What the Frack Can We Do: Suggestions for Local Regulation of Hydraulic Fracturing in New Mexico

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Abstract

In the absence of action by the federal and state governments, municipalities and counties nationwide have attempted to regulate the use of hydraulic fracturing in oil and gas development. Some have crafted community rights ordinances while others have used land use and zoning laws to address their concerns that hydraulic fracturing poses risks to local natural resources. This article analyzes the ability of municipal and county governments, specifically in New Mexico, to regulate hydraulic fracturing and concludes that communities should use their authority over land use to do so if they desire. Moreover, this article details concerns that local governments should consider when drafting land use ordinances to regulate hydraulic fracturing.

I. Introduction

Many Americans are concerned that hydraulic fracturing ("fracking") poses unacceptable threats to water quality, air quality, and geologic integrity. With the current state of American politics, it is unlikely that the federal government will take steps to address these concerns.
Some states have chosen to regulate fracking, but most have no laws that specifically address it.\(^2\) As fracking has received increasing attention, some states, like New York, have begun exploring what can be done to protect local resources and communities.\(^3\) Other states, like Pennsylvania, expressly permit fracking and preempt local regulation.\(^4\) This article uses New Mexico’s experience with fracking regulation as an example for communities across the nation.

While the federal government and some state governments have decided to not regulate fracking, many communities are concerned about the dangers they believe they are, or may be, exposed to.\(^5\) As in many resource rich states, New Mexico’s oil and gas industry has tremendous political clout and would likely oppose any substantive regulation of fracking at the state level\(^6\)—especially for the remainder of Governor Susanna Martinez’s administration.\(^7\) Despite what state policy or law might be, county and local governments generally have broad power to

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5. *Supra note 1.*
make laws to protect public health and welfare and to regulate activities within their borders, so long as their ordinances are not preempted by state or federal law.\textsuperscript{8} Many New Mexican counties and cities have exercised this power to enact ordinances that regulate oil and gas development generally.\textsuperscript{9} Concerned communities wishing to protect themselves from fracking should take similar steps; however, they have limited options and must use their powers wisely. This article discusses what those options are, and concludes that local land use regulations are a community’s best approach to regulate fracking, if they are carefully tailored to not contradict existing state or federal law and to avoid unwanted takings.

This article begins in Section II with a background discussion of fracking, the desire among communities throughout the United States and in New Mexico to regulate fracking, and the difficulties they confront when attempting to do so. Section III is a presentation and analysis of both the community rights model and the use of traditional local powers to regulate fracking. The article goes on, in Section IV, to discuss concerns that New Mexico communities should have when using police, zoning, planning, and public nuisance powers to regulate fracking. Finally, Section V argues that New Mexican communities longing for protection from fracking should implement land use rather than community rights ordinances because land use ordinances are more legally supportable. Section V also discusses how to tailor these ordinances as to not contradict existing state or federal law and to avoid any unwanted takings.

\section*{II. BACKGROUND}

Fracking has fueled a “natural gas rush” in many regions of the United States, and is now used in 90 percent of oil and gas wells.\textsuperscript{10} Generally, fracking includes creating fractures and injecting a mixture of chemicals and sand diluted in either water or diesel fuel (“fracking fluid”) to increase a well’s production when drilling begins. While oil

\begin{itemize}
\item \textit{Weekly Alibi} (Apr. 21, 2011), \url{http://alibi.com/feature/36853/State-The-Rule-Makers.html}.
\end{itemize}
and gas producers promote the process as a safe and effective method of increasing yields and reducing surface impact, many environmentalists are concerned that fracking is too dangerous.

According to ConocoPhillips, fracking is a six-step process that protects against threats to natural resources. However, the non-profit environmental law firm Earthjustice is more damning in its description of the process, stating that fracking poisons the air and water and jeopardizes the health of millions and that “fracking fluids” are laced with toxic chemicals that have not been fully tested or disclosed to the public. Moreover, fracking has been the alleged cause in at least twenty-seven damages claims brought throughout the United States. Many New Mexico residents have voiced concerns about the proximity of fracking wells to homes, schools, and grazing pastures for livestock.

Despite these concerns, neither the federal government nor the New Mexico state government has taken specific action to regulate the process. Local communities have some ability to regulate, but it is potentially limited by state action, as discussed below. Generally, a local law is void if it conflicts with state or federal law. This is a necessary tenet of federalism. Thus, concerned communities looking to regulate fracking must be aware of existing state and federal environmental and natu-

13. The six steps are: (1) site and rig preparation, (2) well drilling, (3) steel casing and cement installation, (4) drilling continues well beyond any freshwater resources and then turns horizontally, (5) a “mixture of water, sand and chemical additives” are injected into the well, and (6) the shale is fractured allowing greater production from a single well. Supra note 11.
15. “From well site preparation, to drilling and production, and finally to the disposal of wastes, the industry pollutes soil, air, and water, and leaves scars on the landscape that last for decades.” Supra note 10.
17. One ranching family in San Juan County has lost cattle to toxic spills on public grazing land, and the Texas Veterinary Medical Diagnostic Laboratory found petroleum in the hair of over 96% of the family’s herd. The Drill in the Back Yard, NATURAL RESOURCES DEFENSE COUNCIL, http://www.nrdc.org/land/use/drilling/photoessay/1.html (last visited Sept. 20, 2012).
18. See infra Part IV.
20. See generally THE FEDERALIST No. 22 (Alexander Hamilton).
eral resources law in order to avoid preemption claims. Further, government must always give "just compensation" for takings of private property, so communities must avoid unwanted takings when drafting fracking regulations.

