

“Environmental Governance and Fracking in the U.S.:
Lessons Learned From Colorado’s Fracking Industry.”

Jonathan M. Fisk

Department of Political Science

Colorado State University

Executive Summary

This paper considers the difficulties of intergovernmental management and relationships in the U.S. political system. Due to incomplete power, the use of both formal and informal policy tools and political instruments, and a fragmented system – the challenge of working across levels of governments and sectors is immense. The challenge arises because many of today’s most pressing public problems necessitate the cooperation of multiple units of government. Using the State of Colorado and the City of Longmont’s ongoing interactions as an example, it is evident that lower units of government have the capability to alter state and federal agendas, to offer competing venues to stakeholders and to enlarge political conflicts in ways that can disrupt the political status quo. Through the City’s actions, which offered opponents of the practice, a more favorable venue to ban the technique, two results became certain. First, the stakes are large. Second, municipal actions are likely to diffuse.

The conflicts engendered by the environmental movement cut across sectors and governments and exemplify the difficulties associated with intergovernmental management. Reforms emerged from a hierarchical-based system of Federal command and control regulation, by which lines of authority were more clearly delineated (Scheberle, 2004; Lehner, 1993). Today, governance is often the product of any number of organizations that includes private actors as well as decision-makers from sub-national units of government (Hysing and Olsson, 2008). And, importantly, the inclusion of new actors and institutions present opportunities for stakeholders to expand the scope of conflict, occupy and reset multiple agenda and help organize opponents (Frederickson et al., 2012; Hysing & Olsson, 2008; Stoker, 1998). Recognizing this complexity and its implications for intergovernmental management and relations, this paper focuses on how multiple centers of power facilitate and but more frequently constrain natural resource policymaking. It does so by examining the policymaking context of Colorado's fracking industry, which involves state and local lawmakers.

Despite differences amongst the actors, institutions and strategies, questions of political power underscore the conflicts between the levels of government (Betsill & Rabe, 2009; Bowman and Kearney, 2012; Busche, 2010; Krane, Rigos and Hill 2001; Ostom, 1990; Schneider, Jacoby, & Lewis 2011). Power, in both the political and administrative spheres is neither monolithic nor static. Rather, power is dynamic and can be observed in a variety forms and degrees of formality. Actors seeking their political goals, thus, have a variety of means and tools at their disposal to advance a desired solution, to set their or others agenda, to raise an issue's salience and to mobilize potential supporters. Through these power dynamics, they create various relationships and networks that range from collaborative to conflictual, with each presenting challenges to the working relationships amongst governments (Agranoff & McGuire, 2004).

Formal legal arrangements such as those articulated in Federal and State Constitutions, statutes and officially documented delegations of power are common sources of political power (Ricucci, 1995). Higher level governments rely on formal allocations of power in order to complete a wide-ranging set of tasks ranging from setting and enforcing standards to establishing the rules of the 'game' for industry (Mashaw, 2006; McGarity, 1991). These governments may also enact minimum standards that create a baseline to which other governments must follow. More formal actions may also result in the promulgation of rules that limit available policy options or require that the street level agents to act in proscribed ways. Finally, formal regulations may also be used to motivate or sanction lower levels of governments relative to a preferred policy of a higher level of government (Cremer & Palfrey, 2002). The language used in specifying these formal relationships, however, is not precise or complete enough to spell out power relationships in all situations. As such, even in terms of formal power dynamics, there is enough discretion, uncertain and incomplete power and goal ambiguity to create room for more informal displays of power.

