

HYDROFRACKING--DISTURBANCES BOTH GEOLOGICAL AND
POLITICAL: WHO DECIDES?*John R. Nolon and Victoria Polidoro*¹

ABSTRACT. There is much controversy about the mining of shale gas through a process known as hydraulic fracturing (hydrofracking) in the Marcellus Shale formation, one of the largest shale gas areas in the world; a debate is raging about its economic benefits and environmental impacts as the New York State's Department of Environmental Conservation (DEC) considers what standards to require when it issues permits to drillers. New York State law gives permitting authority to the DEC and calls into question the historical home rule authority of localities to control the location and land use impacts of gas wells, through comprehensive planning, zoning, and development regulations. This article describes and discusses this debate, the tension between state and local control, local zoning controls imposed on drilling and ensuing litigation, and options available to municipalities to control the impact of drilling on their local environment and economies. The regulation, advocacy, and negotiation regarding hydrofracking raise critical questions for economic and environmental policy because the facts regarding this emerging technology are highly disputed, the forces pushing and resisting shale gas mining are powerful, and the authority of each level of government is unclear. At stake are critical policy issues about who decides issues that have national, regional, and local impacts and the role of lawyers in developing effective strategies for resolving such complex environmental and economic conflicts.

I. THE PROMISE AND PERILS OF DRILLING FOR SHALE GAS

Over the past three years, state and local officials, business leaders, environmentalists, and the public have been locked in a fractious and escalating debate about whether and how to allow horizontal drilling for natural gas in New York.² Nearly every day for the past year a new article, report, or study appears that either lauds or vilifies hydrofracking. Even reports on the first earthquake in New York's recent memory were not spared from the hydrofracking debate when it was discovered that drilling

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² See, e.g., Scott R. Kurkoski, *The Marcellus Shale: A Game Changer for the New York Economy?*, 84 N.Y. ST. B.A. J. no.1, 9 (2012).

was being conducted near the center of the quake.³ Much of the attention regarding the promise and perils of drilling for shale gas is focused on the Marcellus Shale formation, which is the one of the largest shale gas formations in the U.S., underlying several mid-Atlantic states including 18,700 square miles in New York.⁴ Estimates of the number of wells that will result in this vast Marcellus region in New York alone range up to 40,000.⁵ Drilling in New York awaits the completion of a study on the draft rules that will govern state-issued permits.

Hydraulic fracturing, or hydrofracking, is a well stimulation technique designed for areas underlain by large shale formations in which millions of gallons of water containing thousands of gallons of proprietary chemical slurries and a propping agent, such as sand, are pumped under high pressure down a well bore to create fractures in the hydrocarbon-bearing shale.⁶ This causes the release of the natural gas that the shale contains and allows it to be pumped to the surface.⁷ Some of the fluid mixture, known as “flow-back water,” returns to the surface, where it is disposed of by being trucked to injection wells or water treatment plants. In New York this raises a further complication since its geology is not favorable to injection wells. This, in turn, has led to a search for appropriate injection wells in other states and for wastewater treatment plants that can handle this wastewater, which are in short supply.

Under the Oil, Gas and Solution Mining Law (OGSML)⁸ the Department of Environmental Conservation (DEC) is the permitting agency and must study the potential environmental impacts of hydrofracking before finalizing its regulations.⁹ The DEC has released a Revised Draft Supplemental Generic Environmental Impact Statement (Revised dSGEIS)

³ See, e.g., Eric Niller, *Can Fracking Cause Quakes?*, DISCOVERY NEWS (Jan. 6, 2012, 01:54 PM), <http://news.discovery.com/earth/fracking-earthquakes-gas-120106.html>.

⁴ N.Y. STATE DEP'T OF ENVTL. CONSERV., REVISED DRAFT SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS AND SOLUTION MINING REGULATORY PROGRAM: WELL PERMIT ISSUANCE FOR HORIZONTAL DRILLING AND HIGH-VOLUME HYDRAULIC FRACTURING TO DEVELOP THE MARCELLUS SHARE AND OTHER LOW-PERMEABILITY GAS RESERVOIRS 4-14 (2011) [hereinafter Revised dSGEIS], *available at* <http://www.dec.ny.gov/data/dmn/rdsgeisfull0911.pdf>.

⁵ *Id.* at 6-6.

⁶ See *id.* at 5-5.

⁷ See N.Y. STATE DEP'T OF ENVTL. CONSERV., DRAFT SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS AND SOLUTION MINING REGULATORY PROGRAM: WELL PERMIT ISSUANCE FOR HORIZONTAL DRILLING AND HIGH-VOLUME HYDRAULIC FRACTURING TO DEVELOP THE MARCELLUS SHALE AND OTHER LOW-PERMEABILITY GAS RESERVOIRS 5-32 (2009), *available at* <ftp://ftp.dec.state.ny.us/dmn/download/OGdSGEISFull.pdf>.

