This paper focuses on agenda change affecting the politics of “fracking operations” in the U.S., a process of extracting natural gas from underground shale formations. We examine how the movement of this policy issue between the state and federal levels of government has become increasingly contentious because of rising public concern about pollution impacts. Using information obtained from documentary sources and media content analysis, we found that the natural gas policy coalition has largely focused on a political strategy based on maintaining fracking regulatory control at the state level while the environmental policy coalition has pushed for increased regulation of drilling practices in general, including a larger policy and oversight role for federal agencies such as EPA.

Introduction

This paper focuses on the agenda politics of regulating natural gas in the U.S., notably the efforts taken by various policy actors and networks to expand or contain the regulatory oversight of hydraulic fracturing (commonly referred to as “fracking”). This refers to a drilling technology that injects a mix of water and chemicals at high levels of pressure into deep underground shale deposits in order to dislodge gas. Once the rock formation is fractured, “the natural gas can flow to the well where it is pumped out of the ground.” (Saundry, 2009). While earlier forms of fracking by U.S. energy companies date back to the late 1940s, the recent upsurge in its use was prompted by the discovery of large new reserves of coal or shale bound gas throughout the U.S. and by technological improvements such as the inclusion of horizontal drilling techniques adopted from deepwater oil and gas wells operating in the Gulf of Mexico (U.S. Energy Information Administration, 2011).

Environmental groups and some state officials are increasingly concerned about potential risks related to public health and water quality stemming from the migration of chemicals to nearby aquifers as well as the sizeable amount of water required to utilize this technology. They worry that state level policies designed to protect water quality are too weak and that state regulatory agencies or commissions tend to be overly responsive to developmental interests. Consequently, they favor a larger federal role; that is, removing the regulatory exemption from the Safe Drinking Water Act currently in place for oil and gas firms and granting more regulatory authority to federal agencies like the U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Interior (DOI).

Conversely, natural gas industry officials and trade associations have tended to resist efforts to expand the jurisdictional scope of regulations affecting drilling operations; e.g., full disclosure of chemicals used in the fracking process. They also contend that the technology has
proven to be both effective and safe and point to long-term use at the state level without adverse health or environmental impacts. Industry interests generally oppose efforts to alter the status quo; i.e., keeping decision-making authority pertaining to fracking operations within the jurisdiction of state agencies or commissions and resisting efforts to “federalize” regulatory activities that seek to carve out a more prominent policymaking role for federal agencies.

This paper focuses on agenda change and the jurisdictional locus of authority for the prospective regulation of hydraulic fracturing or fracking in the U.S. Our primary research objective is to analyze political actions taken to either retain regulatory responsibilities for fracking policies at the state level or to expand regulatory authority to include a more prominent role for federal agencies such as EPA or the DOI. Scholarly efforts to consider jurisdictional venue shopping by Baumgartner and Jones (2009) and Pralle (2006, 2009) focus on the types of policy that are more susceptible to intergovernmental shifts, while Mintrom and Norman (2009) and Gerber and Kollman (2004) examine how political entrepreneurs or other policy actors view shifts in authority as a means of furthering policy goals. However, we contend that existing approaches to intergovernmental venue shopping have given insufficient attention to alternative decisional pathways used to enhance or deny efforts to increase federal regulatory authority over policies currently controlled by state officials. Thus, one way to refine the explanatory usefulness of an existing framework is to identify and discuss how some of these pathways can be better integrated in attempts to explain these efforts.