Informal power also complicates intergovernmental relations. Unlike the Federal Government and states, local jurisdictions are creations of statutes. Because they are not constitutionally protected units, they and other groups lack the legal authority to force other levels of government to consider their interests. Yet, they are not bereft of political tools (Berman, 2003; Zimmerman, 1995; Zimmerman, 2012). Riverstone-Newell (2012) likens them to groups, which, after negotiation fails can resort to outsider strategies i.e. informal tactics such as protest tactics, press releases and conferences, social media and other traditional media that mobilize the public in support of the municipalities (Berman, 2003; Sherman, 2007; Zimmerman, 1995). In other instances, they may maintain and/or grow their base of power through means such as reputation building, networking and expertise (Frederickson et al., 2012). They may also 'force' an issue onto a higher level of government's agenda through formal means such as passing an ordinance/ resolution which may lead heighten an issue's saliency (Betsill, 2001; Lindseth, 2004). Whatever the tactic, informal powers exist alongside formal powers and may be used to slow down and complicate intergovernmental coordination by raising the costs associated with cooperation.

Federalism and the separation of powers further blur the intergovernmental 'lines.' Long (1949) described that because of the structure and design of the U.S. political system, political power cannot be consolidated to the degree necessary for governments to achieve a single (typically vague) goal or for an agency to hold onto a policy monopoly in perpetuity. Decentralized and diverse sources of power create leadership gaps, multiple goals, and competition amongst and between stakeholders (Frederickson et al., 2012). Multiple power centers also tend to be more and less responsive to various interests and groups. Federal and state governments typically answer to more heterogeneous populations with divergent and broad interests while others, like many municipalities, are accountable to much more homogenous populations with more similar preferences (Zeemering 2009).

Cho et al. (2005) identified the magnitude and complexity of the intergovernmental system. At the Federal level, there are 535 individual lawmakers with thousands of staffers— each with his or her agenda that may also be influenced by other units of government, groups or policymakers. There are countless bureaucratic agencies that afford actors additional venues in which they can seek favorable policy outcomes. Second, there are fifty states (with thousands of elected lawmakers and unelected policymakers. Embedded within these two levels are fifty different state-national relationships that are characterized by both formal and informal examples of power. Third, at the local level, governing complexity continues to grow. Currently, there are over 86,000 local governments (counties, cities, school districts, etc.) with more than half a million elected officials and over 13 million local government employees. Like their state-federal

relationships, there are countless formal and informal linkages amongst localities and between localities and their states and federal government.

Environmental Policymaking and Hydraulic Fracturing

The Federal government shares many of its environmental policy responsibilities with state and local governments. In fact, the inclusion of state and local policymakers in environmental protection is often the preferred method for addressing intractable environmental problems (Scholz & Wang, 2006). As sub-national units of governments become more active, they are developing new resources, capacities and levels of technical expertise that can be applied strategically to either facilitate or impede the goals of other governmental units (Rabe, 2006; Betsil & Rabe, 2006). This dynamism, Scheberle (2004) argued, has contributed to 'fluid' and shifting legal boundaries making efforts to work across government difficult – as the power and goals of actors are also shifting. The politics of fracking in Colorado illustrate the difficulties of intergovernmental lawmaking

At its conceptual core, fracking is an issue of federalism. In short, the U.S. Constitution's Supremacy Clause states that if the federal government is silent on an issue, the states retain the authority to promulgate their own regulations (Downey 1985). In a similar manner, in many states, if the state does not establish regulations or if the issue is inherently local, local governments typically possess the discretion to establish their own regulatory controls. Because of this overlapping constitutional language, there is often confusion as to which level of government bears responsibility for an issue or policy (Klyza & Sousa, 2008).

In the arena of fracking, Colorado is the primary regulator of the industry. Despite the potential of Federal involvement, Colorado has retained near exclusive jurisdiction over issues such as the licensing, permitting, and chemical disclosure of drilling wells. This includes well design and location, spacing, operational procedures, water and waste management and disposal, air emissions, wildlife impacts, surface disruptions and disturbances and worker health and safety (Colorado Oil and Gas Association [COGA], 2012; Davis, 2012; Fisk, 2013). State laws, even when tilted in favor of state centralization, still afford opportunities for local input (Davis, 2012). Without this high degree of centralized state control, the state argues that a patchwork of local regulations would result and weaken state policy by imposing an undue and unfair burden on businesses, thereby discouraging future investment and economic growth, which as of 2012, included over 100,000 jobs and a total economic impact of \$30 billion dollars (COGA, 2012a).