III. LOCAL ATTEMPTS TO REGULATE FRACKING

Generally, communities have utilized one of two distinct approaches in attempting to regulate fracking. Some communities have enacted ordinances proclaiming their civil and political rights to local self-government as a basis for protecting themselves from oil and gas development and production. Other communities have made use of their power over land use and to protect public health, safety, and general welfare as the basis for regulating fracking. Although communities may institute moratoria to temporarily prohibit certain activities, like fracking, such ordinances are stopgap measures by nature and thus are beyond the scope of this article.

A. Community Rights Ordinances

Community rights ordinances focus on what advocates argue is the natural right of communities to local self-government. A major proponent of these ordinances is the Community Environmental Legal Defense Fund (CELDF). The CELDF describes itself as "a non-profit, public interest law firm providing free and affordable legal services to communities facing threats to their local environment, local agriculture, local economy, and quality of life" with a mission of building "sustainable communities by assisting people to assert their right to local self-government and the rights of nature." The CELDF advocates the passage and assists communities in the drafting of these ordinances to prohibit unwanted activities like oil and gas development, "big box" retail stores, sludge treatment facilities, and landfills. While the CELDF is aware that such blanket prohibitions are problematic because of constitutional limi-
tations and preemption issues, it argues that the right to local self-govern-ernment is sufficient to overcome these generally accepted rules of law.27

In a response statement to Pennsylvania’s passage of legislation to permit fracking of the Marcellus Shale, the CELDF stated its goal of asserting community rights and its plan of how to achieve it. The statement proclaims that community rights ordinances “have always stood as a frontal challenge to the authority of the State to override local control.”28

The CELDF argues that if a critical mass of communities passes ordinances asserting their right to local self-government, then state constitutions will be amended to expressly recognize communities’ right to protect their health, safety, and welfare.29 Such ordinances have already been enacted in over 100 Pennsylvania communities and communities in Maryland, New Hampshire, New York, and New Mexico.30

Community rights ordinances generally prohibit a certain activity and include provisions stripping violators of the protections of constitutional and preemption law. For example, in New Mexico, under the Las Vegas Community Water Rights and Local Self-Government Ordinance it is “unlawful for any corporation to engage in the extraction of oil, natural gas, or other hydrocarbons within the City of Las Vegas and its watersheds.”31 It is also “unlawful for any individual or corporation . . . to use a corporation to construct or maintain infrastructure related to the extraction of oil, natural gas, or other hydrocarbons.”32 The ordinance goes on to explicitly strip violators of any protections provided by the First or Fifth Amendment to the Constitution of the United States.33 Further, Las Vegas’ ordinance also purports to strip corporations of any protections provided by the Commerce or Contracts Clauses of the United States Constitution and their corresponding sections in the New Mexico Constitution.34 In addition to these provisions regarding constitutional issues, Las Vegas’ ordinance accounts for preemption claims by stating that violators “shall not possess the authority or power to enforce State

29. Id.
30. Supra note 26.
32. Id. at § 5.4.
33. Id. at § 5.5.
34. Id.
or federal preemptive law."\(^{35}\) Like all of the CELDF's ordinances, this ordinance asserts that Las Vegas has the legal authority to enact these provisions based on the natural right to local self-government which is recognized by both the Declaration of Independence and the Constitution of the State of New Mexico.\(^{36}\)

In addition to the Las Vegas ordinance, the CELDF is working with groups in Mora and San Miguel Counties to pass community rights ordinances that will prohibit oil and gas development. These ordinances contain much rhetoric, but lack significant legal support. A major problem for community rights ordinances is the legal fiction of corporate personhood and the corresponding constitutional protections granted to corporations. Community rights ordinances run afoul of the Fourteenth Amendment by prohibiting actions by corporations only because corporations are entitled to equal protection of the laws.\(^{37}\) Corporations are also protected by the Takings Clause of the Fifth Amendment,\(^{38}\) but community rights ordinances purport to strip corporations of the right to assert takings claims.\(^{39}\) This lack of support is further evidenced by the Las Vegas ordinance's express recognition of conflicts with existing rules of law. There would be no need to proclaim that the protections of constitutional and preemption law would not apply to those who violated the ordinance unless the City believed that violators would challenge it on these grounds. The CELDF statement discussed above also recognized that community rights ordinances cannot stand alone when it identified state constitutional amendments as the ultimate goal of community rights advocates.\(^{40}\)

\(^{35}\) Id. at § 5.6.

\(^{36}\) Id. at § 2 states:

That authority precedes government and is secured, without limitation, by:

The Declaration of Independence, which states that governments are instituted to secure the rights of people, deriving their just powers from the consent of the governed; and the New Mexico Constitution, Article 2, which declares that 'all political power is vested in and derived from the people: all government of right originates with the people, is founded upon their will and is instituted solely for their good. That section also declares that the people have the sole and exclusive right to govern themselves as a free, sovereign, and independent state and that all persons are born equally free, and have certain natural, inherent and inalienable rights and that the enumeration in this constitution of certain rights shall not be construed to deny, impair, or disparage others retained by the people.'

\(^{37}\) See Minneapolis & St. Louis Railroad v. Beckwith, 129 U.S. 26, 28 (1889).

\(^{38}\) See, e.g., Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922).

\(^{39}\) Supra note 31 at § 5.5.

\(^{40}\) Supra note 26.
While the legal shortcomings of community rights ordinances are apparent, not a single community rights based fracking ban has been challenged by drillers.\textsuperscript{41} Still, it is not advisable for communities to regulate fracking by asserting community rights and expressly prohibiting the activity. A plaintiff will eventually challenge these ordinances and at the very least the defendant community will incur legal fees and the overturning of their unconstitutional regulations. Concerned New Mexican communities would be better served by working within existing state law and utilizing their power to regulate land use to protect the public health. If these communities and their residents have concerns that the state constitution should more explicitly recognize community rights or that state law should regulate fracking, they can make direct efforts to pass a constitutional amendment or legislation to that effect.