⁸ N.Y. ENVTL. CONSERV. LAW § 23-0303(2) (McKinney 2012).

⁹ Under New York law, state and local agencies must complete an Environmental Impact Statement when their actions, such as permitting gas drilling, may have an adverse impact on the environment. See N.Y. COMP. R. & REGS. tit 6, ch. VI, pt. 617 (2012).

regarding hydrofracking.¹⁰ The gas drilling industry is waiting for the completion of the environmental impact statement and the finalization of drilling regulations before applying for permits. In the meantime, the industry is laying the groundwork for obtaining permits by leasing land.

DEC and industry forces read the OGSML as preempting local zoning and land use control of the location of wells. In response, some localities whose lawyers read the law differently have enacted various controls on the location of gas wells to protect their community character and environment. Landowners and the industry, in turn, have sued these municipalities. Deciding the underlying issues in these cases will take years to wind their way through the New York court system. Largely absent from the decision-making process is the federal government. Although federal policy regarding the regulation of hydrofracking is under review, the mining process is largely exempt from current federal law.¹¹

Proponents of hydrofracking trumpet the economic benefits of drilling, citing the vast amounts of recoverable natural gas reserves: up to 410 trillion cubic feet,¹² and high prices for natural gas.¹³ The point to DEC projects that hydrofracking will create anywhere from 13,491 to 53,969 jobs in New York State¹⁴ and the Public Policy Institute's projection that the state could gain \$2.7 billion in value added and \$1 billion in local, state, and federal taxes.¹⁵ Natural gas has also been touted as a cleaner source of

¹⁰ See Revised dSGEIS, *supra* note 4. Over 13,000 comments have been received. *Id.* at 1-4.

¹¹ The discharge of flow-back water and the disclosure of chemicals used in hydrofracking and contained in that flow-back fluid were exempted from the permitting that would otherwise be required under the Safe Drinking Water Act by the Energy Policy Act of 2005. See 42 U.S.C. § 300h(d)(1) (2006). In October 2011, EPA Administrator Lisa P. Jackson announced that the EPA will draft standards for regulating the handling and disposition of this wastewater. See *EPA to Regulate Disposal of Fracking Wastewater*, CBSNEWS.COM (Oct. 20, 2011 02:47 PM), http://www.cbsnews.com/2100-501369_162-20123299.html.

¹² See Erich Schwartzel, *Marcellus Shale Gas Estimate Plummet*, PITTSBURGH POST-GAZETTE, Jan. 24, 2012, <http://www.post-gazette.com/pg/12024/1205614-454.stm>.

¹³ See U.S. ENERGY INFO. ADMIN., NATURAL GAS YEAR-IN-REVIEW 2007 3 (2008), *available at* http://www.eia.gov/pub/oil_gas/natural_gas/feature_articles/2008/ngyir2007/ngyir2007.pdf.

¹⁴ The DEC bases these estimates on a sixty year production cycle. The agency's projection also includes: 10,532 to 42,126 gas wells, a thirty year productive life cycle for each gas well, and a thirty year build out. See Revised dSGEIS, *supra* note 4, at 6-209, Table 6.31, 6-210, 6-213, Table 6.32.

¹⁵ Estimates also include 62,640 jobs, based on an assumption of 500 wells drilled annually. See PUB. POLICY INST. OF N.Y. STATE, DRILLING FOR JOBS: WHAT THE MARCELLUS SHALE COULD MEAN FOR NEW YORK 16 (2011), *available at* <http://www.ppins.org/reports/2011/Drilling-for-jobs-what-marcellus-shale-could-mean-for-NY.pdf>.

energy than oil and coal.¹⁶ Today, the United States is the world's largest petroleum consumer, importing nearly 50% of that total from foreign countries.¹⁷ Proponents note that reducing the United States' dependency on foreign oil has many economic benefits including a more stable energy market and obvious foreign policy advantages.

Opponents of hydrofracking point to credible sources that dispute the optimistic forecasts of gas prices.¹⁸ Recent studies have shown a significant decrease in the estimated amount of shale gas available, down 66% from last year.¹⁹ Other economic indicators, such as jobs and taxes, are tied to the size of the reserves and, opponents claim, have not been adjusted downward to reflect the new reduced estimates of gas available. They also point to a myriad of potential adverse environmental impacts that hydrofracking may cause: depletion of groundwater, surface water pollution, ground water pollution, air pollution, increased truck traffic, loss of community character, creation of "boomtowns," and earthquakes (seismicity).²⁰ They do not believe that natural gas derived from hydrofracking is a cleaner source of energy than oil and coal.²¹ While natural gas burns cleaner than other fuels, they note that the accompanying release of methane into the atmosphere may exacerbate global warming as methane is over twenty times more potent as a greenhouse gas.²² Finally, opponents

¹⁶ See, e.g., *id.* at 3.