After a preliminary discussion of how fracking fits into the analysis of energy policies writ large, we summarize the literatures that address agenda change within a federal system and develop research expectations. Since our topic has received little attention from policy researchers, there are few sources of data that would permit a more systematic evaluation of the research question. Accordingly, our analysis is exploratory and is based on two sources of information. One draws from documentary sources and news accounts from 2009 (when public awareness of fracking began to surface) to the present. In addition, we examine the rise in news coverage of fracking over the same time period in major newspapers located in three states that are among the biggest producers of natural gas in the U.S. – Pennsylvania, Colorado, and Texas. Stories that discuss or even hint at the possibility of groundwater contamination or other forms of pollution linked to fracking operations are counted and discussed as well as news accounts that mention the possibility of federal agency involvement in the regulation of natural gas drilling practices. These three states vary not only in terms of geography but dependence on natural gas as a key source of energy for in-state uses, relative support for environmental protection policies, and the presence or absence of gas-related accidents or other focusing events that could affect the political calculus of the issue. And each of the sources chosen is a newspaper of record for the respective states.

Fracking and State Energy Policies

Energy policies within the U.S. vary greatly in terms of jurisdictional control, sensitivity to markets, public awareness, technical complexity and the role each plays in contributing to the overall mix of power production (Davis, 1993). While policy scholars have occasionally analyzed energy within the larger arena of environmental policymaking (Vachon and Menz, 2006), others suggest that a more careful comparison of the two reveals differences related to the type of policy and the locus of political authority. Lowry (2008) found that energy policies have historically put emphasis on distributive attributes to a greater degree than environmental
programs that more commonly adopt a regulatory emphasis; however, he also noted that public officials have become more sensitive to policy concerns that led to changes with more regulation, an increasingly partisan divide, and greater conflict. In addition, some program areas like nuclear power are more likely to be administered by federal agencies while others, like natural gas production, have remained under the jurisdiction of state government (Kraft, 2011).

The state-level focus of oil and gas production activities reflects a preference among state political authorities and industry officials to reap the rewards of economic growth and to avoid federal regulatory controls while meeting the energy needs of in-state residents (Ground Water Protection Council and ALL Consulting, 2009). Over time, politically influential policy sub-governments emerged within energy-rich states consisting of industry leaders, trade associations, elected officials, and agencies or regulatory commissions (Eisner, Worsham, and Ringquist, 2006; Rabe and Mundo, 2007). State regulators developed close working relationships with industry, owing, in part, to statutory mandates for regulatory agencies among the 27 major gas producing states that frequently place emphasis on the “orderly development of energy resources” (Soraghan, 2011j). Several states have also retained staffing requirements for oil and gas conservation commissions that include prior industry experience (Soraghan, 2011k). While environmentalists worry about a structural bias resulting in agency decisions favoring production over environmental protection, others contend that such requirements ensure a greater degree of technical expertise in the decision-making process.

A closer look at the distribution of fracking policies reveals some variation in terms of what states do. Most states tend to encourage the development of gas related activities as a welcome source of well paying jobs in a tough economy (IHS Global Insight, 2009) and to regulate fracking as part of the general framework for oil and gas drilling (Wiseman, 2009). But a smaller number of states have exhibited greater sensitivity to environmental concerns such as the management of saline or contaminated produced waters from frack jobs and the types of chemical disclosure policies in place for fracking operations. For example, in New York, a state with substantial gas reserves linked to the Marcellus Shale play, policymakers have placed a moratorium on the issuance of permits to gas companies pending environmental reviews that are expected to reveal the magnitude of risk posed to public water supplies by the onset of drilling activities. Colorado officials have taken additional steps policy-wise to protect groundwater and wildlife resources from fracking activities (Davis, 2012). And five states now require disclosure of well-by-well data with an online public clearinghouse, FracFocus.org., a move that is supported by an industry trade group, the Natural Gas Alliance (Maykuth, 2012).

