinion in *Hurlbut* was ultimately based not on inherent rights, but on the language of Article 15, Section 14 of the state constitution, providing that: "[J]udicial officers of cities and villages shall be elected; and all other officers shall be elected or appointed." Hurlbut, 24 Mich. at 104 (Cooley, J., concurring). Cooley concluded this language provided for initial appointment by the legislature and subsequent election by municipal voters. Id.

234. Professor Gere explains: "[T]he Cooley Doctrine was never meant by Cooley to be a carte blanche for local governments. Inherent rights did not mean, to him, a denial of the fundamental state/local relationship. His view, rather, was that within this relationship there existed numerous purely local issues, of no consequence to the state, which were inherently the right of cities and towns to decide for themselves." Gere, *supra* note 227, at 295. In contrast, David Barron argues that Cooley would allow judicial deference to state control, but that judicial intervention was justified to protect against state interference that favored private corporations or private political parties over neutral, public self-governance in accordance with constitutional requirements of equality. David J. Barron, *The Promise of Cooley's City: Traces of Local Constitutionalism*, 147 U. P.A. L. Rev. 487, 520–22 (1999).

235. See infra Part V.B.

236. Howard Lee McBain, The Doctrine of an Inherent Right of Local Self-Government, 16 Colum. L. Rev. 190, 216 (1916).

237. Gerald E. Frug, The City as a Legal Concept, 93 HARV. L. Rev. 1059, 1109 (1980); see generally Gere, supra note 227.

238. John F. Dillon, Treatise On the Law of Municipal Corporations (1st ed. 1872).

objections.²³⁹ Judge Dillon expanded upon the idea of state control over municipal corporations in his treatise:

It is a general and undisputed proposition of law that a *municipal corporation possesses and can exercise the following powers, and no others*: First, those granted in *express words*; second, those *necessarily or fairly implied* in or *incident* to the powers expressly granted; third, those essential to the accomplishment of the declared objects and purposes of the corporation—not simply convenient, but indispensable. Any fair, reasonable, substantial doubt concerning the existence of power is resolved by the courts against the corporation, and the power is denied.²⁴⁰

Despite the dominance of the Dillon Rule as little more than a description of the local-versus-state relationship, the question remains: Should local governments be entitled to more power? Some scholars, most notably Professor Gerald Frug, have argued that cities are essentially powerless, given the absence of "natural" or "inherent" power under state law, the fact that local power is delegated, and that even home rule powers are subject to qualification.²⁴¹ To Frug, it seems rather unconscionable that private corporations, in contrast to municipal corporations, are not limited by the powers states choose to delegate, but may exercise power for almost any legal purpose simply by incorporating.²⁴² Frug views city autonomy as a way to reduce the size of the decisionmaking unit and thus increase individual participation in political life.²⁴³ In addition to engendering democratic participation, other noted arguments for local power include furthering concepts of "community" and promotion of the efficient allocation of public resources to suit local tastes and demands.244

In response, other scholars have argued that local government powerlessness is a fiction. According to this reasoning, local autonomy and the tendency of courts to respect that autonomy are values ingrained in our system of beliefs about government, much like the concept of

^{239.} City of Clinton v. Cedar Rapids and Missouri River Railroad Co., 24 Iowa 455, 475 (1868) ("Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which they cannot exist.").

^{240.} DILLON, supra note 238, § 237 (internal citations omitted) (emphasis in original).

^{241.} Frug, supra note 237 at 1062-63 (1980).

^{242.} *Id.* at 1065; *see also* N.M. Stat. Ann. § 53-11-4(R) (1987) ("Each corporation has power to . . . have and exercise all powers necessary or convenient to effect its purpose."). 243. *Id.* at 1069.

^{244.} See Sheryll D. Cashin, Localism, Self-Interest, and the Tyranny of the Favored Quarter: Addressing the Barriers to New Regionalism, 88 GEO. L. J. 1985, 1995 (2000).

"federalism" in the state-versus-federal relationship. ²⁴⁵ In furtherance of those values, Professor Richard Briffault argues that courts tend to defer to local autonomy in the absence of direct attacks from state legislatures, and states rarely use their power to formally preempt local decision-making, avoiding the political conflict attendant with restraining local authority. ²⁴⁶

While a rule such as Dillon's Rule implies that local governments cannot be trusted to determine which policies will harm or benefit the locality, ²⁴⁷ the rule has other valued purposes. When local governments have the ability to impose externalities upon those outside the locality, constraints on local governance may be justified. Matters that involve such extraterritorial impacts are no longer matters of purely local concern. ²⁴⁸

Dillon's Rule may also be justified where neither exit (the mobility of residents who disagree with local decisions)²⁴⁹ nor voice (the ability to participate meaningfully in the political process) provide an alternative to interest group dominance.²⁵⁰ Interest group dominance materializes when one political interest group has a distinct advantage in the political process over another group based on its capacity to form coalitions, raw majoritarian advantage over those who lack an appreciable voice, or other circumstances that result in "one-sided lobbying," as described by Professor Clayton Gillette.²⁵¹ "Where there is a single dominant interest group, that group is unlikely to comprise unseasoned, non-professional civic participants. Instead, that group is likely to comprise professional lobbyists most readily identified with 'deadweight' losses"²⁵²

^{245.} See Richard Briffault, Our Localism, Part I: The Structure of Local Government Law, 90 COLUM. L. REV. 1, 113 (1990). "'Our Localism' like 'Our Federalism,' emphasizes that local autonomy is not simply a question of the structure of intergovernmental relations but also includes the ideology that structure has generated—an ideology which continues to provide support for the devolution of power to local governments." Id. at 2, n.1; See also Cashin, supra note 244, at 1995.

^{246.} See Briffault, supra note 245, at 112-13.

^{247.} Clayton P. Gillette, In Partial Praise of Dillon's Rule, or, Can Public Choice Theory Justify Local Government Law?, 67 CHI.-KENT L. REV. 959, 972 (1991).

^{248.} Id.

^{249.} Professor Tiebout argues that variations among municipalities allow the consumer-voter to simply move to the locality that best satisfies his or her preferences. Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. Pol. Econ. 416, 418 (1956). Tiebout's theory, however, relies on a number of assumptions, including the full mobility of voters, full knowledge of differences, a large number of different communities, low transactional costs to the move, and no restrictions due to employment opportunities. *Id.* at 419.

^{250.} See Gillette, supra note 247, at 974–75; see generally Albert O. Hirschman, Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States (1970).

^{251.} Gillette, supra note 247, at 983-84.

^{252.} Id. at 986.

The dangers of localism are often examined in the context of the relationship between city-centers and suburbs, where protective suburban localities allocate resources to exclude outsiders and undesirable land uses, and concentrate affluent tax-bases.²⁵³ The city is thus left to bear the burden of low-income housing, underfunded public schools, and unsightly land uses that provide industrial utilities and services needed by the suburbs. It is in this context that Professor Briffault explains how zoning has morphed from a process of separating inconsistent uses into a practice used by communities to completely exclude otherwise lawful land uses in a manner unchecked by state government and the judiciary:

By enabling suburban residents to reap the benefits of easy access to industrial or commercial opportunities in other jurisdictions without having to provide any land for locally undesirable land uses, these decisions mirrored suburban growth patterns and the suburban assumption that such residential communities were a natural, indeed a beneficial development.²⁵⁴

Extending these concepts to oil and gas, one cannot imagine a more inhospitable majoritarian advantage than that faced by the mineral owner or operator in a local arena that does not currently rely on oil and gas production. Shell Oil Company, which apparently holds leases on approximately 100,000 acres, appears to be the only lessee or mineral interest owner that has been identified in the press as holding mineral rights in Mora County. Assuming there are at least some mineral interest owners and lessees in the county other than this single example of "big-oil," only fee owners of both the surface and the minerals are likely to be "residents," and entitled to any vote whatsoever.