¹⁷ The U.S. consumed 19.1 million barrels per day of petroleum products in 2010. *How Dependent are we on Foreign Oil?*, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/energy_in_brief/foreign_oil_dependence.cfm (last updated June 24, 2011).

¹⁸ The 2011 EIA Annual Energy Outlook report shows estimates of \$5/thousand cubic feet. See U.S. ENERGY INFO. ADMIN., DOE/EIA-0383(2011), ANNUAL ENERGY OUTLOOK 2011 3 (2011), available at [http://www.eia.gov/forecasts/aeo/pdf/0383\(2011\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2011).pdf).

¹⁹ The estimated amount of recoverable gas from the Marcellus Shale rose from 2 trillion cubic feet (TCF) in 2002, to 50 TCF in January 2008, to 363 TCF in November 2008, to 410 TCF by 2011, and then plummeted to 84 TCF in August 2011. See Mary Esch, *Gas Yield from Marcellus Shale Goes Up*, THE EVENING SUN, Nov. 3, 2008, <http://www.evesun.com/news/stories/2008-11-04/5593/Gas-yield-from-Marcellus-shale-goes-up/>; Erich Schwartzel, *supra* note 11; DANIEL J. SOEDER & WILLIAM M. KAPPEL, USGS, WATER RESOURCES AND NATURAL GAS PRODUCTION FROM THE MARCELLUS SHALE 3 (2009), available at <http://pubs.usgs.gov/fs/2009/3032/pdf/FS2009-3032.pdf>; see also U.S. ENERGY INFO. ADMIN., DOE-EIA-0383ER, AEO2012 EARLY RELEASE OVERVIEW (2012), available at http://www.eia.gov/forecasts/aeo/er/early_production.cfm.

²⁰ See Revised dSGEIS, *supra* note 4, at ch. 6 (discussing potential environmental impacts of hydrofracking).

²¹ See RUTH WOOD ET AL., TYNDALL CTR. FOR CLIMATE CHANGE RESEARCH, SHALE GAS: A PROVISIONAL ASSESSMENT OF CLIMATE CHANGE AND ENVIRONMENTAL IMPACTS 8-9 (2011), available at http://www.tyndall.ac.uk/sites/default/files/tyndall-coop_shale_gas_report_final.pdf.

²² See Robert W. Howarth et al., *Methane and the greenhouse-gas footprint of natural gas from shale formations: A Letter*, 106 CLIMATIC CHANGE 676

point out that the high price of natural gas overseas will inevitably lead to its export, blunting the argument that shale gas will wean us from imported oil.²³

II. THE TENSION BETWEEN STATE AND LOCAL POWER

The oil industry and the DEC have taken the position that the State has “preempted the field” of regulating hydrofracking and that communities may not use their zoning powers to govern the location and land use impacts of gas drilling.²⁴ The question of whether a municipality can ban hydrofracking or limit the location of gas wells through zoning has become a divisive issue in the state and is currently working its way through the courts.²⁵

New York is a “home-rule” state; local governments have constitutionally derived power to enact local laws relating to their property, affairs, or government, so long as such laws are not inconsistent with the constitution or a general law of the state.²⁶ In addition, localities have been delegated the power to regulate land uses through zoning.²⁷ The State’s highest court has recognized that “[o]ne of the most significant functions of a local government is to foster productive land use within its borders by enacting zoning ordinances.”²⁸

Zoning authority can be curtailed when the State has demonstrated the intent to preempt an entire field of regulation.²⁹ This prevents inconsistent local laws from “inhibit[ing] the operation of the State’s general law and thereby thwart[ing] the operation of the State’s overriding policy

(2011), *available at*

<http://graphics8.nytimes.com/images/blogs/greeninc/Howarth2011.pdf>.

²³ See Bill Lascher, *Debate Surrounds Race to Export America’s Natural Gas*, INSIDECLIMATENEWS (Feb. 21, 2012),

<http://insideclimateneews.org/news/20120220/energy-firms-shale-gas-export-terminals-liquefied-natural-gas-Ing-eia-coal>.

²⁴ See Revised dSGEIS, *supra* note 4, at 8-1; Thomas West, Attorney, The West Firm, PLLC, Representing Chesapeake Energy Corp., Remarks at Pace Law School CLE Event, Hydrofracking: The Explosive Issue of Natural Gas Drilling within the Marcellus Shale in NY State (Apr. 14, 2011).

²⁵ See *infra* Part III.

²⁶ N.Y. CONST. art. IX, § 2(c)(1); N.Y. MUN. HOME RULE LAW § 10 (McKinney 2012). For an in-depth discussion of the constitutional and statutory issues surrounding natural gas drilling regulation, see Michael E. Kenneally & Todd M. Mathes, *Natural Gas Production and Municipal Home Rule In New York*, 10 N.Y. ZONING L. PRAC. REP., no. 4, Jan./Feb. 2010, at 1.