Literature Review

Policy Agendas

The outcome of any conflict is determined, at least to some extent, by the scope of participation in that conflict. Efforts to expand or contain conflict involve federal-state relationships. Actors seeking to limit the scope of a conflict will attempt to localize it, while those seeking to expand conflict will attempt to nationalize it. This suggests, as E.E. Schattschneider (1975) notes, that conflicts that involve arguments about local versus national control, federalism, or centralization versus decentralization involve “controversies about the scale of conflict”. These controversies can take on an urgent tone because the scale at which a conflict is adjudicated influences its outcome. As the jurisdictional level for conflict changes,
resources and potential solutions may shift, becoming more or less available (Schattschneider, 1975). The discussion that follows examines the strategies likely to be employed by groups during a policy conflict. While the discussion examines the strategies of supporters of the status quo separately from the strategies likely to be employed by proponents of change, such activities are not isolated. Rather, actions taken by one group will shape the actions of the other. In any policy conflict, as groups interact they “shape one another’s claims, choices of venue, and other tactics”, and what opponents do can act as either an opportunity or a constraint (Pralle, 2006).

Expansion of policy conflict is often initiated by grassroots policy actors. Cobb and Elder (1972) put emphasis on efforts that enlarge the coalition of groups seeking policy change through strategies such as issue or problem redefinition. This can take a number of forms. One example is the development and use of causal stories as a means of linking a possible solution to a particular problem (Stone, 2002; see also, Scheberle, 1994). Policy actors may seek to reshape how public officials view the problem; e.g., efforts by competing groups to gain the upper hand in defining consumer safety needs for airline travel (Cobb and Primo, 2003) and airbag safety (Houston and Richardson, 2000). Activists may also attempt to link their issue to larger cultural norms and concerns. In this case, symbols, stories, and definitions will utilize easily identifiable concepts like freedom, security, economic growth, or conservation in order to promote the idea that a public interest is at stake (Baumgartner and Jones 2009; Stone 2002).

Other factors contributing to policy expansion include initiatives taken by individual policy brokers or entrepreneurs either within government or by individual or organizational representatives (Kingdon, 1995; Mintron and Norman, 2009). Members of Congress often devote considerable effort in developing and promoting policy ideas; similarly, political executives may seek to expand departmental jurisdiction to address problems lacking regulatory coverage under existing legislation. Kingdon also notes that agenda change is significantly influenced by the political stream, notably shifts in public opinion or election outcomes. Policymakers are also attuned to the strategic value of capitalizing on media attention directed to “focusing events” and other indicators of policy problems. This has been documented in agenda change studies dealing with homeland security (Birkland, 2004) and coastal oil spills (Kurtz, 2004), among others.

Venue shopping is another key form of agenda setting that can take on a variety of forms. Abandoning the pursuit of legislation in favor of administrative policy change is one example. Sometimes the involvement of a new institution may add legitimacy to group claims and serve to highlight the conflict present in a given policy arena; e.g., Baumgartner and Jones (2009) discuss efforts by anti-nuclear activists to shift their political focus from the federal level of governance to the states. Jurisdictional control can shift “up or down the ladder of authority” with expansion strategies typically associated with moving up the ladder of authority (e.g., local to state or state to federal) while containment strategies tend to seek to maintain the level of authority or shift it down the ladder to local decision-makers (Pralle, 2006). When combined with increasingly negative public perceptions of problems or programs, a venue shopping strategy can lead to agenda change, and ultimately, policy change.

While much of the agenda setting literature has focused on issue expansion strategies, it is equally necessary to acknowledge structural and procedural barriers to the enactment of new policy proposals. Proponents of the status quo are adept at identifying and utilizing strategies to contain conflict. Roger Cobb and Howard Ross (1997) discuss strategies of agenda denial in terms of a cost continuum. Low-cost strategies are characterized by “non-confrontation”. As proponents of change are able to attract the attention of the public, the media, and government officials, their issue preferences are increasingly likely to reach the agenda. As attention
increases, opponents must utilize higher cost strategies. In order to avoid this, opponents will seek to deflect attention away from the issue. Defenders of the status quo are likely to first deny that the problem exists, an “ignorancing” strategy. This strategy can involve efforts to ignore either the problem or its proponents, or provide procedural reasons for not addressing a problem (Cobb and Ross, 1997b).