Local governments have multiple reasons to be invested in monitoring and regulating fracking operations. Such reasons center around fracking's suspected environmental impacts that include land use, water and air pollution and climate change. A recent Colorado study, for example, found that areas near fracking sites are associated with acute and

chronic health impacts (Kelly, 2012; Zeller, 2011). Other studies have also found a link between fracking and poor air quality. Sites located near Pinedale, Wyoming, for example, were found to have amounts of ozone pollution at 124 parts per billion, worse than the City of Los Angeles' worst day in all of 2010. Finally, fracking may negatively impact resident's quality of life through increased noise and traffic from trucks hauling sand, chemicals and wastewater (Lynn, 2012; Wiseman, 2009).

Despite most of the formal power being held in Denver, local governments have actively participated in the policy process, demonstrating the difficulties of contemporary governance. The Colorado Oil and Gas Conservation Commission (COGCC) pre-empts local regulation in the areas described above. It does however, give local governments a somewhat formal role in its decision making process. The commission permits the appointment of a local governmental designee (LGD). The LGD receives information on all oil and gas activities within the area. Moreover, he or she may also request a hearing to evaluate any significant and adverse impacts that he or she believes have not been adequately considered or addressed by previous COGCC action. A local public forum (LPF) may also be called under Rule 508 to consider applications that seek to increase well density and for consideration of other topics that affect the welfare, safety and health of nearby communities (COGCC, 2008; COGA, 2012b).

Informal powers, such as agenda setting and mobilization, have dominated Colorado's fracking politics. In short, state-level restrictions have not stopped local governments from promulgating supplemental regulations and forcing the issue of local control over fracking onto the agenda of state lawmakers. Gunnison, Garfield, La Plata, and Pitkin counties, for example, are in the process of enacting additional standards and rules governing natural gas development more stringent than state regulations. Perhaps, the most widely followed story is the City of Longmont's, a suburb of Denver, efforts to ban fracking. In July 2012, following a drilling moratorium, the City enacted a new set of oil and gas regulations that included an outright ban on drilling in residential areas (passed on a 4-3 vote). Activists also used the citizen initiative to restrict fracking within the city. In November 2012, Longmont voters backed a fracking ban by a 60-40 margin. It should be noted that despite voting for the ban, the city's actions stand on precarious legal grounds especially as the State Supreme Court considers hears the case (Denver Post, 2012; Rochat, 2012; 2012a).

Recommendations and Future Considerations

There are a number of lessons can be distilled from this brief discussion of hydraulic fracturing in Colorado. First, it is clear that the reality of U.S. second order federalism is more complicated than the traditional dyadic state-federal relationship. There exists a myriad of formal agendas that actors may strategically target, each imbued with various formal and informal powers that drive up transaction costs and make it difficult to work across levels of

government. Power is incomplete, enabling rational policy actors to seek out favorable venues that may disrupt the status quo and enlarge the scope of conflict. Colorado's local governments, even without explicit statutory authorization and fewer formal powers when compared to the state, have been used as a platform for the opponents of fracking to strategically pursue their interests. Access has transformed them into new venues in which a mobilized group of citizens' may contest the state's authority. Municipal and county activism, it appears, challenged the political status quo, which favored oil and gas extraction, and enlarged the scope of conflict. Second, in the case of Colorado, the state has a number of formal and legal tools at its disposal – ranging from bureaucratic regulations to the courts. Despite, this near monopoly of formal powers, it has not deterred opponents who have sought out multiple venues to effectuate political and policy change through informal tools such as mobilization, conflict enlargement and agenda (re)setting.¹

Despite conflicts, in the larger context of energy security, the need for responsive governance and effective problem-solving through intergovernment management is critical. While the variety of tools described above may be used to slow down the process, the scale and magnitude of contemporary challenges requires that governments use all of their tools. And, importantly, some levels of government are better suited to use certain tools. In the context of fracking, for example, its impacts are global, but demand for energy can be traced to decisions made at the most local and individual levels. Thus, to mitigate the effects of fracking and environmental challenges, cooperation will be needed. Federal and state governments, for example, may need to set hard standards that establish minimums for industry and other units of government. Using their position as closer to citizens, local units may need to engage in the politics of persuasion and mobilization to induce behavioral change amongst their residents in ways that complement the actions of higher levels of government.