²⁷ See N.Y. TOWN LAW §§ 261-263 (McKinney 2012); N.Y. VILLAGE LAW §§ 7-700, 7-702 (McKinney 2012); N.Y. GEN. CITY LAW § 20(24), (25) (McKinney 2012); *Kurzius v. Vill. of Upper Brookville*, 51 N.Y.2d 338, 343 (N.Y. 1980).

²⁸ *DJL Rest. Corp. v. City of New York*, 96 N.Y.2d 91, 96 (N.Y. 2001).

²⁹ See *Jancyn Mfg. Corp. v. County of Suffolk*, 71 N.Y.2d 91, 97 (N.Y. 1987).

concerns.”³⁰ The intent to preempt can be explicit or can be implied through review of the state’s regulatory scheme regarding a particular subject.³¹

When faced with a potential conflict between state and local zoning laws, courts will attempt to harmonize local and state legislative enactments, “thus avoiding any abridgment of the town’s powers to regulate land use through zoning powers” expressly delegated in the constitution and implemented through state statutes.³² It is well settled that “[t]he mere fact that a state regulates a certain area of business does not automatically preempt all local legislation that applies to that enterprise.”³³

The DEC’s and the gas industry’s position that the state has “preempted the field” of natural gas drilling regulation and that communities may not use their zoning powers to prohibit natural gas drilling in any or all zoning districts³⁴ has resulted in a conflict between the interest of municipalities in controlling industrial uses within their boundaries and the achievement of the State’s energy goals as outlined in the OGSML.³⁵ Over the last two years dozens of communities have temporarily or permanently banned hydrofracking by adopting moratoria or amending their zoning laws to prohibit natural gas drilling, with more considering doing so.³⁶ The question of whether this is a permissible use of local authority has been

³⁰ *Id.* at 97.

³¹ *See id.* at 99.

³² *Frew Run Gravel Prods., Inc. v. Town of Carroll*, 71 N.Y.2d 126, 134 (N.Y. 1987).

³³ *Matter of Envirogas, Inc. v. Town of Kiantone*, 112 Misc. 2d. 432, 433 (N.Y. Sup. Ct. 1982), *aff’d*, 454 N.Y.S.2d 694 (N.Y. App. Div. 1982), *motion for leave denied*, 58 N.Y.2d 602 (1982).

³⁴ *See Revised dSGEIS, supra* note 4, at 8-1; Remarks of Thomas West, *supra* note 24; *see also* Complaint at 6-7, *Anschutz Exploration Corp. v. Town of Dryden*, No. 2011-0902 (N.Y. Sup. Ct. filed Sept. 16, 2011), *available at* <http://catskillcitizens.org/learnmore/drydenlawsuit.pdf>. For Anschutz’s position, *see Anschutz Files Supreme Court Lawsuit to Overturn Town of Dryden Ban on Natural Gas Drilling*, ANSCHUTZ, <http://www.anschutz-exploration.com/news/2011/091611-town-of-dryden.shtml> (last visited Feb. 17, 2012).

³⁵ *See* N.Y. ENVTL. CONSERV. LAW § 23-0301 (McKinney 2012).

³⁶ For example, temporary moratoria have been adopted by the Towns of Elbridge, DeWitt, Barrington, Milo, Wales, Skaneateles, Tully, Marcellus, Kirkland, & Andes. Bans have been enacted by the towns of Cherry Valley, Otsego, Middlefield, Ulysses, Dryden, Danby, Springfield, Tusten, Geneva, and Ithaca, and the Cities of Buffalo and Oneonta. Bans have been proposed in the towns of Jerusalem, Highland, Bethel, Lumberland, and the City of Syracuse. Several counties, which do not have zoning authority, have acted to prohibit natural gas drilling on county-owned lands. *See Local Actions Against Fracking*, FOOD&WATERWATCH, <http://www.foodandwaterwatch.org/water/fracking/fracking-action-center/local-action-documents/> (last visited Feb. 21, 2012) (scroll down to New York); *see also* Sarah Crean, *Will Community Bans on Hydrofracking Hold Up?*, GOTHAM GAZETTE (Dec. 2011), <http://www.gothamgazette.com/article/environment/20111218/7/3659>.

challenged in two communities; the individual cases are discussed below in Part 3.³⁷

Section 23-0303(2) of the ECL, New York's Oil, Gas and Solution Mining Law (OGSML), provides that

[t]he provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries; but shall not supersede local government jurisdiction over local roads or the rights of local governments under the real property tax law.³⁸

The crux of the conflict involves the interpretation of the term "regulation." If zoning laws, which regulate the use of land and the location of businesses but not the operations involved in the gas drilling business, are viewed as laws "relating to the regulation of" the industry, they are preempted by the language of ECL § 23-0303(2). If not, municipalities may use their zoning powers to identify appropriate locations in the community for such drilling, that is, if the community chooses to allow it at all.