If this type of strategy fails and the initiating group is still able to attract public attention, opponents to change must engage new strategies. This includes the use of more outward arguments denying that a problem exists and the battle is increasingly focused on issue definition (Cobb and Ross, 1997b; Pralle, 2006). For example, opponents may argue that while proponents define an issue as part of a larger pattern, the problem is better understood as an isolated incident. Another strategy is to deny the existence or political legitimacy of the initiating group.

Either approach may force initiating groups to expend resources in order to provide and publicize counterarguments. If initiators, despite the efforts of their opponents, are able to attract participants to conflict, low-cost strategies for agenda denial will become less and less tenable, forcing opponents to employ more costly strategies. These strategies are more likely to reflect an attack posture through which efforts are made to discredit and negatively characterize either the issue definition promoted by the initiating group or the group itself. Efforts of this sort are aimed at raising public doubt about the proposal and stemming any mobilization of support for the initiators (Cobb and Ross, 1997b).

If the group advocating change is characterized by “low legitimacy,” they are more likely to be the objects of an attack. These strategies involve efforts to attach negative images to and destroy the credibility of the group itself as well as those who support it. Such attacks require that initiators spend resources, including time, countering and defending themselves against these charges. Cobb and Ross (1997b) argue that a “key element in the attack strategy is the allocation of blame” because when blame can be attached to a particular group, public “pressure for action diminishes.” When initiators blame opponents for their problems, opponents may seek to reverse the roles, claiming victimhood for themselves. Attacks might also involve the use of deception. Opponents may seek to distort either their own position or that of the initiator.

An additional medium-cost strategy involves symbolic placation. Rather than continue to utilize the language describing a zero-sum conflict, opponents employing this strategy will place more emphasis on mutual interests and compromise. In addition, utilizing the “language of consensus” minimizes conflict and creates the appearance of an issue under control, which can encourage apathy and discourage either the entrance or the continued involvement of participants (Pralle, 2006; Schattschneider, 1975). An interesting variant of this strategy lies in the use of stakeholder groups by the Canadian tar sands industry and supportive public authorities to convey the impression that all interests are represented while avoiding any concrete steps to alter existing decisions (Hoberg and Phillips, 2011).

The last major category of strategies of agenda denial includes high-cost efforts that have the potential to impose costs on both sides of the issue. These strategies are only undertaken for “sufficiently important” issues and involve “electoral, economic, and legal threats” or sanctions. One such tactic, seen especially in the environmental arena, is the use of Strategic Lawsuits Against Public Participation (SLAPPs). This tactic has been utilized in a number of environmental controversies ranging from Superfund controversies to local government attempts to regulate fracking. And within the economic policy arena, Hall and Jones (1997) discuss how the Securities and Exchange Commission have utilized a market friendly disclosure-enforcement
approach over time to discourage – or contain - the consideration of stronger regulatory measures that would seriously constrain the effective operation of capital markets.

Federalism and Policy Agendas

Federalism provides ample opportunities for venue shopping. In the U.S., redundancy and overlap in public policy has created a system in which governments at all levels engage in efforts to resolve many of the same problems. This allows groups to pursue a vertical venue shopping strategy in which different levels of government provide more or less favorable venues for the attainment of policy goals (Pralle, 2006; Schattschneider, 1975; see also: Bowman, 2002; Scheberle, 2004). By forcing their opponents to address policy issues across jurisdictional boundaries, groups spend more than would have occurred had the issue been confined to a single venue. This favors groups that are well-established and blessed with ample resources.

National and subnational venues are linked through policy approaches such as grants-in-aid and regulatory mandates and through political actions undertaken by interest groups or issue networks. Shifts towards either greater policy decentralization or centralization or “authority migration” may arise under several conditions. First, shirking or abdication of responsibility at one level of government might result in policy initiatives to fill the void from public officials representing another level of government. Second, one level of government may encroach on the jurisdiction of another, perhaps in response to public pressure. Third, migration might arise through deliberate efforts, for example, when national authorities pass policy responsibility to local governments through a policy design such as partial preemption. Fourth, national governments may employ voluntary agreements and incentives to devolve authority (Scheberle, 2004). Lastly, public pressures and political culture may create incentives and pressure for either decentralization or increased centralization of power (Gerber and Kollman, 2004).