The lack of a surface owner entitlement to any portion of production, coupled with a lack of understanding as to the easement and related rights of the severed mineral estate, exacerbates the tension.²⁵⁶

^{253.} Richard Briffault, Our Localism: Part II-Localism and Legal Theory, 90 COLUM. L. REV. 346, 355 (1990).

^{254.} Briffault, *supra* note 253, at 369; *see also* Sheryll D. Cashin, *Localism, Self-Interest, and the Tyranny of the Favored Quarter: Addressing the Barriers to New Regionalism,* 88 GEO. L. J. 1985, 2030–31 ("[I]n most metropolitan regions the collective well-being of the region is not being pursued, primarily because of the aggregate spillover effects of local power being exercised by scores of autonomous localities, each without consideration of the impact of local decisions on the entire region.").

^{255.} See Noon, supra note 203.

^{256.} Jeffrey R. Fiske & Anne E. Lane, *Urbanization of the Oil Patch: What Happens When They Pave Paradise and Put Up a Parking Lot?*, 49 Rocky Mtn. Min. L. Inst. 15–8 (2003). While some surface owners may be aware they are not entitled to production, what is more

Some local residents may in fact be mineral owners who have not leased their oil and gas development rights to an oil and gas company. If these residents' mineral rights are located where no production has occurred, however, they are extremely unlikely to demand protection for a highly speculative future entitlement to a share of production, should it ever occur. A mineral interest owner or lessee may argue for the societal benefits of production, or even for the future economic benefits to the county, but voters in such a county are likely to be dominated by a strong majority of surface owners who rightly foresee no interest in production.²⁵⁷ Surface owners instead envision pumping equipment in their backyards.²⁵⁸

Oil and gas production is an undesirable land use for the servient surface owner, but one for which access is required.²⁵⁹ With the choice, however, to allow or deny oil and gas production altogether without any corresponding loss in government revenue, most jurisdictions would choose to shift operations away. Each jurisdiction will declare that its aesthetic and cultural resources should be protected, that its land and water are more valuable than another jurisdiction's, and that it is otherwise a "special" place, leaving less and less land on which oil and gas operations are tolerated. This is not to say there are no "special" places in New Mexico, but a legislative body with broader interests than protecting its individual interests should make such designations.

Further, oil and gas may only be produced where it is located.²⁶⁰ Other seemingly undesirable uses (such as low-income housing) may be forced to search out more accommodating local governments, and may thus end up concentrated in cities rather than suburbs, but their options are not limited by subsurface geology.

Finally, allowing cities and counties to ban or zone out oil and gas operations signals a level of judicial or political risk. If state legislatures and courts are unwilling to protect mineral ownership, producers will eventually flee to other resource-rich states. At that point, the cost of

likely to come as a surprise is the right of the mineral owner to make use of the surface for exploration, development, and production. *Id.* 15–26.

^{257.} At the time of severance, the mineral owner acquires an implied easement to make reasonable use of the surface to exploit the minerals. *See* Patrick H. Martin & Bruce M. Kramer, Williams & Meyers, Oil and Gas Law § 218 (Abridged 4th ed. 2010). Such easement does not, however, entitle the severed surface owner to any portion of the production. Under New Mexico law, a surface owner is entitled to recover damages to the surface from the use. *See* N.M. Stat. Ann. § 70-12-4 (2007).

^{258.} Kramer, *supra* note 163, at 5-1.

^{259.} See id.

^{260.} Id. at 5-7.

such flight will be borne by state residents as a whole (rather than shifted from one local government to another).

In summary, regulation at the state rather than the local level involves less one-sided lobbying, greater participation by both environmental and industry interests, a more diverse mix of political positions, and less opportunity for small interest-group dominance.²⁶¹ State level control also promotes more uniformity, reducing transaction costs associated with duplication, and allows a broader constituency to participate in the political process of designating "special" places that may justify relatively more restrictive controls.

State level control also allows administration, rule making, and enforcement by expert administrative bodies. In New Mexico, these are the NMOCC and the NMOCD.²⁶² The NMOCD has expertise in petroleum engineering, geology, and environmental science and is led by a director who is, by statute, required to be an expert in petroleum engineering.²⁶³ The NMOCC consists of the director of the NMOCD and designees of the commissioner of public lands and the secretary of energy, minerals, and natural resources who also must possess expertise in the regulation of petroleum production.²⁶⁴ The NMOCC and the NMOCD

^{261.} Professor Gillette offers a number of reasons why state legislatures may be less prone to one-sided lobbying than local governments, including (1) the variety of perspectives brought from a larger geographical area, (2) state legislatures have more procedural safeguards than local governments, including the committee process, (3) interest group legislation may be opposed by the executive branch, and (4) the diminished ability of particular interest groups to dominate at the state level. Gillette, *supra* note 247, at 996–98.

^{262.} Arguments for regulation by administrative agencies inevitably leads to counterarguments of agency "capture," predicting that administrative agencies tend to succumb to the influence of special interest groups representing the regulated industry to the detriment of broader goals favoring the public interest. See Marver H. Bernstein, Regulating Business by Independent Commission 84–95 (1977); Gabriel Kolko, Railroads And Regula-TION, 1877-1916, 3, 231-36 (1965); but see David B. Spence & Frank Cross, A Public Choice Case for the Administrative State, 89 GEO. L.J. 97, 122-23 (2000) (arguing agency capture is an invalid description of the manner in which administrative agencies regulate). The recent softening of the "pit rule" in New Mexico, see supra note 173 and accompanying text, might arguably be viewed as a case of industry interest group capture. In contrast, industry views the changes as the result of an arduous, complex, and contentious process that lasted over a year and half. See Steve Henke, N.M. Oil & Gas Ass'n., Response to Santa Fe New Mexican Op-ed, NMOGA BLOG (Sept. 3, 2013), http://www.nmoga.org/response-to-santa-fe-newmexican-op-ed. In either case, administrative agencies nevertheless remain subject to broader legislative policy mandates, representing a broad constituency of state interests, that are lost in local decision-making.

^{263.} N.M. Stat. Ann. § 70-2-5 (1977, as amended through 1987).

^{264.} N.M. STAT. ANN. § 70-2-4 (1935, as amended through 1987).

are thus uniquely qualified to regulate the oil and gas industry and to enforce applicable statutes and rules.²⁶⁵

V. NEW MEXICO LAW LIMITING LOCAL GOVERNMENT REGULATION OF OIL AND GAS

Moving on from policy considerations, we turn now to the law of preemption that actually governs the boundary between state and local decision-making. New Mexico appellate courts have not issued a preemption decision in the oil and gas context, but existing precedent in other contexts implies a predilection for local control of the extractive industries.

In evaluating a state statute and a county ordinance in New Mexico, the test adopted in *Board of Commissioners of Rio Arriba County v. Greacen* asks whether "the ordinance permits an act the general law prohibits, or vice versa." Where the local ordinance merely complements and is not antagonistic with the statute, the ordinance will stand. An ordinance conflicts with state law "when state law specifically allows certain activities or is of such a character that local prohibitions on those activities would be inconsistent with or antagonist to that state law or policy." ²⁶⁸

Municipalities that are not home-rule municipalities have no inherent right to exercise the police power; that right derives from authority granted by the state. ²⁶⁹ Counties in New Mexico are granted the same powers that are granted to non-home rule municipalities, except for powers that are inconsistent with statutory or constitutional limitations placed on counties. ²⁷⁰ The powers of counties, however, specifically include those traditionally referred to as the police power, namely those powers "necessary and proper to provide for the safety, preserve the

^{265.} See Michael J. Wozniak, Home Court Advantage? Local Government Jurisdiction Over Oil and Gas Operations, 48 Rocky Mtn. Min. L. Inst. 12–15 (2002).