B. Using Traditional Local Powers to Regulate Fracking

Local governments generally have broad power to protect public health and welfare.\textsuperscript{42} When communities are concerned that certain activities are harmful to the public, they have the power to enact land use ordinances that regulate how land within their jurisdiction may be used and how much damage is permissible.\textsuperscript{43} Community rights advocates criticize this approach to addressing concerns about fracking because they see it as a half-measure because it is technically only a regulation and not a prohibition.\textsuperscript{44} However, land use ordinances are the most practical approach given the lack of legal authority for community rights ordinances and the limited power of local government in relation to conflicting state law, as discussed above. Although land use regulations cannot expressly prohibit fracking,\textsuperscript{45} concerned communities can still take steps to significantly limit the practice by regulating issues such as siting, aesthetics, noise levels, and hours of operation. Communities have had varied success when using land use ordinances to regulate fracking. The communities of Dryden and Middlefield in New York and Morgantown in West Virginia passed such ordinances, and all three were chal-

\textsuperscript{41}. Non-Rights Based Fracking Ordinances, CELDF, http://celdf.org/-1-84 (last visited April 18, 2013).
\textsuperscript{42}. 6A McQUILLIN MUN. CORP. § 24:34 (3d ed. 2012).
\textsuperscript{43}. 8 McQUILLIN MUN. CORP. § 25:24 (3d ed. 2012).
\textsuperscript{44}. Supra note 41.
\textsuperscript{45}. This is because most states' oil and gas statutes allow the state to regulate oil and gas operations, but may be silent as to their effect on traditional land use issues. The extent to which state statutes may preempt local ordinances is discussed below. Further, expressly prohibiting an activity is more likely to lead to a court finding that an ordinance makes a lease of federal land commercially impracticable or is a taking of private property interests.
lenged. Santa Fe County, New Mexico (Santa Fe) has also passed such an ordinance, but it has not been challenged.

1. Attempts Outside of New Mexico

Dryden, New York, prohibited fracking by amending the Dryden Zoning Ordinance on August 2, 2011.\textsuperscript{46} The Anschutz Exploration Corporation, which owns leases on more than 22,000 acres and has invested $5.1 million in drilling operations in the Town of Dryden, challenged the provision on grounds that it was preempted by state law.\textsuperscript{47} Anschutz argued that New York’s Oil Gas and Solution Mining Law (OGSML) preempted Dryden’s ordinance because it provides that it “shall supersede all local laws or ordinances relating to the regulation of oil, gas, and solution mining industries.”\textsuperscript{48} However, Tompkins County Supreme Court Justice Phillip R. Rumsey rejected Anschutz’s argument in holding that while state law does preempt local regulations if they relate to the “operations” of oil and gas producers, it does not preempt local governments from regulating land use and zoning issues in a manner that may impact these producers.\textsuperscript{49}

Justice Rumsey cited \textit{Matter of Frew Run Gravel Prods. v. Town of Carroll}, 71 N.Y.2d 126 (1987), to support his holding.\textsuperscript{50} There, the Court of Appeals of New York held that a nearly identical provision regarding supersession of local law in New York’s Mined Land and Reclamation Law (MLRL) did not preempt local zoning regulation of extraction activities.\textsuperscript{51} Justice Rumsey reasoned that, like the MLRL, “[n]one of the provisions of the OGSML address traditional land use concerns, such as traffic, noise or industry suitability for a particular community or neighborhood.”\textsuperscript{52} Therefore, although the state had taken steps to regulate drilling operations with the OGSML, this does not preempt communities from regulating where such operations may be conducted.\textsuperscript{53}


\textsuperscript{47.} Id.


\textsuperscript{49.} Anschutz Exploration Corp., 35 Misc. 3d at 468, 940 N.Y.S.2d at 472.

\textsuperscript{50.} Anschutz Exploration Corp., 35 Misc. 3d at 459-61, 940 N.Y.S.2d at 466–67.


\textsuperscript{52.} Anschutz Exploration Corp., 35 Misc. 3d at 465, 940 N.Y.S.2d at 470.

\textsuperscript{53.} Id. at 467, 940 N.Y.S.2d at 472 (“[L]ocal governments may exercise their powers to regulate land use to determine where within their borders gas drilling may or may not take place, while the [State Department of Environmental Conservation] regulates all technical
The Otsego County Supreme Court upheld the Town of Middlefield’s fracking ban in a case similar to *Anschutz Exploration Corp.* Middlefield repealed its “zoning ordinance” and replaced it with a “zoning law” on June 14, 2011, that effectively banned oil and gas drilling within the township. A dairy farmer challenged the law using the same argument that was used against Dryden’s ordinance, i.e., that Middlefield’s new law was preempted by the OGSML. Justice Donald F. Cerio held that state law did not intend to stop towns from prohibiting certain industrial activities. Like Justice Rumsey in *Anschutz Exploration Corp.*, Justice Cerio reasoned that “the OGSML supersession clause preempts local regulation solely and exclusively as to the method and manner of oil, gas and solution mining or drilling, but does not preempt local land use control.” While two New York courts have held that communities are not preempted from using land use regulations to prohibit fracking, a West Virginia court reached an opposite conclusion on this same issue.

Morgantown, West Virginia, enacted an ordinance to ban fracking within the city’s limits and anywhere within a mile of the city. The ordinance was challenged only two days after its passage by the owner of property located just outside of the Morgantown city limits and the oil and gas production company that held a lease to this property. These plaintiffs argued that West Virginia had preempted local regulation of oil and gas production and exploration.

Judge Susan Tucker agreed with the Plaintiff’s argument and held that Morgantown’s ordinance was preempted by the establishment of the West Virginia Department of Environmental Protection (WVDEP) and passage of the West Virginia Oil and Gas Act (WVOGA). In fact, Judge Tucker held that the state had preempted the entire field of oil and gas development and production from any local regulation. She operational matters on a consistent statewide basis in locations where operations are permitted by local law.”).