Federalism involves a “system of policy venues” that leads to specialization in some policy areas, while sharing jurisdiction over others. This, in turn, creates multiple opportunities for political actors seeking policy change by shifting authority. However, the strategies employed by these actors will be constrained by the venue to which they are appealing. Most importantly, different venues within the federal system will be more or less receptive to different issue frames and policy proposals. This creates constraints for policy actors, who must appeal the institutional values and specialization of the venue in which they seek to be heard. For example, Baumgartner and Jones (2009) argue that interest groups, in their attempts to appeal to traditional concerns, have become adept at framing state-level policies in terms of economic growth.

Policy actors continue to seek to use the federal structure to their advantage. Environmental groups, in particular, have argued that some issues, notably clean drinking water, are too important to be left to uneven and varied regulation by states, and that a national, uniform standard is needed to ensure greater compliance. Environmental advocates have also turned to the states. When frustrated in national venues either by gridlock or lack of receptivity and progress in general, environmental groups have occasionally sought to find more receptive audience at the state level. Moreover, some policy tools such as the citizens’ initiative allow for an important means of policymaking that is independent of state elected officials – examples include voter approval of a ban on environmentally destructive heap leach mining in Montana and the regulation of corporate hog farms in Colorado (Klyza and Sousa, 2008).

Those in favor of devolution argue that states, with greater flexibility, can avoid current points of gridlock over environmental policy and become leaders in policy experimentation and
learning. Arguments for devolution also include claims that such a move will create several positive outcomes including greater efficiency in the production and delivery of public goods and services, and will increase innovation, responsiveness, and transparency (Bowman, 2002). It is also suggested that context matters; i.e., environmental conditions and problems vary from state to state and a one-size fits all policy cannot effectively address problems that are jurisdiction-specific. While some analysts find hope in considering state-centered approaches (John, 1994), other environmental advocates worry that state governments may be favorable terrain for those who would prefer environmental regulations to be cut back, especially in states dependent on revenues from extractive industries (Klyza and Sousa, 2008).

Interests can also turn to federal power as a tool to prevent or oppose policies and proposals with which they do not agree. For example, Wyoming passed legislation in 2005 dealing with the split-estate controversy that historically placed surface property owners (like ranchers) at a considerable disadvantage in dealing with owners of the mineral estate (i.e., subsurface resources). The new law allowed surface property owners greater control over energy development activities on their land. However, BLM Director Kathleen Clarke argued that this new law created economic burdens for energy companies and that it would not apply to mineral rights held by federal landowners. In short, by offering ample opportunity for venue change, federalism hinders the ability of any group or network to control the flow of ideas through the entire system, making “changes less controllable by anyone” (Baumgartner and Jones, 2009).

Interstate compact commissions (ICCs) have become another contact point for groups seeking federal or state control over a given policy problem. ICCs are created to administer interstate compacts for states that share common interests in particular policies. These compacts represent formal and permanent contracts that bind a state to courses of action policy-wise, thereby reducing a state’s capacity for making independent decisions to develop, alter, or implement public programs. In short, a system of governance is created with the development of a commission, rules, and policies (Bowman and Woods, 2010). States seek compact membership for two major reasons - “to enhance their policymaking capacity and to substitute actions taken by like-minded state actors for policy action by the national government” (Zimmerman, 2002). Increasingly, compacts have been recognized as tools for conflict resolution and policy development in several policy areas, including natural resources and the environment (Florestano, 1994).

Interest groups have also found it useful to seek benefits arising from ICC policy decisions. By monitoring shifting power relations for opportunities and potential threats, groups look for new avenues of influence, including the interstate compact. Compacts are attractive for several reasons. For one, compacts create stable policy, since any proposed changes would require multistate negotiations. A compact may also prove to be a more favorable venue than other institutions since groups can manage policy conflict at an appropriate scale; i.e., within an intermediate number of states that is smaller than a full blown federal effort but greater than a single state focus. Some policy groups have long used interstate compacts as a means of securing market stability for member state firms while avoiding federal agency involvement (Bowman and Woods, 2010).