^{266. 3} P.3d 672, 678 (N.M. 2000) (quoting State ex rel. Coffin v. McCall, 273 P.2d 642, 644 (N.M. 1954)). The *Greacen* Court addressed a Rio Arriba County traffic ordinance that duplicated state traffic laws, except that it directed payment of penalties back to the county. The Court upheld the authority of the County to enact the ordinance generally, but also found several inconsistencies between the ordinance and state law. *Id.* at 680. Although the Court refused to evaluate each provision of the ordinance for conflicts, it did specifically strike down the payment allocation provisions contained therein. *Id.* at 678, 680.

^{267.} Id.

^{268.} Stennis v. City of Santa Fe, 176 P.3d 309, 315 (N.M. 2008) (quoting New Mexicans for Free Enter. v. City of Santa Fe, 126 P.3d 1149 (N.M. Ct. App. 2005)).

^{269.} City of Albuquerque v. New Mexico Pub. Regulation Comm'n, 79 P.3d 297, 300 (N.M. 2003); Temple Baptist Church, Inc. v. City of Albuquerque, 646 P.2d 565, 569 (N.M. 1982).

^{270.} N.M. Stat. Ann. § 4-37-1 (1975); City of Albuquerque, 79 P.2d at 300.

health, promote the prosperity and improve the morals, order, comfort, and convenience of any county or its inhabitants."²⁷¹ Applying these background principles, the remainder of this Part examines existing preemption precedent in the mining context, whether home rule status changes the legal calculus, and ultimately whether existing state oil and gas statutes preempt local ordinances.

A. Santa Fe County and Mining

In the New Mexico case perhaps most applicable to a general oil and gas ordinance, San Pedro Mining Corp. v. Board of County Commissioners of Santa Fe County, 272 the New Mexico Court of Appeals expanded the preemption analysis beyond the questions of whether the ordinance is inconsistent or antagonistic with state law, holding that a state statute may preempt a local ordinance either expressly, impliedly because there is a conflict between the state statute and the ordinance, or impliedly because the statute demonstrates an intent to occupy the entire field. 273 The San Pedro case involved a comprehensive land development code enacted by Santa Fe County in 1991 (and amended in 1993) that included extensive permit requirements for mines.²⁷⁴ When the plaintiff, San Pedro Mining, began to operate its mine in 1994, the county ordered the plaintiff to cease its activities for lack of a permit, and the plaintiff brought suit.²⁷⁵ The district court ordered administrative proceedings in the county, and, not surprisingly, the county determined that the plaintiff required a mine permit, after which the plaintiff appealed to the district court.276

The district court then held that the New Mexico Mining Act did in fact preempt the county's regulatory authority, but that the county nevertheless maintained residual zoning power, including the right to require a permit and to impose conditions on the grant of the permit.²⁷⁷ On appeal, the Court of Appeals declined to determine whether the county's power was a zoning power or a general police power, but held that no preemption had occurred.²⁷⁸ Specifically, it held that the county

^{271.} N.M. Stat. Ann. § 4-37-1 (1975).

^{272. 909} P.2d 754 (N.M. Ct. App. 1995).

^{273.} See Rancho Lobo, Ltd. v. DeVargas, 303 F.3d 1195, 1201 (10th Cir. 2002) (succinctly summarizing the test set forth in San Pedro).

^{274.} San Pedro, 909 P.2d at 757.

^{275.} Id.

^{276.} Id. at 757-58.

^{277.} Id. at 758.

^{278.} Id.

had the power to regulate much more than just the location of mining activities.²⁷⁹

Section 69-36-4 of the Mining Act provided (and continues to provide): "After the effective date of the New Mexico Mining Act and until the commission adopts regulations necessary to carry out the provisions of the New Mexico Mining Act, county mining laws or ordinances shall apply to mining within their jurisdictions in New Mexico." San Pedro Mining argued this provision meant that once regulations were adopted, county ordinances no longer applied. The Court disagreed, finding the Mining Act ambiguous and holding that no express preemption occurred, while comparing the Mining Act to clear and unambiguous statutory language preempting local control over pesticides."

As to implied preemption, the Court stated in dicta that to the extent specific provisions of the ordinance actually conflicted with the Mining Act or the regulations thereunder, the ordinance would be preempted. However, the Court declined to examine specific provisions because San Pedro Mining only argued for the preemption of the entire ordinance. Notably, the Court mentioned that the Mining Act allowed room for the ordinance to address "off-site safety, compatibility with surrounding property uses, and other matters left unaddressed by the Act and the regulations." According to the Court, the state statute did not address matters that traditionally concern local governments, including "possible nuisances," "compatibility of the [activity] with the use made of surrounding lands," and "the effect of the [] activity on surrounding property values." ²⁸³

The Tenth Circuit extended *San Pedro* even further in *Rancho Lobo*, *Ltd v. DeVargas*.²⁸⁴ The plaintiff, Rancho Lobo, applied for and was granted a permit from the State Forestry Division to harvest trees under the New Mexico Forest Conservation Act. Rio Arriba County then informed the plaintiff that it must apply for a timber harvest permit under a county ordinance. Rather than seek the permit, Rancho Lobo chal-

^{279.} Id.

^{280.} San Pedro, 909 P.2d at 759 (quoting N.M. Stat. Ann. § 69-36-4(B) (1993)).

^{281.} Id. (citing N.M. Stat. Ann. 1978, § 76-4-9.1 (Cum. Supp. 1992)).

^{282.} Id. at 760.

^{283.} Specifically, the Court held that "neither the act nor the regulations contain any mention of development issues with which local governments are traditionally concerned, such as traffic congestion, increased noise, possible nuisances created by blasting or fugitive dust, compatibility of the mining use with the use made of surrounding lands, appropriate distribution of land use and development, and the effect of the mining activity on surrounding property values." *Id.* at 759.

^{284. 303} F.3d 1195 (10th Cir. 2002), cert. denied, 538 U.S. 906 (2003).

lenged the ordinance on its face as being preempted by state law.²⁸⁵ The ordinance prohibited clear-cutting without a variance, whereas clear-cutting was allowed under the Forest Conservation Act.²⁸⁶ The district court held that the state statute expressly preempted the county ordinance,²⁸⁷ but the Tenth Circuit disagreed. The Tenth Circuit not only found no express preemption, but also no preemption of the field or implied preemption by conflict, stating in the case of the latter:

[T]he statute does not state that municipal governments are prohibited from imposing their own restrictions on clear-cutting. Instead, the language of the statute simply makes clear that nothing in the Forest Conservation Act *itself* is to be interpreted as a ban on clear-cutting activity under the specifically stated circumstances.²⁸⁸

The test announced by the Supreme Court of New Mexico in *Greacen* was whether the ordinance permits an act the general law prohibits, or vice versa.²⁸⁹ If this test were applied, one could conclude that the New Mexico Forest Conservation Act allows clear-cutting, while the county ordinance prohibits clear-cutting, at least without a variance. One could also conclude that the Forest Conservation Act occupied the entire area of forestry regulation, and the Tenth Circuit acknowledged the support for such a conclusion.²⁹⁰ The Tenth Circuit nevertheless found that after *San Pedro*, it was bound to find room for concurrent jurisdiction.²⁹¹ *San Pedro* and *Rancho Lobo* both concerned county ordinances. Consider now whether a different standard applies to home rule municipalities under New Mexico law.