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55. *Id.* at 768, 943 N.Y.S.2d at 723.
56. *Id.* at 770, 943 N.Y.S.2d at 724.
57. *Id.* at 780, 943 N.Y.S.2d at 730.
60. *Id.* at 5.
61. *Id.* at 8–9.
62. *Id.*
reached this conclusion because the purpose of the WVDEP explicitly entrusts the state with “the primary responsibility for protecting the environment” and established that “other governmental entities, public and private organizations and our citizens have the primary responsibility of supporting the state in its role as protector of the environment.”

Further, Judge Tucker reasoned that the state has occupied the field of oil and gas regulation because the WVDEP is responsible for administering and enforcing the provisions of the WVOGA. That the WVOGA established a comprehensive regulatory scheme led Judge Tucker to reason that the state has “sole discretion . . . to perform all duties related to the exploration, development, production, storage and recovery” of West Virginia’s oil and gas resources. While the New York courts held that the state’s oil and gas laws did not preempt communities from enacting land use regulations regarding where oil and gas production could take place, Judge Tucker interpreted West Virginia’s state laws regulating oil and gas production as a preemption of any local regulation of the field in question. These decisions are from trial courts outside of New Mexico, yet they provide some context when analyzing Santa Fe County’s fracking ordinance. The next section provides information on Santa Fe’s ordinance and is followed by an analysis of its validity and impact.

2. Santa Fe’s Fracking Ordinance

New Mexico’s county and local governments generally have broad power to make laws to protect public health and welfare that are “not inconsistent with the laws of New Mexico.” Many communities have exercised this power to enact ordinances that regulate oil and gas development generally. However, Santa Fe is the first and only New Mexican community to use its power to regulate land use and to protect the health of its residents as a basis for specifically addressing fracking concerns.

63. Id. at 6, quoting W. Va. Code § 22-1-1(a)(2) (1994). The purpose of the WVDEP is to “consolidate environmental regulatory programs in a single state agency, while also providing a comprehensive program for the conservation, protection, exploration, development, enjoyment and use of the natural resources of the state of West Virginia.” W. Va. Code §§ 22-1-1(b)(2)-(3) (1994).

64. Supra note 59 at 6, citing W. Va. Code §§ 22-6—22-10.

65. Supra note 59 at 6.

66. Supra note 8.

67. Supra note 9.

Rather than prohibiting an activity like Dryden, Middlefield, and Morgantown did in their land use ordinances, Santa Fe has protected itself from fracking by exercising its “police, zoning, planning and public nuisance powers for the health, safety and general welfare” to enact a complex regulatory ordinance that greatly discourages fracking. There is an intensive and lengthy three-step application and permitting process that oil and gas producers must comply with in addition to state permit requirements. Santa Fe also requires that oil and gas producers secure insurance to cover the costs of accident cleanup. Oil and gas producers must make deposits to the county to cover potential emergency response expenses. The ordinance emphasizes both land use and environmental concerns by stating that the purpose of “[t]he regulations and approval processes” is to “ensure that oil and gas activity is compatible with the on and off-site environment and adjacent properties and neighborhoods.”

Section 11.25 of the ordinance specifically addresses fracking. Fracking may only be conducted between 8:00am and 5:00pm and operations related to fracking may not create noise greater than eighty decibels when measured 300 feet from the site. Further, only fresh water may be used in fracking operations and the use of synthetic fracking fluids is expressly prohibited. The ordinance avoids preemption challenges by explicitly stating that it “is supplementary to, does not replace, enhances and is consistent with . . .federal and state statutes, Executive Orders, and regulations.” It also includes provisions for a variance process to ensure that denial of permit applications does not result in a taking. An attorney for Tecton Energy, the lessee of most of the 65,000 acres leased for oil and gas exploration in Santa Fe, stated that the frack-

69. SANTA FE COUNTY, supra note 68 at § 2.
70. SANTA FE COUNTY, supra note 68 at §§ 5, 8, 9. Owners or lessees of mineral interests must “apply for, and obtain: an Oil and Gas Overlay Zoning District Classification; Special Use and Development Permit, Grading and Building Permits; and a Certificate of Completion.” Santa Fe also requires 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. SANTA FE COUNTY, supra note 68 at § 5.
71. SANTA FE COUNTY, supra note 68 at § 11.17.
72. SANTA FE COUNTY, supra note 68 at § 9.6.2.1
73. SANTA FE COUNTY, supra note 68 at § 9.1.
74. SANTA FE COUNTY, supra note 68 at § 11.25.2.
75. SANTA FE COUNTY, supra note 68 at § 11.25.3.
76. SANTA FE COUNTY, supra note 68 at § 11.25.4.
77. SANTA FE COUNTY, supra note 68 at § 4.
78. SANTA FE COUNTY, supra note 68 at §12.
ing ordinance is, "a very good, environmentally protective ordinance. It's very unlikely that oil and gas development would be able to go forward for a variety of reasons, most of which are financial. And it would be hard to claim a taking, which leaves [Tecton Energy] with nothing." Santa Fe's ordinance shows that New Mexico communities can successfully use their traditional powers as protection from the potential harms of fracking. However, concerned communities must recognize that they have limited options and must use their powers wisely.

IV. CONCERNS FOR NEW MEXICAN COMMUNITIES APPLYING LAND USE REGULATIONS TO FRACKING

While Santa Fe has provided an example for New Mexican communities wishing to exercise their power over land use issues to regulate fracking, these communities must recognize the following: (1) that the regulations may have limited application depending on land ownership, (2) that state and federal law preempts inconsistent local law, and (3) the potential for regulatory takings liability. These are issues communities everywhere in the United States should be concerned with when drafting fracking ordinances.