In short, we suggest that a closer look at the literatures of agenda building and federalism will help us account for efforts to shape fracking policy agenda decisions in the U.S. It is important to note that the status quo contains a strong policy bias favoring natural gas policies as they are. Fracking represents a source of jobs and economic salvation for many states hard hit by the recession; hence, the starting point for any policy discussion is to avoid any form of
regulatory intervention that might thwart or slow drilling operations. A policy network consisting of natural gas industry officials, trade associations like the American Petroleum Institute (API) and the Independent Petroleum Association of America (IPAA), and state agencies has historically succeeded in ensuring that regulatory decisions remain within the confines of state government. But we can also cite a longstanding pattern of policy success stories for environmental groups like the Sierra Club or the Audubon Society that have effectively “nationalized” pollution control or natural resource policies by marshalling public support and using alternative venues like the federal courts.

This allows us to develop several research expectations. Natural gas policy actors will continue to pursue a regulatory containment strategy that leads them to oppose any jurisdictional shift for fracking policies from the state level to higher levels of governance. Another line of defense from the prospective involvement of federal agencies will be the continuing support from the Interstate Oil and Gas Commission, an interstate organization that has long represented the policy goals of energy producing states. Policy supporters will continue to stay on message by emphasizing the lack of any documented incident of water contamination from fracking operations occurring over a half century of experience.

Conversely, environmentalists worried about the potential costs of fracking to public and ecological health will utilize an issue expansion strategy that shifts jurisdiction over natural gas regulatory policies from the states to agencies situated at higher levels of government like EPA. An intermediate option that stops short of a strong federal role will also be pursued as part of a multipronged strategy set. Interstate organizations like the Delaware River Basin Commission (DRBC) and the Susquehanna River Basin Commission (SRBC) represent both state and federal interests by implementing key compact responsibilities such as ensuring an equitable allocation of water resources among states within its watershed and protecting water quality. The latter goal offers a potentially important source of leverage for water conservation advocates since any oil or gas drilling within the watershed requires a permit that may or may not be issued by the DRBC. The policy frames used by environmentalists include the oft-used argument that the natural gas industry should not be exempted from coverage under the Safe Drinking Water Act and that companies should have little to fear if the fracking technologies are as safe as claimed.

We also expect to find that the number of media reports about fracking will increase over time in Colorado, Pennsylvania, and Texas and that a corresponding increase in the number and proportion of stories that mention problems associated with its use will also occur. An increase in news articles mentioning a federal role in the regulation of natural gas fracking operations is expected as well although the general tone (negative vs. positive) of these stories may vary because of state-level factors such as the degree of public support for environmental protection policies and the presence or absence of gas-related accidents or other focusing events.

Fracking and the Policy Agenda

Conflicting Attitudes toward Drilling

Natural gas has been touted by industry officials, policymakers, and environmental groups as a cleaner burning alternative to coal and as a bridge fuel towards a less carbon intensive energy economy (see: Kirkland, 2010). Add forecasts of vast reserves now made available through horizontal drilling and hydraulic fracturing coupled with the rise in job creation and related economic benefits and we can understand why natural gas as a preferred
source of energy has captured the attention of industry leaders and policymakers alike. But for all the positive attention, homeowners, local governments, and community, public health, and environmental groups remain skeptical because of persistent reports of water contamination and other environmental impacts. Consequently, many people have mixed feelings about fracking.