B. The Home Rule Problem

Legislative home rule power, which may be granted either in the state constitution or by the legislature, is based on the premise that a home rule municipality has full legislative power, subject only to the power of the legislature to deny local authority by state statute.²⁹² This

^{285.} Id. at 1199-1200.

^{286.} Id. at 1200.

^{287.} Id.

^{288.} Id. at 1206 (emphasis added).

^{289.} See supra text accompanying note 266.

^{290.} Rancho Lobo, 303 F.3d at 1203-1204.

^{291.} Id. at 1204-1205.

^{292.} Contrast *legislative* home rule with *imperio* home rule, the original form of home rule described by the Supreme Court of the United States as an "*imperium in imperio*." City of St. Louis v. W. Union Tel. Co., 149 U.S. 465, 468 (1893). In an *imperio* home rule system, the court first considers the language of the State constitution to determine whether the

system of legislative home rule was introduced in the 1950s in the American Municipal Association's model state constitutional provision, which was revised in 1968 by the National Municipal League.²⁹³ A number of states, including New Mexico, Montana, and Alaska,²⁹⁴ adopted constitutional provisions following the National Municipal League model, which requires the legislature to affirmatively deny or prohibit a local government's particular exercise of legislative power in order to override that power.²⁹⁵ The goal of this legislative home rule movement was to remove the discretion of the court as to what constitutes a matter of "local" concern, and instead vest the legislature with the decision whether a particular matter should be regulated at a local level.²⁹⁶

In New Mexico, the stated purpose of the home rule amendment to the state constitution is to provide home rule municipalities with "the

ordinance in question is within the scope of the grant of home rule powers to the locality. If the ordinance pertains to a matter that is *exclusively* local, then the ordinance will be immune from state preemption, notwithstanding that the legislature has expressed its intent to preempt home rule regulation. *See* Laurie Reynolds, *Home Rule, Extraterritorial Impact, and the Region*, 86 Denv. U. L. Rev. 1271, 1276 (2008). If an area of concern is both a state and local matter, local regulation is subject to preemption analysis; for matters of state concern, the local government may not regulate at all. *See* Daniel R. Mandelker, Land Use Law § 4.24 (5th ed. 2003) [hereinafter Land Use Law]. Early court decisions interpreting *imperio* home rule have been characterized, consistent with the Dillon Rule, as hostile toward home rule or highly deferential to legislative interventions. *See*, *e.g.*, City of New Orleans v. Bd. of Comm'rs of the Orleans Levee Dist., 640 So. 2d 237, 242–43 (La. 1994) (citing Bishop v. San Jose, 460 P.2d 137 (Cal. 1969); Cnty. Sec. v. Seacord, 15 N.E.2d 179 (N.Y. 1938); Van Gilder v. City of Madison, 267 N.W. 25 (Wis. 1936).

293. Nat'l Municipal League, Model State Constitution 16 (6th ed. 1963). The description of the evolution from *imperio* to legislative home rule is described in *City of New Orleans*, 640 So. 2d at 243.

294. N.M. Const., art. X, § 6 ("A municipality which adopts a charter may exercise all legislative powers and perform all functions not expressly denied by general law or charter."); Alaska Const., art. X, § 11 (2014) ("A home rule borough or city may exercise all legislative powers not prohibited by law or by charter."); Mont. Const., art. XI, § 6 ("A local government unit adopting a self-government charter may exercise any power not prohibited by this constitution, law, or charter. This grant of self-government powers may be extended to other local government units through optional forms of government provided for in section 3.").

295. Louisiana takes legislative home rule to the extreme. According to the Louisiana Supreme Court, the 1974 home rule amendments to the Louisiana Constitution limit the powers of pre-1974 home rule municipalities only to contrary provisions of the Louisiana Constitution and their own charters, while new home rule cities and parishes are subject to general state law, even if passed after the charter. See City of New Orleans, 640 So. 2d at 247; see also G. Roth Kehoe II, Recent Development: City of New Orleans v. Board of Commissioners: The Louisiana Supreme Court Frees New Orleans from the Shackles of Dillon's Rule, 69 Tul. L. Review 809, 818–19 (1995).

296. See David J. Barron, Reclaiming Home Rule, 116 HARV. L. REV. 2255, 2326-27 (2003).

maximum power of local self-government,"²⁹⁷ but that power is not unlimited. A home rule municipality may not exercise legislative powers or perform functions "expressly denied by general law or charter."²⁹⁸ When applying the amendment to a particular municipal ordinance, the court first determines whether the potentially conflicting state law is a general law. A general law applies generally throughout the state or is of statewide concern, in contrast to a local law that affects only the inhabitants of the locality.²⁹⁹ This seemingly simple demarcation between a state and a local concern has proved difficult to apply in closer cases, where there is a "twilight zone" of authority.³⁰⁰

New Mexico law does not appear to allow counties, other than Los Alamos County, to claim home rule status, although CELDF has determined to test this idea as well, beginning with San Miguel County.³⁰¹

^{297.} N.M. Const., art. X, § 6 (E).

^{298.} N.M. Const., art. X, § 6 (D).

^{299.} In City of Albuquerque v. N.M. Public Regulation Commission, the Supreme Court of New Mexico held that a utility's rates are always a matter of statewide concern, at least when the utility serves more than one municipality. 79 P.3d 297, 302 (N.M. 2003). The Supreme Court refined the test somewhat in State ex rel. Haynes v. Bonem, stating: "Thus, the test, or at least a test, is the effect of a legislative enactment—whether it affects all, most, or many of the inhabitants of the state and is therefore of statewide concern, or whether it affects only the inhabitants of the municipality and is therefore of only local concern." 845 P.2d 150, 156 (N.M. 1992).

^{300.} Apodaca v. Wilson, 525 P.2d 876, 882 (quoting City of Tucson v. Arizona Alpha of Sigma Alpha Epsilon, 195 P.2d 562, 566 (Az. 1948)). *See* State ex rel. Haynes v. Bonem, 845 P.2d 150, 151 (N.M. 1992) (holding that the number of commissioners is a matter of local concern in allowing home rule municipality to increase the number of commissioners over the number provided by statute); *Cf.* Casuse v. City of Gallup, 746 P.2d 1103, 1105 (N.M. 1987) (holding that at-large election charter provisions of a home rule municipality were invalidated by state statute).

^{301.} A lawsuit has been filed against the San Miguel County Clerk, Melanie Rivera, arguing that counties have the right to pursue home rule, and that her refusal to sign off on a proposed home rule petition violates state law. See Martin Salazar, Activist Sues County Clerk—Latest Chapter in Oil and Gas Drilling Controversy, LAS VEGAS OPTIC (Jan. 31, 2013), http://celdf.org/las-vegas-optic--activist-sues-county-clerk--latest-chapter-in-oil-and-gasdrilling-controversy. The request for pre-circulation review of the home rule petition arrived on CELDF letterhead. See Petition for Writ of Mandamus, Einer v. Riveria, No. D-412-CV-2013-00045 (N.M. 4th Dist.), Ex. A. In 1987, New Mexico adopted a "Home Rule County Validation Act," N.M. Laws 1987, ch. 8, §§1-4 (codified at N.M. Stat. Ann. §§ 4-37-10 to 4-37-13) [hereinafter the Validation Act], which provides that "all amendments adopted under color of law to a county charter adopted under [the county incorporation provisions] . . . are hereby validated, ratified, approved, and confirmed"; N.M. Const. art. 10, § 5, "allowing or purporting to allow the county to exercise all legislative powers and perform all functions under the municipal home rule provision," N.M. Const. art. 10, § 6, "and all acts and proceedings heretofore taken under such charter amendments are validated as of the date of the adoption of the amendment." N.M. Stat. Ann. § 4-37-11 (1987) (emphasis added). N.M. Const. art. 10, §5, only allows the incorporation of a county which "at the

It is not clear, however, that home rule status in New Mexico materially changes the relevant preemption test, at least insofar as the New Mexico Court of Appeals has been concerned. In the first case to cite *San Pedro* as to preemption, the Court of Appeals in *Smith v. City of Santa Fe*³⁰² considered a city of Santa Fe municipal ordinance that prohibited the drilling of water wells within the city limits in light of a statutory requirement to apply to the State Engineer for a well exception, holding that the automatic and unrestricted permit granted under state law "does not approximate a comprehensive or exhaustive regulation of such wells." ³⁰³ As to implied preemption, the Court stated that "[b]oth parties cite to *San Pedro*. We note that *San Pedro* does not construe home rule authority. However, we find its discussion of implied preemption instructive."