The preemption clause in ECL § 23-0303(2) has only been interpreted once before by a New York court. In the case of *Matter of Envirogas, Inc. v. Town of Kiantone*, now over thirty years old, the court struck down a local law that required gas drillers to post a \$2500 compliance bond and pay a \$25 permit fee to the town before beginning drilling operations.³⁹ The court found that the law was preempted because it attempted to regulate gas drilling.⁴⁰ Although the town of Kiantone's local law was technically a zoning law, both sides of the hydrofacking debate are now claiming this case supports their own. Plaintiffs argue that it stands for the proposition that all local zoning laws are preempted, and the defendants argue that it serves only as an example of the type of local regulation that is prohibited under the ECL.⁴¹

The New York courts have prior experience looking at the distinction between zoning laws and laws that regulate business operations including mining. The state's Mined Land Reclamation Law (MLRL) contained the following preemption provision, which is similar to the language found in the OGSML, cited above:

For the purposes stated herein, this title shall supersede all other state and local laws relating to the extractive mining industry; provided, however, that nothing in this title shall

³⁷ *Anschutz Exploration Corp. v. Town of Dryden*, No. 2011-0902 (N.Y. Sup. Ct. Feb. 21, 2012); *Cooperstown Holstein Corp. v. Town of Middlefield*, No. 2011-0930 (N.Y. Sup. Ct. Sept. 15, 2011).

³⁸ N.Y. ENVTL. CONSERV. LAW § 23-0303(2) (McKinney 2012).

³⁹ *Matter of Envirogas, Inc. v. Town of Kiantone*, 112 Misc. 2d. 432, 434 (N.Y. Sup. Ct. 1982).

⁴⁰ See *id.*

⁴¹ See discussion *infra* Part III.

be construed to prevent any local government from enacting local zoning ordinances or other local laws which impose stricter mined land reclamation standards or requirements than those found herein.⁴²

The MLRL preempted local laws “relating to the extractive mining industry.”⁴³ Although the MLRL specifically permitted local laws regarding reclamation of land after mining at a site had ceased, it provided no express authority to adopt zoning laws to establish where a sand and gravel operations could locate.⁴⁴

In *Frew Run Gravel Products, Inc. v. Town of Carroll*, the court found that the legislature, in enacting the MLRL, did not intend to preempt the provisions of a town zoning law that limited the areas of town where sand and gravel mines could be established.⁴⁵ In making its determination, the court conducted a two part inquiry, looking first at the plain language of the statute and then to the purpose and intent of the statute.⁴⁶ Looking at the plain meaning of the phrase “relating to the extractive mining industry,” the court “[could not] interpret the phrase . . . as including the Town of Carroll Zoning Ordinance.”⁴⁷ The purpose of a zoning ordinance is to regulate land use, and in doing so, it “inevitably exerts incidental control over any of the particular uses or businesses which, like sand and gravel operations, may be allowed in some districts but not in others.”⁴⁸ The court found that this type of incidental control through zoning was “not the type of regulatory enactment relating to the ‘extractive mining industry’ which the Legislature could have envisioned as being within the prohibition of the statute.”⁴⁹ In so finding, the court recognized the difference between a zoning law and “[l]ocal regulations dealing with the actual operation and process of mining,” which would frustrate the statutory purpose of the MLRL’s standardized regulations.⁵⁰

The court also looked at the legislative history of the ECL’s enactment and found no express provision regarding zoning preemption.⁵¹ The court was hesitant to “drastically curtail” the Town’s constitutional and statutory power to adopting zoning regulations in the absence of a clear intent to do so.⁵² After *Frew Run* was decided, the Legislature amended the MLRL to clarify that municipalities have authority to adopt local zoning

⁴² *Frew Run Gravel Prods., Inc. v. Town of Carroll*, 71 N.Y.2d 126, 129 (N.Y. 1987) (citing N.Y. ENVTL. CONSERV. LAW § 23-2703(2) (1987) (amended 1991)).

⁴³ N.Y. ENVTL. CONSERV. LAW § 23-2703(2) (1987) (amended 1991).

⁴⁴ *Frew Run Gravel Prods., Inc.*, 71 N.Y.2d 126 at 131-32.

⁴⁵ *Id.* at 133.

⁴⁶ *Id.* at 131.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.* at 133.

⁵¹ *Id.* at 132.

⁵² *Id.*

laws that control the location of extractive mining.⁵³ The key issue that the courts will have to decide in pending litigation is whether the statutes regulating oil and gas mining are analogous to those regulating surface gravel mining.