Can we detect any evidence of a public mood that depicts how people think about fracking and the accelerated production of natural gas in the U.S.? A number of polls have been carried out over the past few years including a 2010 national survey that was administered by Infogroup/Opinion Research Corporation for the Civil Society Institute. An analysis of survey findings revealed that 45 percent of Americans were “very” or “somewhat” aware of the controversy surrounding fracking, and, among those respondents, 69 percent were concerned about threats to drinking water posed by the process. The study also found that most respondents would support disclosure requirements and further studies into potential health and environmental impacts. Moreover, these results were bipartisan, drawing support from Republicans (74 percent), Independents (72 percent), and Democrats (85 percent). A majority of respondents (56%) also agreed that state regulators could do more to protect health and the environment (Civil Society Institute, 2010). Increased public pressure on industry and awareness of the issue may also be driven by moves to explore and develop new areas where residents are unfamiliar with drilling operations but are more amenable to regulation (Soraghan, 2011e).

More recent polls find that people want the economic benefits associated with fracking but are concerned about its environmental impacts. In a recent survey conducted by Bloomberg News (2012), 65% of Americans expressed support for tighter regulation of fracking compared with 18% who favor less. In like fashion, a Quinnipiac University opinion poll conducted in January, 2012, found that Ohio residents agreed by a margin of 43-to-16 percent that fracking would damage the environment while 72% of those responding supported a temporary suspension of the practice until safety concerns were addressed. On the other hand, Ohioans still believe that the positive benefits of jobs added through increased natural gas drilling are more important than the environmental costs by a 64-to-29 percent margin (Mufson, 2012).

What does this mean in terms of agenda change and fracking policies? On the one hand, the natural gas policy coalition no longer monopolizes information about fracking technology to the extent that people are unaware of environmental risks. The polling data indicate that respondents are clearly worried about the possibility of collateral damage from drilling in the form of air or water pollution but they are equally drawn to its positive benefits, namely economic growth and job creation. So coalition members can probably expect continuing political support as long as gas companies can avoid unwanted industrial accidents that can be quickly transformed into a catalyst for policy reforms.

**Efforts to Federalize Fracking Policies**

How have environmental groups attempted to move beyond state regulatory controls to an institutional arrangement that shares regulatory responsibilities between state and federal officials? It begins with efforts to develop a more expansive definition of fracking that goes beyond pressurizing shale formations to release natural gas. Attention is directed to environmental impacts from drilling processes in general, including the disposal of saline “produced waters” that surface following fracking operations, the amount of water used (two to four million gallons per frack), the loss of tranquility because of continuous noise and traffic from trucks hauling sand, chemicals, or wastewater through communities, and increasing levels
of air pollution from the use of compressors and from leaks from shale gas wells and from loose pipe fittings attached to gas pipelines (Zeller, 2011).

The use of a more inclusive definition of fracking dovetails nicely with efforts by anti-fracking activists to selectively use information to inflate public perceptions of risk. An example is the attempt to publicize the recently discovered 1987 EPA report (released in August, 2011) that found a strong link between fracking and contaminated well water. Fracking critics then pointed to the inconsistencies posed by the 1987 EPA report and the subsequent language used by EPA officials in 2004 when they claimed that there had not been a single documented case of well water contamination caused by hydraulic fracturing (Lustgarten and Kusnetz, 2011). More recently, EPA reinforced the message that groundwater contamination can be associated with nearby fracking operations when agency scientists concluded that residential water wells in Pavillon, Wyoming contained traces of fracking chemicals (Associated Press, 2011).

The federalizing of fracking policies can follow legislative or executive paths. Sometimes members of Congress can seek policies designed to mitigate environmental impacts because of personal or programmatic interests as well as the potential effects of drilling in her or his district or state. In June 2009, Democratic members of Congress introduced twin bills to regulate hydraulic fracturing. The Fracturing Responsibility and Awareness of Chemicals Act, the FRAC Act, contained several provisions which included amending the SDWA and providing EPA with the authority to establish regulatory standards for fracking. In addition, the bill would have required that oil and gas companies disclose the ingredients used in fracturing fluids, though proprietary formulas would continue to be protected except during an emergency. In the House, Diana DeGette (D-CO), Jared Polis (D-CO), and Maurice Hinchey (D-NY) introduced the Act to the Energy and Commerce Committee. In the Senate, the bill was carried by Senators Bob Casey (D-PA) and Chuck Schumer (D-NY). Despite their efforts, the bills went down to defeat in 2009, 2010, and 2011 (Williams, 2011).