The Court then held that there was no evidence of any intent to regulate the use of domestic wells in areas of concern to a municipality, including the "depletion of local aquifers, impact on the quality of the local water, and reliability of the water system."³⁰⁵ On appeal, the Supreme Court affirmed the opinion of the Court of Appeals that the city's authority "was not preempted by existing state law," but without making specific reference to *San Pedro*.³⁰⁶

Then, in *Titus v. City of Albuquerque*³⁰⁷ the New Mexico Court of Appeals held that the Albuquerque red light camera program was not preempted by the state motor vehicle code, specifically citing the preemption standard from *Greacen* and the three-part preemption test from *San Pedro*, both cases pertaining to county and not home rule municipal ordinances.³⁰⁸ While the New Mexico Supreme Court could potentially reject *San Pedro* as applied to home rule municipal ordinances, the three-

time of the adoption of this amendment . . . is less than one hundred forty-four square miles in area and has a population of ten thousand or more." As such, the Validation Act appears only to validate the actions of Los Alamos County, the only county that qualifies under the size and population restrictions of the New Mexico Constitution, and that "heretofore" incorporated and claimed home rule status in 1976. See Charter for the Incorporated Community of Los Alamos, art. 1, § 103 (home rule) (adopted pursuant to Amendment No. 5, Jan. 20, 1976), available at http://www.losalamosnm.us/utilities/Documents/DPU_LACCharter681210s.pdf.

302. Smith v. City of Santa Fe, 133 P.3d 866 (N.M. Ct. App. 2006), aff d, 171 P.3d 300 (N.M. 2007).

303. Id. at 867.

304. Id. at 872.

305. Id.

306. Smith v. City of Santa Fe, 171 P.3d 300, 308 (N.M. 2007).

307. 252 P.3d 780 (N.M. Ct. App. 2011).

308. *Id.* at 790–92. The Motor Vehicle Code (MVC) specifically provided that local authorities retain the power to "adopt additional traffic regulations which are not in conflict with [the MVC]." *Id.* at 791 (quoting N.M. Stat. Ann. § 66-7-8 (1978)).

part analysis should at least be the relevant test in home rule cases involving issues of mixed state and local concern.

C. Oil and Gas Statutes and Legislative History

Did the New Mexico legislature preempt local ordinances that ban, zone out, or severely restrict oil and gas drilling operations? It did not do so expressly. Neither the New Mexico Oil and Gas Act (the O&G Act) nor any other statute in New Mexico expressly prohibits the regulation by counties and municipalities of oil and gas activities. New Mexico oil and gas statutes also fail to expressly state an intention to occupy the entire field. Nonetheless, the intentions inherent in New Mexico state law imply a degree of intolerance for conflicting local law.

Article XX, Section 21 of the New Mexico State Constitution requires the legislature to "provide for control of pollution and control of despoilment of the air, water and other natural resources of this state . . . "309 Pursuant to this constitutional mandate, the legislature has adopted statutes for the protection of air quality, 310 water quality, 311 groundwater, 312 and other environmental protections. 313 Section 21 goes on, however, to require that such control be "consistent with the *use and development* of these resources *for the maximum benefit of the people*." The O&G Act does exactly what Section 21 requires by furthering the use and development of the state's oil and gas resources towards its maximum benefit. 315

The O&G Act expressly gives the NMOCC and the NMOCD jurisdiction and authority over all matters relating to the conservation of oil and gas, and "jurisdiction, authority and control of and over all persons, matters or things necessary or proper to enforce effectively the provisions of [the Act] or any other law of this state relating to the conservation of oil or gas"³¹⁶ The O&G Act also empowers and makes it the

^{309.} N.M. Const. art. 20, § 21.

^{310.} See New Mexico Air Quality Control Act, N.M. Stat. Ann. §§ 74-2-1 to 74-2-17.

^{311.} See New Mexico Water Quality Act, N.M. Stat. Ann. §§ 74-6-1 to 74-6-17. The Oil Conservation Division is the lead agency in New Mexico for purposes of administering the federal Safe Drinking Water Act underground injection control (UIC) program, as it relates to oil and gas operations. Regulations for State Programs, 42 U.S.C. § 300h (2005). See N.M. Stat. Ann. § 70-2-12(15) (2004).

^{312.} See New Mexico Ground Water Protection Act, N.M. Stat. Ann. §§ 74-6B-1 to 74-6B-14.

^{313.} See generally, Environmental Improvement, N.M. Stat. Ann Ch. 74 (1978).

^{314.} N.M. Const. art. 20, § 21.

^{315.} N.M. Stat. Ann §§ 70-2-1 to 70-2-38.

^{316.} N.M. Stat. Ann § 70-2-6 (1979). The term "conservation" is a relative term and could refer broadly to the "complete or partial prohibition of production or consumption

duty of the NMOCC and the NMOCD to prevent waste prohibited by the O&G Act and to protect correlative rights.³¹⁷ "Waste" of oil or gas is defined by the O&G Act to include the underground waste from "inefficient, excessive or improper, use or dissipation of the reservoir energy," and surface waste, including from "evaporation, seepage, leakage or fire," among other types of waste.³¹⁸

The O&G Act defines "correlative rights" as "the opportunity afforded, so far as it is practical to do so, to the owner of each property in a pool to produce without waste his just and equitable share of the oil or gas or both in the pool . . . "319 The prevention of waste, and the protection of correlative rights are interrelated and inseparable, and waste will result unless correlative rights are also protected. 320 Further, "the legislature has stated definitively the elements" of the property right of the oil and gas mineral rights owner. 321 Although such a right is not absolute or unconditional, it includes at least the opportunity to produce an owner's fair share of oil and gas in a manner otherwise consistent with the definition of correlative rights. 322

The legislative history of the O&G Act and related amendments over time also support the importance of the statewide interest in oil and gas production. The O&G Act was adopted in 1935, replacing a more limited act that was adopted in 1925. The 1925 Act provided for the appointment of a state geologist, but also allocated inspection and enforcement responsibility for underlying regulations to county inspectors. The predecessor to the current act, adopted in 1935, centralized oversight in the NMOCC and repealed most of the provisions of the 1925 Act, including those provisions that allocated limited responsibility to counties. The predecessor is the open state of the provisions of the 1925 Act, including those provisions that allocated limited responsibility to counties.

Then, in 1975, the legislature adopted the Energy Resources Act, restructuring the NMOCC underneath a newly created "Energy Re-

^{...&}quot; or more restrictively to "attaining the maximum production from known fields" in an efficient manner. Patrick H. Martin & Bruce M. Kramer, Williams & Meyers, Manual of Oil and Gas Terms 193–94 (15th ed. 2012). Given the emphasis in other provisions of the statute and of the New Mexico Supreme Court, "conservation" as used in the Act likely refers jointly to the prevention of waste and the protection of correlative rights.