III. LOCAL ACTIONS IN LITIGATION: ISSUES AND ARGUMENTS

Several towns in the Marcellus Shale region have taken affirmative action against hydrofracking in their communities by temporarily or permanently banning it within their borders.⁵⁴ Proponents of hydrofracking have brought legal challenges against two such towns that have permanently banned it through zoning, challenging their ability to adopt such laws in light of the preemption provision of the ECL.

The Town of Dryden is located in Tompkins County, New York. On August 2, 2011, following the receipt of a petition signed by 1,594 individuals, the Town amended its zoning ordinance to explicitly prohibit natural gas drilling.⁵⁵ The ordinance added definitions for “natural gas” and “natural gas and/or petroleum exploration,” and “natural gas exploration and/or petroleum production wastes” and then prohibited the “exploration for or extraction of natural gas and/or petroleum,” anywhere in the town.⁵⁶ The law also purports to invalidate any “permit issued by any local, state or federal agency, commission or board for a use which would violate the prohibitions of” the ordinance.

The Town of Middlefield is a rural community surrounding the incorporated Village of Cooperstown in Otsego County, New York. Its predominant land uses are agriculture, forests, and low density residential.⁵⁷ Concerned about its water supply and its community character, the town hired a consultant to analyze the potential impacts of heavy industry on the

⁵³ N.Y. ENVTL. CONSERV. LAW § 23-2703(2)(b) (McKinney 2012).

⁵⁴ See *supra* note 37.

⁵⁵ See TOWN OF DRYDEN, BOARD MEETING MINUTES 5-15 (Special Town Board Meeting, Aug. 2, 2011), available at http://dryden.ny.us/Board_Meeting_Minutes/TB/2011/TB2011-08-02.pdf.

⁵⁶ See Town of Dryden, Notice of Adoption of Amendments to Zoning Ordinance 1 (Aug. 3, 2011), available at http://documents.foodandwaterwatch.org/Frack_Actions_DrydenNY.pdf. Section 2104 provides that:

[n]o land in the Town shall be used: to conduct any exploration for natural gas and/or petroleum; to drill any well for natural gas and/or petroleum; to transfer, store, process or treat natural gas and/or petroleum; or to dispose of natural gas and/or petroleum exploration or production wastes; or to erect any derrick, building, or other structure; or to place any machinery or equipment for such purposes.”

Id. at 2.

⁵⁷ See GREENPLAN, INC., LAND USE ANALYSIS: HEAVY INDUSTRY AND OIL, GAS OR SOLUTION MINING AND DRILLING 4 (2011) (prepared for the Town Board of the Town of Middlefield), available at <http://www.otsego2000.org/documents/forwebsiteMiddlefieldLandUseAnalysis-Greenplan.pdf>.

town and then amended its comprehensive plan and zoning law to prohibit heavy industry throughout the town.⁵⁸ Heavy industry is broadly defined by its characteristics and includes “drilling of oil and gas wells” as well as chemical manufacturing, petroleum and coal processing, and steel manufacturing.⁵⁹ The local law to amend the Town’s zoning was adopted on June 14, 2011.⁶⁰

The Town of Dryden’s law has been challenged by the Anschutz Exploration Corporation (“Anschutz”), a Colorado-based driller and developer of natural gas wells. Anschutz is the owner of oil and gas leases on approximately 22,200 acres in the Town of Dryden.⁶¹ The Town of Middlefield’s law has been challenged by Cooperstown Holstein Corporation, a local dairy operation that has leased approximately 400 acres of its land for natural gas development.⁶² The leases are currently held by Gastem USA, Inc., a subsidiary of a Canadian company that owns leases on approximately 34,400 acres in New York.⁶³

On February 21, 2012, the Supreme Court Justice handling the *Dryden* case decided in the Town’s favor by granting its motion for summary judgment, thereby upholding the town’s total ban on hydrofracking within its borders.⁶⁴ The court’s holding was straightforward: “In light of the similarities between the OGSML and the MLRL as it existed at the time of *Matter of Frew Run*, the court is constrained to follow that precedent in this case.”⁶⁵ The court found that the OGSML did not expressly preempt local zoning and that the town’s zoning amendment did not regulate gas production; rather, it regulated land use and not the operation of gas mining.

The court noted that “[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.”⁶⁶ It cited other preemptive statutes with provisions requiring the relevant state agency to consider the traditional concerns of zoning in deciding whether a permit is to be issued. “Under this construction, local governments may exercise their powers to regulate land use to determine where within their borders gas drilling may or may not take place, while DEC regulates all technical

⁵⁸ See *id.* at 2.

⁵⁹ TOWN OF MIDDLEFIELD, N.Y., ZONING LAW art. II, § B(8) (2011), available at <http://middlefieldny.com/Documents%20Forms/Docs/Zoning%20Law%20061411%202011%20Final.pdf>.