A. Limited Application Depending on Land Ownership

A local law regulating fracking would not necessarily apply to all land within the community's borders because community land use regulations in New Mexico apply differently to public and private landowners. Privately owned land is subject to local land use laws. However, such ordinances may be ineffective on publically owned land. Land owned by the State of New Mexico is not subject to local land use ordinances. Activity on state land, whether by a public or private entity, is not subject to local zoning regulations. Applying local land use regulations to federally owned land is less clear cut. Congress has preemptive power over state and local control of federal lands under the Supremacy Clause of the United States Constitution, and the federal government is

79. Haywood, supra note 68.
80. County of Santa Fe v. Milagro Wireless, LLC, 2001-NMCA-070, ¶ 7, 130 N.M. 771, 32 P.3d 214 ("Although a statute may grant general zoning power to a local body, it does not give that local body the power to enforce zoning ordinances on state land absent express delegation of such power by statute.").
81. City of Santa Fe v. Armijo, 96 N.M. 663, 664, 634 P. 2d 685, 686 (1981) ("A state governmental body is not subject to local zoning regulations or restrictions.").
83. Mayo v. United States, 319 U.S. 441, 445 (1943) ("Since the United States is a government of delegated powers, none of which may be exercised throughout the Nation by
shielded from "direct state regulation" which includes local land use ordinances. The next section will further discuss the impact of local ordinances on federal land.

B. Preemption

American federalism delegates powers vertically and horizontally as it divides power among three branches of government at both the federal and state levels. In such a system, it is necessary that the powers delegated to either level of government, federal or state, is respected by the other to ensure clear resolutions when laws conflict. This model also applies to local governments, to which states have also delegated powers by statute. However, while the federal government is supreme in matters related to the powers delegated to it by the Constitution of the United States, states generally reserve supremacy over powers delegated to community governments. The reasoning supporting this structure is the general need for uniformity of laws within the larger government's borders, either state or federal. Thus, states may preempt local law, and federal law is capable of preempting both state and local law if the federal law is a constitutionally valid assertion of a delegated power.

A law may be preempted in three distinct ways. First, the level of government which is supreme may expressly state its intent to preempt any other law on the matter in question. Second, if the level of government which is supreme on the matter has "occupied the field" any one state, it is necessary for uniformity that the laws of the United States be dominant over those of any state.


85. Infra § IV.B.1.


87. Supra note 20.

88. Supra note 86.

89. Supra note 20.


91. Nelson, supra note 90 at 226.
then the other levels of government are preempted from enacting any law related to the field in question even without an expressly stated intent to preempt.92 Third, laws of the non-supreme level of government are preempted when they conflict with the laws of the government which is supreme on the matter.93

1. Federal Preemption of Local Fracking Regulations

Federal law will preempt local zoning and planning laws if there is an “actual conflict” identified between the two.94 Laws conflict when it is “impossible for a private party to comply with both,” or where [one] “stands as an obstacle to the accomplishment and execution of the full purposes and objectives of [the other].”95 Federal law, specifically the Safe Drinking Water Act (SDWA), excludes fracking from federal regulation.96 Although the SDWA specifically excludes fracking from federal regulation, state oil and gas agencies may have additional regulations for hydraulic fracturing.97 Thus, the SDWA would not expressly preempt local fracking regulations because it does not state an intent to do so. Further, the allowance of state fracking regulations shows that field preemption is beyond the purpose of the SDWA. Therefore states and local communities are free to regulate fracking, but to what extent we turn to now.

While federal law does not regulate fracking specifically, courts have assumed arguendo that the Federal Land Management Policy Act (FLMPA) and the National Forest Management Act (NFMA) are a field preemption of state land use planning laws on federal land.98 However, there is a way to get around this—state and local laws that are characterized as environmental regulations, like in California Coastal Comm’n v. Granite Rock Co., may apply to activities on federal land.99 While a land use regulation essentially chooses particular uses for a piece of land, environmental regulations in contrast require “only that, however the land

92. NELSON, supra note 90 at 227.
93. NELSON, supra note 90 at 228.
95. Freightliner Corp., 514 U.S. at 287 (internal citations omitted).
97. Id.
99. Id. at 587. In Granite Rock Co., the Supreme Court rejected a mining corporation’s claim that federal law and regulations preempted any state permit requirements of its operations on federal land. The Court found that land use and environmental regulations are distinguishable, and that California used coastal development permits to advance reasonable environmental regulation rather than impose land use regulations on federal lands. Id. at 593–94.
is used, damage is kept within prescribed limits."100 Local environmental ordinances may limit federally approved activities on federal land as long as the regulation does not render the lease “commercially impracticable.”101 This means that a party challenging the ordinance must present substantial evidence to show that enforcement of the ordinance would deprive the lease of its economically viable use, that it would be impossible to profitably carry out the purpose of the lease, or that it would unduly interfere with the party’s investment-backed expectations.102 While this analysis is derived from landmark takings law cases,103 it is independent of the takings issues discussed below in § IV(C).

Parties challenging an ordinance may argue that it is invalid because it renders their federal lease “commercially impracticable.” San Pedro Neighborhood Assn. v. SF County BCC, upheld a county environmental ordinance that prohibited “commercial activity” in certain areas. This effectively prohibited the stockpiling of mined sand and gravel on property located adjacent to the plaintiff’s federal mining lease.104 The plaintiff argued that this local regulation should not apply to its activity because it would render the federal mining lease commercially impracticable.105 The court concluded that the plaintiff had not presented substantial evidence to support its claim that the financial feasibility of its mining operation was dependent upon its ability to stockpile mined materials on the adjacent property.106 The evidence showed that the plaintiff had experienced difficulty in finding storage space. However, it did not “meet the high standard of ‘commercial impracticability’ that [was] required” because the mining operation could function at a healthy level and demand for the product was high.107 While this precedent does not provide much beyond an example of what does not constitute “commercial impracticability,” it sheds light on a potential limit communities will face when seeking to impose local fracking regulations on federal land.