^{317.} N.M. Stat. Ann. § 70-2-11 (1977).

^{318.} N.M. Stat. Ann. § 70-2-3 (1965).

^{319.} N.M. Stat. Ann. § 70-2-33(H) (2004).

^{320.} Cont'l Oil Co. v. Oil Conservation Comm'n, 373 P.2d 809, 818 (N.M. 1962).

^{321.} Id.

^{322.} Id.

^{323. 1925} N.M. Laws 230.

^{324.} Id

^{325. 1935} N.M. Laws 137.

sources Board."326 The legislature declared the purpose of the Energy Resources Act was to, among other things, "guarantee, insofar as is practicable[,] to the citizens of this state that fuel and power produced in this state, sufficient to the needs of its current and prospective citizens, governments and industries, will be available,"327 "to ensure that the state and its political subdivisions receive, from the severance of irreplaceable energy resources from the soil of this state, the maximum economic return, consistent with the good of the *entire* state;"328 "to provide for an economic climate in the state to foster the energy resource extractive industry;"329 "to provide for an energy resource administration that will work for a national energy policy which will benefit the energy resource industry and the people in this state;"330 and "to provide that these objectives should be accomplished in a way that is primarily in the best interest of the state but also to the benefit of the rest of the nation."331 As described above, the state necessarily is in a favored position to local authorities to promote not only the interests of the state as a whole, but also the interests of the nation in the production of oil and gas.³³²

In 1977, the legislature then adopted the Energy and Minerals Department Act to consolidate functions formerly carried out by the Energy Resources Board, the NMOCC, and other agencies in the Energy and Minerals Department.³³³ In addition to the purposes cited above for the Energy Resources Act (which were repeated virtually verbatim),³³⁴ the Energy and Minerals Department Act further declared such purposes as "to protect and preserve the extractive resources of the state of New Mexico for present and future generations;"³³⁵ "design and implement statewide programs and policies directed toward the best use of limited supplies of non-renewable energy sources;"³³⁶ and "ensure that the consumers within the state of New Mexico receive optimum benefits from extractive resource development through coordinated policy development by state and federal energy-related agencies."³³⁷

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326. 1975 N.M. Laws 1583.
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^{327.} Id.

^{328.} Id. at 1584 (emphasis added).

^{329.} Id.

^{330.} Id.

^{331.} Id. at 1585 (emphasis added).

^{332.} See supra Part III.A.

^{333. 1977} N.M. Laws 1836.

^{334. 1977} N.M. Laws 1836, ch. 255, §§ 3(G), 3(L)-(O).

^{335.} Id. ch. 255 § 3(A).

^{336.} Id. ch. 255 § 3(D).

^{337.} Id. ch. 255 § 3(E).

These legislative pronouncements, as they relate to oil and gas, might fairly be described as promoting (1) the availability and production of oil and gas for present and future state consumers, (2) the maximum economic return to the state from oil and gas production, (3) statewide oil and gas programs and policies, and (4) the accomplishment of these objectives in the best interests of the state and for the benefit of the nation.

D. Whether State Law Preempts Local Oil and Gas Bans and Restrictions

Focusing on preemption law alone (and ignoring questions particular to community rights ordinances such as general constitutional protections for corporations, the rights of ecological systems, proper remedies for violations of ordinances, and violations of local procedural requirements),³³⁸ a New Mexico court should hold, without hesitation, that state law preempts the Mora County ordinance and other ordinances that ban oil and gas activities. As discussed, New Mexico has not expressly preempted the regulation of oil and gas. Additionally, *San Pedro* and *Rancho Lobo* allow room for concurrent jurisdiction by conflating express preemption with field preemption. ³³⁹ In other words, satisfaction of the field preemption test seemingly requires an express statement of intent to preempt the field. Assuming the state's highest court would continue this rigid practice, the only remaining question in the preemption analysis asks whether there is an implied conflict between state law and the local ordinance.

Based on New Mexico case law, one could argue that the implied preemption by conflict test also requires more than an implied conflict, but an actual express conflict. This would conflate the entire preemption analysis into a single standard, but is too strong a reading of case law. No oil and gas ordinance in New Mexico could ever conflict with state law, which was not the intention of the legislature. There must be an outer boundary to the implied preemption by conflict test lest it lose its entire meaning.

First, an outright ban on oil and gas results in the waste of oil and gas in every pool where such a ban is in place.³⁴¹ Opponents might respond that the O&G Act only prohibits waste in connection with "the

^{338.} For a general discussion of corporate rights of personhood, *see supra* note 57. Other such matters are outside the scope of this article.

^{339.} See supra text accompanying note 291.

^{340.} See Part V.A, infra.

^{341.} N.M. Stat. Ann. § 70-2-2 (1949).

production or handling of crude petroleum oil or natural gas."³⁴² It follows that without production or handling (activities that are banned in Mora County), there can be no prohibited waste. Such an argument, however, fails to recognize that pools do not conform to local boundaries. Instead of drilling in an efficient pattern prescribed by reservoir characteristics, a ban requires an inefficient, irregular pattern of production from outside the local boundary in a manner that impedes the state's interest in the efficient production of the pool.³⁴³

Second, the argument that New Mexico law only governs the manner of production, but not the ability to produce at all, ignores the relationship between waste and correlative rights.344 A ban on production eviscerates the correlative rights of an owner by denying that owner the opportunity to produce her just and equitable share, or any share. While all manner of federal and state laws that protect the environment may impair correlative rights, allowing a local government to ban oil and gas operations fails the basic preemption test. It arguably goes even further by prohibiting not just something that the law allows, but something that an entire agency is bound by state law to protect. A local ban also discriminates against the owners of a common pool with mineral interests inside the boundaries of the locality as owners outside the boundary would effectively have the right to drain the entire pool.³⁴⁵ Further, because an owner has such an opportunity to produce under state law, it follows that a prohibition on fracking, a lawful method required for the extraction of oil and gas in shale and other tight formations, also wastes oil and gas that cannot be produced by other methods, thereby impairing correlative rights.

A ban allows for no permit, variance, or other procedure, but simply declares illegal an act that New Mexico law permits and comprehensively regulates, and that legislative history declares critically important to the state and its economy. Local bans recently have been upheld in New York on the theory that preemption of "regulation" does not pre-

^{342.} *Id.* This argument is consistent with a recent New York preemption decision where the court reasoned that a policy designed to prevent waste does not equate to an intention to require oil and gas drilling operations to occur in every location where the resource is present. *See* Norse Energy Corp. v. Town of Dryden, 108 A.D.3d 25, 37–38 (N.Y. App. Div. 2013).

^{343.} See Voss v. Lundvall Bros., 830 P.2d 1061, 1067 (Colo. 1992).

^{344.} As discussed, the concept of correlative rights is inextricably linked to the concept of waste. *See* supra text accompanying note 320. It also ignores important state interests in ensuring production.

^{345.} Voss, 830 P.2d at 1067.

empt an outright ban.³⁴⁶ But other courts in states where oil and gas represents an important statewide interest have struck down complete prohibitions on drilling.³⁴⁷ A New Mexico court should not provide special solicitude to local interests adopting a ban given the important interests of the state as a whole in oil and gas production.³⁴⁸

Ignoring the special rules for Santa Fe County and the Galisteo Basin in regulations adopted under the O&G Act, it is unclear whether a comprehensive ordinance such as the Santa Fe ordinance would suffer more than a few dents in a judicial challenge.³⁴⁹ Santa Fe County made a

346. See Norse Energy, 108 A.D.3d 25. In Norse, the court held that an express preemption clause that superseded "all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries" did not prohibit a local fracking ban because the ban was a land use ordinance establishing a permissible use, not a "regulation" relating to the spacing or technical operation of wells. See id. at 11–21. An appeal of the decision is pending before the Court of Appeals.