⁶⁰ See *id.*

⁶¹ Complaint, *supra* note 34, at 3.

⁶² Complaint at 1-2, Cooperstown Holstein Corp. v. Town of Middlefield, No. 2011-0930 (N.Y. Sup. Ct. filed Sept. 15, 2011), available at <http://catskillcitizens.org/learnmore/VsTownOfMiddlefield.pdf>.

⁶³ See GASTEM, <http://www.gastem.ca/> (last visited Feb. 15, 2012).

⁶⁴ Anschutz Exploration Corp. v. Town of Dryden, No. 2011-0902 (N.Y. Sup. Ct. Feb. 21, 2012), available at <http://ecowatch.org/wp-content/uploads/2012/02/dryden.pdf>.

⁶⁵ *Id.* at 12.

⁶⁶ *Id.* at 18.

operational matters on a consistent statewide basis in locations where operations are permitted by local law.”⁶⁷ The provision of the local law that invalidated any other permits permitting drilling was found invalid as preempted by the OGSML and was severed from the law leaving the other provisions in place.⁶⁸

IV. LOCAL CONTROL: ACTIONS LOCALITIES CAN TAKE

Comprehensive Planning

If, after full appellate review of their cases, the towns of Dryden and Middlefield ultimately win, they will have established that the location and land use impacts of hydrofracking projects may be regulated by local zoning laws. All zoning and other land use regulations in New York must conform to the comprehensive plan.⁶⁹ Localities interested in adopting effective and legally sustainable actions to control hydrofracking should add a component to their comprehensive plans regarding gas drilling, its impact on their communities, and the goals, objectives, strategies, and implementation measures they plan to adopt to control those impacts and to maximize the economic benefits of hydrofracking.

If these towns ultimately fail in the appellate courts, it is still a good idea for them to adopt a hydrofracking component of their comprehensive plan. The development of the plan component may bring a community to consensus regarding the benefits and dangers of hydrofracking and support various non-regulatory actions it can then take. The OGSML affirmatively endorses local governments’ jurisdiction over their roads, for example, opening the door to effective control of this critical impact of hydrofracking. An aggressive road control ordinance will be bolstered by an adopted comprehensive plan. Finally, a comprehensive plan component on the topic may influence DEC in the issuance of permits and bring the locality into its decision making process.⁷⁰

A hydrofracking or heavy industry component of the comprehensive plan can discuss the adverse impacts on the community’s character and environment arising from these types of industries. With respect to hydrofracking much of this homework has been done by the DEC and towns can now draw on the risks discussed in the dSGEIS. That same document can guide communities in listing measures that will mitigate the adverse impacts of gas drilling. If the courts determine that localities have the power to adopt land use regulations, these mitigation measures can be included in the component as strategies to be achieved through land use regulation. Other protective initiatives, such as those discussed below, can

⁶⁷ *Id.* at 20.

⁶⁸ The court found that the provision could be severed without impairing the underlying purpose of the zoning amendment. *Id.* at 24.

⁶⁹ N.Y. TOWN LAW § 272-a(2)(a) (McKinney 2012); N.Y. VILLAGE LAW § 7-722(2)(a) (McKinney 2012).

⁷⁰ See *supra* note 4 at p.12.

be listed in the comprehensive plan amendment as effective strategies to be adopted by the community.

Depending on the resources available to the community, its plan can inventory portions of the community that are particularly vulnerable to the adverse impacts of hydrofracking and declare those areas off limits or identifying them as areas requiring special environmental impact review prior to location of a well. Communities that simply ban hydrofracking town-wide without this kind of analysis risk losing substantive due process challenges brought by regulated landowners and drilling companies.

Local Land Use Regulation

If the judiciary supports the *Dryden* decision and determines that localities have the power to regulate the location of hydrofracking wells, then communities can amend their zoning ordinances to make certain neighborhoods or zoning districts off limits for hydrofracking, to allow such drilling by special permits subject to a full list of mitigation requirements regarding matters within the ambit of zoning regulations, or to specify which districts permit gas drilling and to adopt appropriate standards such land uses must meet.

Road Regulation

The OGSML clearly allows localities to adopt road protection and safety standards for heavy trucks and other vehicles used in hydrofracking and other similarly high intensity enterprises.⁷¹ Drilling companies can be required to apply for and receive a road permit which can be renewable periodically, based on satisfactory compliance with the permit system's requirements. Localities can: (1) adopt a road permit system for all vehicles involved in drilling and similar ventures, requiring well owners and operators to apply for a road permit, report annually, and pay a fee; (2) require annual reports regarding the use or abuse of roads, mitigation of adverse impacts, listing of costs of road repair and environmental restoration; (3) an inventory of roads can be created, conditions assessed, damage done by regulated trucks tracked, damage calculated, and charges for road repairs assessed; and, (4) truck routes may be established and road rules adopted.⁷²

⁷¹ N.Y. ENVTL. CONSERV. LAW § 23-0303(2) (McKinney 2012). In addition, a municipality may designate truck routes "upon which all trucks, tractors and tractor-trailer combinations having a total gross weight in excess of ten thousand pounds are permitted to travel and operate and excluding such vehicles and combinations from all highways except those which constitute such truck route system." N.Y. VEH. & TRAF. LAW §§ 1640(a)(10), 1660(a)(10) (McKinney 2012).