Like the state permitting requirement in Granite Rock Co. and the county ordinance in San Pedro Neighborhood Assn., Santa Fe’s fracking ordinance and permitting process is an environmental regulation which is not preempted on federal land by federal laws. The ordinance in San

100. Id. at 587.
101. Id.
103. Id. at ¶ 25.
104. Id. at ¶ 1–3, 23
105. Id. at ¶ 23.
106. Id. at ¶ 22, 27.
107. Id. at ¶ 27.
Pedro Neighborhood Assn. prohibited activity necessary to the plaintiff’s mining operation on federal land based on environmental concerns, yet the court upheld the ordinance because it determined that it did not make the operation commercially impracticable. In comparison, the Santa Fe fracking ordinance is regulatory in nature and does not prohibit any activities in its effort to protect against “irreparable harm to the County’s water supply and pollution of water and air.” 108 Neither the permitting process in Granite Rock Co. nor the ordinance that prohibited activity necessary to the mining operation in San Pedro Neighborhood Assn. were overly burdensome. Therefore it is safe to say that the mere regulation of oil and gas production through a permitting process, like the Santa Fe ordinance, would not make such practices commercially impracticable.

Under Santa Fe’s fracking ordinance, there is no obstacle to profitably producing oil or gas after operators comply with the permit process and other requirements. Presuming that an operator would not make efforts to produce a commercially impracticable well, an operator who obtains a permit under Santa Fe’s ordinance may produce a well as they would have otherwise—profitably. While the cost of complying with the permitting process may decrease the overall profitability of the well, it likely does not meet the “high standard” of commercial impracticability recognized by San Pedro Neighborhood Assn. Santa Fe’s fracking ordinance would generally apply to oil and gas production on federal land because it does not make oil and gas production on federal land commercially impracticable. Moreover, the potential for preemption on federal land is reduced because Santa Fe’s ordinance states that it is supplemental to and not inconsistent with federal law.

2. New Mexico Law and Preemption of Local Fracking Regulations

As stated above, New Mexico’s municipal and county governments have been granted the power to enact ordinances to provide for the “safety, health, and prosperity of residents,” to improve the order and convenience of the community, or to regulate land use within their borders through zoning or land use laws. 109 However, such ordinances are still subject to preemption by state law. 110

In 1986, the New Mexico Attorney General’s Office staked out the position, in an advisory letter to the Oil Conservation Division (OCD), that the New Mexico Oil and Gas Act (NMOGA) occupies the entire field of oil and gas regulation, thus preempts all local laws on the matter.

108. SANTA FE COUNTY, supra note 68 at § 6.
109. N.M. STAT. ANN. § 3-17-1; N.M. STAT. ANN. § 4-37-1; N.M. STAT. ANN. § 3-21-1.
110. Id.
including land use ordinances. This opinion concerned an earlier attempt by Santa Fe County to regulate oil and gas development through its zoning ordinance. The Attorney General’s opinion argued that because the NMOGA provides that:

“The [OCD] shall have, and is hereby given jurisdiction and authority over all matters relating to the conservation of oil and gas . . . It shall have jurisdiction, authority and control of and over all persons, matters or things necessary or proper to enforce effectively the provisions of this act . . .”

Moreover, the Attorney General also argued that the Santa Fe County Zoning ordinance was also preempted because it conflicted with the NMOGA. Citing the Supreme Court of Washington, the Attorney General asked whether Santa Fe’s ordinance permitted or licensed something that state law forbade or prohibited. According to the Attorney General, Santa Fe’s ordinance was preempted because it “applies requirements to oil and gas production beyond those imposed by OCD.” The Attorney General argued that these additional requirements equated to a prohibition of activity that OCD permits, thus they were preempted. While the advisory opinion recognized the potential for concurrent jurisdiction in some instances, it argued that this was not the case under the NMOGA because of its occupation of the entire field of oil and gas production. Although this opinion may be discouraging to communities wishing to regulate fracking, it should be emphasized that this was not a finding of law by a court but rather the Attorney General’s interpretation of the law at the time. Whether or not the NMOGA preempts local land use regulations has not been resolved by the courts; however, analogous case law provides guidance as to how this issue would be resolved.

In 1995, San Pedro Mining Corporation challenged Santa Fe County’s Land Development Code because it required extensive permitting for mine operations in addition to the requirements imposed by

112. Id. at 2.
113. Id.
115. Supra note 111 at 2.
116. Id. at 3.
117. Id.
118. Id.
state law. The Supreme Court of New Mexico held that the State’s Mining Act did not necessarily act as a preemption of local land use regulations. The court reasoned that there was no express preemption because the statute did not clearly state an intent to do so. Other statutes, e.g., the New Mexico Pesticide Control Act, have articulated such intent by including a clause that states: “[e]xcept as otherwise authorized in [this act], no city, county or other political subdivision...shall adopt or continue in effect any ordinance, rule, regulation or statute regarding the [activity regulated by this act].” The Mining Act did not include such a provision. Further, the court found that the Mining Act and its regulations did not act as a field preemption because it did not govern all aspects of mining. Specifically, the law and its regulations were ambiguous regarding the concerns addressed by local mining ordinances and, thus the state law was not sufficiently comprehensive in scope to constitute an occupation of the field. The court was persuaded that the Mining Act left room for concurrent jurisdiction and regulation because it was silent on issues of concern to local governments, e.g., traffic, noise levels, effect of the activity on surrounding property values. However, the court did

119. San Pedro Min. Corp. v. Board of County Com’rs of Santa Fe County, 1995-NMCA-002, ¶ 3, 121 N.M. 194, 909 P.2d 754.
120. Id. at ¶ 14.
121. Id. at ¶ 10.
122. Id.
125. The court states:
Given the absence of an explicit prohibition of any type of local regulation of mining after the adoption of the regulations, and given the fact that the Act and its regulations are not comprehensive in scope but govern only certain aspects of mining, we believe the Act is ambiguous concerning its effect on local mining ordinances.
126. Id. The court states:
Significantly, 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. The County’s ordinance does, in part, address many of these concerns. Therefore, there is room for concurrent jurisdiction and regulation, with the County’s ordinance regulating aspects of the mining activity that concern off-site safety, compatibility with surrounding property uses, and other matters left unaddressed by the Act and regulations. Plaintiff can accordingly be required to obtain County as well as State approval for its mining activities.