References

- Agranoff, R., & McGuire, M. (2004). Another look at bargaining and negotiating in intergovernmental management. *Journal of Public Administration Research and Theory*, 14(4), 495-512.
- Berman, D. R. (2003). *Local governments and the states: Autonomy, politics, and policy*. ME Sharpe.
- Betsill, M. M. (2001). Mitigating climate change in US cities: opportunities and obstacles. *Local environment*, 6(4), 393-406.
- Betsill, M. & Rabe, B. (2009). Climate change and multilevel governance: The evolving state and local roles. In Mazmanian, D.A. & Kraft, M.E. (Eds.), *Toward Sustainable Communities: Transition and Transformations in Environmental Policy* (201-226). Cambridge, Massachusetts: The MIT Press.
- Bowman, A. O. M., & Kearney, R. C. (2012). Are US Cities Losing Power and Authority? Perceptions of Local Government Actors. *Urban Affairs Review*, 48(4), 528-546.

¹ This includes the Cities of Fort Collins, Loveland and Boulder.

- Busche, S. (2010). *Clean Energy Policy Analyses: Analysis of the Status and Impact of Clean Energy Policies at the Local Level*. Golden, CO: National Renewable Energy Laboratory.
- Cho, C. L., Kelleher, C. A., Wright, D. S., & Yackee, S. W. 2005. Translating national policy objectives into local achievements across planes of governance and among multiple actors: Second-order devolution and welfare reform Implementation. *Journal of Public Administration Research and Theory*, 6(1), 31–54.
- Colorado Oil and Gas Conservation Commission. (2008). *Colorado Oil and Gas Conservation Commission: Cost-benefit and regulatory analysis*. Accessed 16 July 2013 http://COGC.state.co.us/rulemaking/CBA/COGC_CBA_Main_doc.pdf.
- Colorado Oil and Gas Association. (2012). *Hydraulic fracturing and disclosure in Colorado*. Accessed 16 July 2013 http://www.coga.org/pdfs_facts/Hydraulic%20Fracturing%20Disclosure.pdf.
- Colorado Oil and Gas Association. (2012a). *Hydraulic fracturing whitepaper*. Accessed 16 July 2013 http://www.coga.org/pdfs_facts/hfwhitepaper.pdf.
- Colorado Oil and Gas Association. (2012b). *The role of local government in oil and gas regulation*. Accessed 16 July 2013 http://www.coga.org/pdfs_policy/Local_Government_Whitepaper.pdf.
- Crémer, J., & Palfrey, T. R. (2002). Federal mandates with local agenda setters. *Review of Economic Design*, 7(3), 279-296.
- Davis, C. (2012). The politics of “fracking”: Regulating natural gas drilling practices in Colorado and Texas. *Review of Policy Research*, 29(2), 177-191.
- Denver Post. 2012. “Endorsement: No on 300: Reject Longmont Fracking ban: We Urge the City's Residents to Vote "no" on Question 300, which Bans Hydraulic Fracturing in City Limits.” The Denver Post. October 22. Available at http://www.denverpost.com/opinion/ci_21812571/endorsement-no-300-reject-longmont-fracking-ban.
- Fisk, J. M. (2013). The Right to Know? State Politics of Fracking Disclosure. *Review of Policy Research*, 30(4), 345-365.
- Frederickson, H. G., Smith, K. B., Larimer, C.W. & Licari, M.J. (2012). *The Public Administration Theory Primer*. 2nd ed. Boulder, CO: Westview Press.
- Hysing, E., & Olsson, J. (2008). Contextualizing the advocacy coalition framework: theorizing change in Swedish forest policy. *Environmental Politics*, 17(5), 730-748.
- Kelly, Brian (2012). *Study Shows Air Emissions Near Fracking Sites May Pose Health Risk: They Contain Hydrocarbons Including Benzene*. Accessed 12 June 2013 <http://www.ucdenver.edu/about/newsroom/newsreleases/Pages/health-impacts-of-fracking-emissions.aspx>.
- Krane, D., Rigos, P. N., & Hill, M. B. (2001). *Home rule in America: A fifty-state handbook*. Washington D.C. CQ Press.
- Kylza, C.M. & Sousa, D. (2008). *American Environmental Policy, 1990-2006*. Cambridge, MA: MIT Press.
- Lindseth, G. (2004). The Cities for Climate Protection Campaign (CCPC) and the framing of local climate policy. *Local Environment*, 9(4), 325-336.
- Long, N. E. (1949). Power and administration. *Public Administration Review*, 9(4), 257-264.
- Lynn, S. (2012). *Cities Take Aim at Oil Industry Regulations*. Accessed 12 July 2013. <http://www.ncbr.com/article/20120629/EDITION/120629913/-1/oilnaturalgas>.
- Mashaw, J.L. (2006). Accountability and institutional design: Some thoughts on the grammar of governance. In Dowdle M.W. (ed) *Public Accountability: Designs, Dilemmas and Experiences* (115–56). Cambridge: Cambridge University Press
- McGarity, T. O. (2001). Politics by other means: Law, science, and policy in EPA's implementation of the food quality protection act. *Admin. L. Rev.*, 53, 103.