⁷² Under New York's Vehicle and Traffic Law (VTL), a municipality has several options for protecting its roads including the creation of truck routes, the ability to prohibit trucks from designated roadways, regulation of traffic through traffic control signals, and regulation of speed limits. See *id.* §§ 1640, 1660. The VTL is a "general law" of the state and a municipality may

Through road regulation, municipalities may gain leverage over gas drilling, even if their zoning power is deemed preempted. For example, a town may temporarily exclude any vehicle with a gross weight in excess of four tons or more over certain roads when “in its opinion such highway would be materially injured by the operation of any such vehicle thereon.”⁷³ The Attorney General has opined that a town may also permanently exclude vehicles from highways.⁷⁴

Collaboration with DEC

In the Executive Summary of the Revised Draft Supplemental Environmental Impact Statement, DEC indicates that the Department will give notice to the affected locality before it issues a gas drilling permit and require the applicant “to identify whether the proposed location of the well pad, or any other activity under the jurisdiction of the Department, conflicts with local land use laws or regulations, plans or policies.”⁷⁵ The project sponsor will be required to identify whether the well pad is located in an area where the affected community has adopted a comprehensive plan or other local land use plan and whether the proposed action is inconsistent with such plan(s).⁷⁶

In cases where a project sponsor indicates that all or part of their proposed application is inconsistent with local land use laws, regulations, plans or policies, or where the potentially impacted local government advises the DEC that it believes the application is inconsistent with such laws, regulations, plans or policies, the Department intends to request additional information in the permit application to determine whether this inconsistency raises significant adverse environmental impacts that have not been addressed in the SGEIS.⁷⁷ Thus by adopting a comprehensive plan component along the lines suggested above, local governments can achieve useful leverage over gas drillers in their communities.

Non-Regulatory Option: Host Community Agreement

The comprehensive plan can call for the creation of a Host Community Agreement (HCA) and invite all gas companies that receive a DEC permit to drill locally to sign the Agreement. The HCA can reference the adverse impacts that the community wishes to avoid, the measures drilling companies should take to mitigate such impacts, and establish local initiatives that communities request drillers to take.

not enact a local law which conflicts with any provision of the VTL through its home rule powers. See *id.* §§ 1600, 1604; see also 1980 N.Y. Op. Atty. Gen. (Inf.) 209 (N.Y.A.G).

⁷³ N.Y. VEH. & TRAF. LAW § 1660(a)(11).

⁷⁴ 1980 N.Y. Op. Atty. Gen. (Inf.) 209 (N.Y.A.G).

⁷⁵ Revised dSGEIS, *supra* note 4, at Executive Summary, p.26.

⁷⁶ *Id.*

⁷⁷ *Id.* at 26-27.

Tied to the comprehensive plan, this Agreement might be useful in negotiating stricter standards when drillers apply for DEC permits. The leverage that communities enjoy with respect to road regulation might also move drilling companies to sign. Where the residents of the community are brought together through the process of adopting a comprehensive plan component and in drafting the HCA, they may develop a local consensus regarding how drilling should be permitted, subject to reasonable restrictions that they identify. Even landowners who wish to lease their land to gas drillers might be persuaded to include a provision in their leases that the gas companies must sign and comply with the HCA.

V. WHO DECIDES?

This battle in New York tests our federal system's decision-making process regarding critical issues such as energy production and the protection of the environment and natural resources. If the *Dryden* and *Middlefield* cases are lost by the towns and Congress and the EPA do not step in with more productive procedures, these issues will be decided by a single agency of the State of New York. The competencies, knowledge, and resources of local governments and the resources and technical information of the federal government will not significantly shape the outcome regarding issues of critical importance to their federal and local constituencies. If the towns ultimately win, the legislature will be under pressure to clarify and perhaps limit local jurisdiction over a resource whose exploitation raises legitimate state and federal issues.

Attorneys for the involved stakeholders, in the interim, are mired down by winner-take-all advocacy in a dispute muddied by conflicting claims and data. The skills of lawyers in issue spotting, fact gathering and analysis, creating productive negotiations for the resolution of complex matters, and framing agreements are not being used fully to influence the outcome of this raucous debate. The sub-optimal process being employed to decide the future of hydrofracking in the Marcellus Shale region should cause lawmakers to revisit and rethink how such critical issues are decided.