Id. (internal citations omitted).
hold that Santa Fe’s ordinance was invalidated insofar as it actually conflicted with the Mining Act. Therefore, while the Mining Act does not completely preempt community land use regulations applied to mining operations it does preempt community ordinances with which it conflicts.

Applying this precedent to the fracking issues covered by the NMOGA and Santa Fe’s ordinance can provide insight for other New Mexico communities that are concerned about and have a desire to regulate fracking. The NMOGA is analogous to the Mining Act at issue in San Pedro Mining Corp., thus the NMOGA is unlikely to preempt local land use ordinances with which it is not inconsistent. Neither law expressly states an intent to preempt local action that may impact the activity that it regulates. The Legislature may clearly state its intent to preempt local regulation as is shown by laws such as the Pesticide Control Act. However, it chose not to include such a provision in either the Mining Act or the NMOGA. Such a decision should not be overlooked by the courts, as is shown by the court’s reasoning in San Pedro Mining Corp. The NMOGA provides that “the [Oil and Conservation] division shall have, and is hereby given, jurisdiction and authority over all matters relating to the conservation of oil and gas.” While this shows the Legislature’s intent to regulate oil and gas production, it should not be read as an attempt to prohibit municipal or county governments from enacting supplemental regulations. The NMOGA, like the Mining Act, is ambiguous regarding local ordinances and such ambiguity is as open to interpretation as an invitation for concurrent jurisdiction as preemptive intent.

Like the Mining Act at issue in San Pedro Mining Corp., the NMOGA is not a comprehensive regulation of all aspects of oil and gas development. Specifically, neither law addresses traditional zoning or land use concerns. This shortcoming opens the door for community governments to exercise concurrent jurisdiction and enact supplemental regulations. Just as the challenged ordinance in San Pedro Mining Corp. was not preempted because the Mining Act did not address local land use concerns, a local land use ordinance that effectively regulated oil and gas production generally, or fracking specifically, would not be preempted because the NMOGA is similarly silent regarding local land use concerns. The NMOGA is analogous to the Mining Act at issue in San Pedro Mining Corp. insofar as it is not a comprehensive occupation of an entire field of regulation, thus it does not preempt local ordinances.

127. Id.
128. Id.
Although the NMOGA does not preempt local land use regulations regarding fracking either expressly or by occupying the field, as state law it will preempt any local ordinances with which it is inconsistent.\textsuperscript{131} To determine if a local ordinance conflicts with state law “the test is whether the ordinance permits an act the general law prohibits, or vice versa.”\textsuperscript{132} Thus, an understanding of state fracking law is necessary for New Mexican communities that have a desire to regulate it. Because state law is ambiguous regarding land use issues, it does not present problems for provisions that would regulate fracking as a land use, e.g., dictating where it may take place, what permits and insurance are necessary, when it may occur, and permissible noise levels. However, provisions addressing the practice of fracking would be more difficult.

For example, the OCD’s Disclosure Rule regarding the use of fracking fluids provides that producers must disclose:

“the total volume of fluid pumped; and a description of the hydraulic fluid composition and concentration listing each ingredient and for each ingredient the trade name, supplier, purpose, chemical abstract service number, maximum ingredient concentration in additive as percentage by mass, maximum ingredient concentration in the hydraulic fracturing fluid as percentage by mass.”\textsuperscript{133}

This tacit consent to the use of fracking fluids conflicts with Santa Fe’s prohibition on the use of any liquid other than fresh water in fracking because the ordinance prohibits an act that state law permits. Yet, this conflict is moot because of the special provisions in the OCD Rules for Santa Fe County and the Galisteo Basin. Under these special provisions, approval of oil or gas development in accordance with OCD Rules “does not relieve an operator of responsibility for complying with any other applicable...local statutes, rules or regulations or ordinances.”\textsuperscript{134} Thus, while oil and gas producers throughout the state could argue that a community fracking fluids ban is preempted by OCD Rules, Santa Fe’s prohibition is not vulnerable to such a claim because of the special provisions. The OCD Rules also include special provisions for Otero and Sierra Counties, but these are unlike those for Santa Fe as they do not include a clause requiring operators to abide by local ordinances and

\begin{footnotes}
\item 133. 19.15.16.19(B) NMAC (as amended through 05/01/2013) (“The [OCD] does not require the reporting or disclosure of proprietary, trade secret or confidential business information.”).
\item 134. 19.15.39.9(J)(9) NMAC (as amended through 05/01/2013).
\end{footnotes}
regulations in addition to state law. The Santa Fe ordinance takes further steps to avoid conflict preemption by providing that it "is supplementary to" and "consistent with" state law.

In summary, concerned New Mexico communities are not preempted by state or federal law from drafting land use ordinances intended to regulate fracking operations. Neither state nor federal law expressly preempts such ordinances. Nor does state or federal law occupy the field of oil and gas production by providing a comprehensive regulatory structure. Thus, New Mexico community ordinances that target fracking will only be preempted insofar as they prohibit what state or federal law permits, or vice versa. Beyond preemption, communities planning to enact such ordinances must also be aware of the potential for takings liability.