347. See, e.g., Voss v. Lundvall Bros., Inc., 830 P.2d 1061 (Colo. 1992) (in light of state interest, home-rule city may not completely ban oil and gas operations); Clouse v. City of Norman, 292 P.2d 827 (Okla. 1964).

348. Despite what appears to be a convergence in New Mexico state preemption law, it is less clear whether a home rule municipality could adopt an outright ban on oil and gas activities. *See* supra notes 301–308 and accompanying text.

349. A few other commentators have looked at the question of whether state law preempts local oil and gas regulation in New Mexico. Most notably, the lead author of the Santa Fe ordinance himself, Dr. Robert H. Frelich, co-authored an article arguing that the Santa Fe ordinance was not preempted by New Mexico state law. Dr. Robert H. Freilich & Neil M. Popowitz, Oil and Gas Fracking: State and Federal Regulation Does Not Preempt Needed Local Government Regulation: Examining the Santa Fe County Oil and Gas Plan and Ordinance as a Model, 44 URB. LAW. 533 (2012). Dr. Frelich states: "Nor does the Act deal with matters that local governments are traditionally concerned with: roads, traffic, police, fire, emergency services, and environmental protection, thereby leaving open the issue of implied preemption." Id. (emphasis added). I agree with Dr. Frelich that New Mexico law allows for concurrent jurisdiction, but assert this statement is too broad, at least as it applies to environmental protection. The Oil and Gas Act and underlying regulations address waste and water quality issues. See, e.g., N.M. Stat. Ann. § 70-2-12(21) (wastes), (22) (administration of Water Quality Act), and numerous other provisions of New Mexico law govern environmental issues related to oil and gas operations. See, e.g., Water Quality Act, N.M. Stat. Ann. § 74-6-1 (1967, as amended through 1993); Air Quality Control Act, N.M. Stat. Ann. § 74-2-1 (1967, as amended through 1989); Wildlife Conservation Act, N.M. Stat. Ann. 1978 § 17-2-37 (1974, as amended through 1995). While this article was in progress, a law student also published an article discussing both CELDF efforts and the Santa Fe ordinance. See Armstrong, supra note 31, at 380. As the title of the article suggests, Armstrong proposes that "Santa Fe's fracking ordinance may serve as a model for other New Mexico communities as it is well structured and has been recognized by oil and gas developers as a valid exercise of local land use authority and environmental protection that effectively prevents any development." Id. at 380. Based on legal precedent, I tend to agree with the conclusion. However, the statement itself highlights the issue of when preemption should be considered to have occurred. If a county can enact an oil and gas ordinance with a sufficient number of pages and procedure so that the ordinance "effectively prevents any developspecial effort to characterize its oil and gas ordinance as a zoning ordinance. ³⁵⁰ By express authority of the legislature, a county or municipality may "regulate and restrict within its jurisdiction the . . . location and use of buildings, structures and land for trade, industry, residence or other purposes," in each case "[f]or the purpose of promoting, health, safety, morals or the general welfare." ³⁵¹ The Santa Fe ordinance does not "prohibit" the production of oil and gas, an act that the general law permits, but instead makes the drilling of an oil and gas well a zoning matter, that while practically impossible, remains a theoretical possibility. ³⁵²

In the absence of an express prohibition, *San Pedro* clearly allows regulation in the interstices of "other matters left unaddressed" by state law, ³⁵³ leaving much room for cities and counties to navigate. New Mexico statutes and regulations simply do not regulate surrounding lands, property values, or most other traditional local land use issues. There must, however, be at least some limit to the matters that a court might define as a local issue when the cumulative regulation pursuant to a local ordinance substantially hinders a significant state interest. ³⁵⁴ Colorado

ment," then such an ordinance should be considered to have crossed the line of implied conflict preemption. Finally, the New Mexico Attorney General's office authored an opinion in 1986 concluding that county regulation was preempted by the Oil and Gas Act. The opinion has little analysis and predates more current judicial precedent that trends towards concurrent jurisdiction. *See* Application of County Zoning Rules to Oil and Gas Production, Op. Att'y Gen. Ref. No. 5621/00 (1986), 1986 N.M. AG LEXIS 6; *See also* Bruce M. Kramer & Patrick H. Martin, The Law of Pooling and Unitization, § 4.05(viii) (3rd ed. 2013) (discussing attorney general opinion and New Mexico trend toward concurrent jurisdiction).

- 350. This analysis ignores the special treatment afforded to zoning ordinances in Santa Fe County and the Galisteo Basin. *See supra* note 80 and accompanying text. In some respects, this express special treatment argues against affording similar treatment to ordinances in other counties that may attempt to follow Santa Fe's detailed approach.
- 351. This language is consistent with Section 1 of the Standard Zoning Act. Land Use Law, supra note 292, § 4.16.
- 352. The commentary of Jon Paul Romero, Santa Fe County Development Review Committee Chairman, says it all: "God knows why anyone would want to come drill when they have to go through all this stuff." Phaedra Haywood, *Drilling: Criticism Wanes as Proposal Evolves: County Commission Won't See Draft Until Nov. 18*, Santa Fe New Mexican, Oct. 17, 2008.
- 353. See supra Part V.A; Cf. Range Res. Appalachia, LLC v. Salem Tp., 964 A.2d 869 (Pa. 2009) (preemption by state law of comprehensive land use regulatory scheme relative to oil and gas development).
- 354. The Tenth Circuit in *Rancho Lobo*, applying *San Pedro*, stated that the focus of the ordinance in question was on "local issues, such as the amelioration of damage to the surrounding property as the result of timber harvesting, including issues such as the effect of the timber harvest on economic development and local employment, water quality and availability, soil protection, archeological, historic and cultural resources, abatement of noise, dust, smoke and traffic, hours of operation, compatibility with adjacent land uses,

courts, for example, have analyzed this question using an "operational conflict" test, holding that a local ordinance may be partially preempted to the extent it conflicts with conservation regulation as to operational matters. However, the Colorado regulatory system actually addresses more matters that might be characterized as "local," meaning the likelihood of finding an operational conflict should be greater in Colorado than in New Mexico.

Further, one might argue that a permissible local land use regulation or exercise of the police power crosses the line into an impermissible impingement on general state law when the ordinance is so onerous that it makes an activity commercially impracticable that is otherwise lawful and furthers important state interests.³⁵⁷ Under New Mexico judicial precedent, such a line is not at all bright and it is not entirely clear such a line even exists.

Accordingly, in contrast to a ban, a plaintiff oil and gas lessee or mineral owner with the time, money, and energy to challenge the Santa Fe ordinance would likely need to attack individual objectionable provisions by referencing the provisions of the O&G Act, other laws, and related regulations to which the objectionable provisions conflict, operationally or otherwise.³⁵⁸ Provisions of the Santa Fe ordinance that address "other matters left unaddressed"³⁵⁹ or that otherwise traditionally concern local governments would likely stand. Even a victory as to certain provisions may leave the permitting process virtually impenetrable or the overall prospects for drilling commercially impracticable.

cumulative effect when combined with existing harvests." 303 F.3d at 1204–05. This is an incredibly broad statement of "local" as many of these issues are of significant interest to the state as a whole. *See, e.g., supra* note 349; Public Health Act, N.M. Stat. Ann. § 24-1-1 *et seq.*, Cultural Properties Act, N.M. Stat. Ann. § 18-6-1 *et seq.*, Prehistoric and Historic Sites Act, N.M. Stat. Ann. § 18-8-1 *et seq.*, Cultural Properties Protection Act, N.M. Stat. Ann. § 18-6A-1 *et seq.*

355. See, e.g., Board of County Commissioners v. Bowen/Edwards Associates, Inc, 830 P.2d 1045 (Colo. 1992) (operational conflicts a case by case inquiry); Town of Frederick v. North American Resources Co., 60 P.3d 758 (Colo. App. 2002) (partial preemption due to operational conflicts).