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.

Riccucci, N. M. (1995). "Execucrats, politics, and public policy: What are the ingredients for successful performance in the Federal Government? *Public Administration Review*, 55(3), 219-230.

Riverstone-Newell, L. (2012). Bottom-up activism: A local political strategy for higher policy change. *Publius: The Journal of Federalism*, 42(3), 401-421.

Rochat, Scott. 2012. *Longmont council approves oil/gas rules 5-2*. Accessed 17 July 2013.
http://www.timescall.com/news/longmont-local-news/ci_21098770/longmont-council-approves-oil-gas-rules-5-2.

_____. 2012a. *Spending passes \$500,000 to Fight Fracking Ban*. Accessed 17 July 2013.
http://www.dailycamera.com/news/ci_21847759/spending-passes-500-000-fight-fracking-ban.

Scheberle, D. (2004). *Federalism and environmental Policy*. 2nd ed. Washington, DC: Georgetown University Press.

Schneider, S. K., Jacoby, W. G., & Lewis, D. C. (2011). Public opinion toward intergovernmental policy responsibilities. *Publius: The Journal of Federalism*, 41(1), 1-30.

Sherman, D. J. (2011). *Not here, not there, not anywhere: politics, social movements, and the disposal of low-level radioactive waste*. Washington D.C.: Resources for the Future.

Scholz, J. & Wang, C. (2006). Cooptation or transformation? Local policy networks and federal regulatory enforcement. *American Journal of Political Science*, 50(1), 81-97.

Wiseman, H. (2009). Untested waters: the rise of hydraulic fracturing in oil and gas production and the need to revisit regulation. *Fordham Environmental Law Review*, 20, 115.

Zeemering, E. S. (2009). What does sustainability mean to city officials? *Urban Affairs Review*, 45(2), 247-273.

Zeller, T., Jr. (2011). *Studies say natural gas has its own environmental problems*. Accessed 19 July 2013.
<http://www.nytimes.com/2011/04/12/business/energy-environment/12gas.html?pagewanted=all>.

Zimmerman, J. F. (1995). *State-local relations: A partnership approach*. Greenwood Publishing Group.

Zimmerman, J. F. (2012). *State-local Governmental Interactions*. SUNY Press.