C. Takings Liability

Under the Fifth Amendment to the United States Constitution and the New Mexico Constitution’s Bill of Rights, private property may not be taken by any government without just compensation. Communities that intend to enact a local land use ordinance to regulate fracking must consider the possibility of takings challenges to such ordinances. A law will be interpreted as a per se taking when it either includes a permanent occupation of private property or if it denies all economically viable use and value of the entirety of a landowner’s property. If the law is not a per se taking, it may still be a regulatory taking if it is so burdensome on a landowner that it is the functional equivalent of an expropriation of property. Regulatory takings analysis is focused on identifying whether the regulation at issue is "functionally comparable to government appropriation or invasion of private property." A taking has not occurred even when one of the rights, or "sticks" as commonly taught in law school, in a property owner’s "bundle" of rights is "destroyed" be-

135. 19.15.39.8 NMAC (as amended through 05/01/2013).
136. SANTA FE COUNTY, supra note 68 at § 4.
138. Loretto v. Teleprompter Manhattan CATV Corp. 458 US 419, 441 (1982) (holding that an ordinance requiring the placement of infrastructure for providing cable television service on private property constituted a taking).
cause this does not prohibit all economic benefit.\textsuperscript{142} If a property owner retains certain rights, like the rights to possess or devise, then there is no taking.\textsuperscript{143} When a regulation does not compel the surrender of property and there is no physical invasion or restraint upon the property, there is no taking.

A community land use ordinance targeting fracking would not require a permanent physical occupation of private property, but a mineral rights holder might argue that such an ordinance prohibits him from gaining any economic benefit from his property. The mineral rights holder would reason that he has been deprived of all economic benefit because his ability to benefit is reliant on an ability to access his property. Santa Fe’s fracking ordinance forestalls such an argument by providing a permitting process. The complexity of and costs associated with permitting do not prohibit even a mineral rights owner from all economic benefit, but the same owner may argue that a local fracking regulation constitutes a regulatory taking. However, as previously discussed, Tecton Energy stated that it would not be able to proceed with oil and gas development in Santa Fe for financial reasons, yet still conceded that it did not have a takings claim.\textsuperscript{144}

Tecton likely reached this conclusion because the ordinance does not “destroy” any of the “sticks” in its “bundle” of rights. The ordinance does not appropriate or invade on private property because it does not prohibit any activity that would result in economic benefit for property owners. It merely limits such activity through land use and environmental regulations and a permitting process. Owners of mineral rights are not stripped of any rights nor are they generally prohibited from developing their property, therefore a regulatory takings argument is unpersuasive. Communities seeking proper approaches to regulate fracking should look to the Santa Fe ordinance and its permitting process as an example.

V. SUGGESTED ACTIONS FOR NEW MEXICO’S CONCERNED COMMUNITIES

As outlined above, concerned communities should recognize that their land use regulations may have limited affects on certain land owners, that their regulations will be preempted if they conflict with state law, and the potential for litigation over takings claims.\textsuperscript{145} In many ways,

\textsuperscript{143} Andrus v. Allard, 444 U.S. at 65–66.
\textsuperscript{144} HAYWOOD supra note 68.
\textsuperscript{145} Supra Part IV.
Santa Fe’s fracking ordinance may serve as a model to other New Mexico communities. 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. However, communities must be aware of the special provisions in the OCD Rules that require oil and gas producers to abide by local regulations within Santa Fe County. This allows Santa Fe to be more aggressive than other communities. In order to avoid preemption challenges, concerned communities should focus more heavily on traditional land use concerns rather than placing express requirements and prohibitions on the operations of oil and gas producers.

New Mexican communities that are interested in regulating fracking may do so, and should do so under their authority over land use issues rather than by asserting a right to local self-government. The CELDF would argue that anything short of an express prohibition on fracking is nothing more than government approved harm to community and environmental rights. However, communities and individuals that feel regulating fracking as land use does not go far enough would be well served by lobbying the state government. While both New Mexico and the federal government have the power to regulate fracking as more than a land use, reforms to the NMOGA and the OCD Rules would be a better focus of communities’ efforts to further restrict fracking or to grant communities the discretion to do so. Neither federal nor state action to regulate fracking seems to be forthcoming. Thus, New Mexico communities that desire to protect themselves from the practice should do so using land use regulations while making sure to tailor these actions to not conflict with existing law and to avoid takings claims.

VI. CONCLUSION

While this article focuses on how New Mexican communities can address their fracking concerns, this is a local problem happening on a national scale. Oil and gas interests have tremendous political power—much more than that of the mostly small and rural communities that are facing the decisions of whether or not and then how to regulate fracking. The oil and gas industry provides much needed jobs, revenue for governments, and campaign contributions to politicians at the state and federal level. Still, communities across the country have concerns about the
potential risks that oil and gas development, specifically fracking, poses to local natural resources and quality of life.

As long as higher levels of government do not act to address this issue, counties and municipalities should use their authority over local land use to address the fracking concerns that their constituencies may have. Santa Fe County’s oil and gas ordinance is a creative way for a community to empower itself by staking out a key role in the oil and gas development process. However, few local governments, in New Mexico or elsewhere, have a special provision expressly granting them power to regulate oil and gas in addition to state law.

Still, Santa Fe has shown that land use powers can be an effective tool at communities’ disposal in determining the impact they will permit fracking to have on the local environment. Such powers are firmly established and have shown to be useful to local governments in addressing their concerns regarding certain activities’ impact on the community. This is in contrast to the untested idea of a community asserting a right to local self government and attempting to strip individuals and businesses of well established constitutional protections. Local governments should be hesitant to follow this “community rights” path, and would be better served by using their legally recognized authority over land use within their jurisdiction to address their fracking concerns.