356. See supra note 165 and accompanying text.

357. As stated by the United States Supreme Court in the context of federal preemption, "[t]he line between environmental regulation and land use planning will not always be bright; for example, one may hypothesize a state environmental regulation so severe that a particular land use would become commercially impracticable." California Coastal Comm'n v. Granite Rock Co., 480 U.S. 572, 587 (1987) (finding state permit requirement for mining in national forests was not, on its face, preempted by Federal Land Policy and Management Act and the National Forest Management Act).

358. See supra note 282 and accompanying text.

359. Id.

CONCLUSION

On November 11, 2013, a group of plaintiffs, including three mineral owners and the Independent Petroleum Association of New Mexico (IPANM, and collectively the "IPANM Plaintiffs"), filed suit against Mora County in Federal District Court. The plaintiffs alleged violations of substantive due process under the Fourteenth Amendment of the U.S. Constitution, the First and Fifth Amendments of the U.S. Constitution, and preemption.³⁶⁰ Not to be outdone, on January 1, 2014 a subsidiary of Shell Oil Company filed suit against Mora County, also in Federal District Court. In addition to the claims made by the IPANM Plaintiffs for declaratory and injunctive relief, Shell alleged violations of the Supremacy and Equal Protection Clauses of the U.S. Constitution, the dormant Commerce Clause of the U.S. Constitution, and further alleged that the ordinance effects a taking of property rights under the Fifth and Fourteenth Amendments to the U.S. Constitution, entitling the plaintiff to money damages.³⁶¹

The Federal District Court in the Mora County cases (which presumably will be consolidated) can avoid difficult issues of preemption and takings by finding the objectionable community rights language in the ordinance unconstitutional. The court must address preemption only if it finds that the language in the ordinance banning oil and gas activities is severable from unconstitutional language. In this sense, extreme ordinances such as Mora County's present less litigation risk for oil and gas companies than a complex zoning ordinance such as the Santa Fe ordinance.

Minerals owners hampered by the Santa Fe Ordinance will wait, as would any rational self-interested actor in the competitive market, for

^{360.} Complaint for Declaratory and Injunctive Relief, *Vermillion v. Mora County*, Case No. 1:13-cv-01095 (Nov. 11, 2013).

^{361.} Complaint for Declaratory and Injunctive Relief and Damages, SWEPI LP v. Mora County, New Mexico, Case No. 1:14-cv-0035-KBM-RHS (Jan. 10, 2014).

^{362.} See Bradbury & Stamm Constr. Co. v. Bureau of Revenue, 372 P.2d 808 (N.M. 1962) (unconstitutional portion of tax statute held severable from remaining portion of tax statute); Baca v. New Mexico Dept. of Safety, 47 P.3d 441 (N.M. 2002) (unconstitutional portion of state law allowing local governments to regulate concealed weapons not severable from provisions allowing local governments to opt-out). The legislative body must have intended for the valid portion to be severable and the valid portion must be severable in fact. Bradbury & Stamm, 372 P.2d at 811. By virtue of the severability clause, see MORA COUNTY ORDINANCE, supra note 1, § 13, the Mora County Commission clearly intends for the bans on oil and gas activities in the Mora County Ordinance to be severable. The prohibitions in the ordinance language, however, only apply to corporations in what appears to be an equal protection violation. Deleting the references to corporations expands and changes in the meaning of the ordinance in a manner that does not appear severable in fact. See id. §5.

another party to risk its capital investment, wade through the permitting process, inevitably be denied a permit, and then challenge the action in court. This process deprives local mineral owners of their opportunity to produce, and also explains why no oil and gas operator has even sought a permit under the ordinance in the almost five years since its enactment.³⁶³

The actions of counties such as Mora County that ban or severely restrict oil and gas might backfire. A loss in court by Mora County will cause other counties to reconsider efforts to regulate oil and gas at local levels, or at least reconsider the extent of local regulation. Local government overreach also risks triggering a legislative backlash that more severely limits local power than would be the case if local governments enacted regulations tailored purely to local interests and externalities.

Ultimately, the legislature should enact express preemption legislation. Such legislation should not just simply state that local laws are preempted. To guide a judiciary apt to protect local decision-making and to better ensure general law treatment, legislation should set out detailed statewide parameters as to the permissible sphere of local control.³⁶⁴ Reasonable set-backs and the regulation of primarily local issues such as truck traffic, noise, and road damage are appropriate for local government regulation. However, local governments should have no power to ban or zone-out oil and gas production altogether, or create onerous zoning-based permitting systems that operate as a de facto ban of otherwise legal oil and gas operations. These local parameters could be prescribed in the form of a uniform ordinance coupled with preemption language as to matters outside the scope of the uniform ordinance. 365 Such a model ordinance would have the benefit of establishing an equitable statewide regime for both producing counties and counties that do not currently produce, but may produce in the future.

^{363.} Stephen C. Ross, County Attorney, Santa Fe County, New Mexico, Presentation at the 2nd Annual Conference on Hydraulic Fracturing, La Posada Hotel, Santa Fe, New Mexico (Oct. 11, 2013) (stating in response to a question from the audience that no permit applications have been submitted under the ordinance).

^{364.} Less than fully comprehensive preemption legislation that does not adequately protect local concerns could lead to judicial intervention to protect more traditional realms of local decision-making similar to recent decisions in New York. See supra note 346 and accompanying text. In Pennsylvania, Act 13 contained detailed parameters limiting local control that the Pennsylvania Supreme Court struck down. Its holding, however, was based on the unique provisions of the Environmental Rights Amendment, Amendment 27 to the Pennsylvania Constitution. See supra note 16. In contrast to Amendment 27, the New Mexico Constitution actually encourages the use and development of resources. N.M. Const. art. XX, § 21.

^{365.} See Riley W. Vanham, Comment: A Shift in Power: Why Increased Urban Drilling Necessitates a Change in Regulatory Authority, 43 St. Mary's L. J. 229, 266–69 (2011).

Legislative action in any form will not satisfy all constituents. Legislators will perceive any action that appears to impact the rights of local constituents as politically risky. ³⁶⁶ Legislators may be prone to defer the issue to their successors, but should consider the consequences to the state. They should also consider the political risk after more bans or restrictions are enacted, revenues are impacted, and the fracking debate ensnares more local communities. The time to repair a roof is when the sun is shining, ³⁶⁷ or with clouds in the sky, at least before it starts to pour.

366. To address such political risk, legislation might be coupled with more comprehensive health and welfare protections aimed at local concerns such as lighting, noise, traffic, and other local impacts. Environmental and local interests will not be satisfied with the trade-off between more regulation and the inability to ban fossil fuel production outright, but addressing some of these local concerns has the benefits of (1) offering protection to local constituents from negative environmental externalities, (2) satisfying constituents that desire protection but do not support complete bans on operations, and (3) from a preemption analysis, setting forth specific general law standards.

367. This quote has been attributed to John F. Kennedy. See John F. Kennedy Presidential Libr. and Museum, Ready Reference: John F. Kennedy Quotations, available at http://www.jfklibrary.org/Research/Research-Aids/Ready-Reference/JFK-Quotations.aspx (last visited Apr. 23, 2014).