The 2011 reintroduction of the FRAC Act followed a Congressional investigation that revealed that oil and gas companies were incorporating diesel fuel into fracking fluids. The 2005 Energy Policy Act exempted fracturing from the Safe Drinking Water Act (SDWA), except for instances when operators added diesel to the mix. When the bill was passed, industry officials claimed that this practice was “essentially nonexistent.” EPA officials, believing this to be the case, failed to undertake actions to implement the diesel rule. Then, in 2008, industry representatives acknowledged to Representative Henry Waxman (D-CA) that the use of diesel in fracking operations continued despite the denial of such actions by one of the companies involved in the controversy (Soraghan, 2011a).

The investigation that followed these revelations may have hurt the credibility of both the EPA and the oil and gas industry (Soraghan, 2011d). Upon completion of a yearlong study initiated by Waxman, the U.S. House Energy and Commerce Committee announced that fracking fluids used in 19 states between 2005 and 2009 contained diesel fuel (Woock, 2011). The EPA took immediate action and posted rules to implement the diesel language of the 2005 Energy Policy Act on the Agency’s website (Soraghan, 2011b); however, industry representatives protested that regulatory actions were undertaken without providing notice to affected parties (Soraghan, 2011d). The EPA disputed these claims, arguing that they were only “reinstating existing law” which does not require a formal public notice and comment period (Soraghan, 2011b). The Independent Petroleum Association of America (IPAA) is challenging those rules in federal court (Soraghan, 2011a).
Heightened concern about fracking within Congress has led to changes at federal agencies. Congressional Democrats requested that EPA revisit hydraulic fracturing and undertake a comprehensive study of the “relationship between hydraulic fracturing and drinking water” (Urbina, 2011; Soraghan, 2011e). The Agency announced in 2010 that a new and more comprehensive study would be initiated that would adopt a “life cycle” approach to fracturing fluids and analyze other aspects of drilling, including well construction (Soraghan, 2011g). Initially, the study was supported by both environmental and oil and gas groups.

When the study was announced, drilling proponents believed the move would forestall calls for increased federal oversight. But, as the study expanded to include new areas of drilling, industry supporters began to fear that the study was a thinly disguised pretext to a subsequent call for increased EPA regulation (Dlouhy and Crocker, 2011). In response to industry complaints that Agency officials were going beyond the Congressional mandate and engaging in “mission creep,” Representative Maurice Hinchey (D-NY) argued that the language within his bill set a minimum floor for the EPA study and did preclude the agency from exploring other areas related to drilling (Urbina, 2011). In a similar vein, environmental groups have emerged as critics, especially after EPA insiders leaked internal documents that raised concerns about the possibility that politics might be influencing the scope of the study. The leaked documents, according to Urbina (2011), demonstrate that the agency rescinded plans to study such things as radioactivity in wastewaters produced at drilling sites as well as hazards created by runoff from landfills where drilling waste has been disposed (see also Mandel, 2010).

At the Department of Interior, pressure for increased oversight is also apparent. In November 2010, Interior Secretary Ken Salazar announced that the Department was developing a new policy to require the public disclosure of chemicals used in fracking (Taylor and Soraghan, 2010). The proposed rule would likely be modeled on Wyoming’s public disclosure regulations that require public disclosure of the chemicals injected into a well through fracturing. Regulators hope that using a model developed in a petroleum-friendly state would add consensus to the rulemaking process. Despite industry opposition to an expected increase in compliance costs, DOI officials and their supporters continue to favor tougher regulations, particularly under the SDWA, and contend that existing proprietary secrets allow less than full disclosure (Soraghan, 2010e).

Another strategy of policy expansion involves the increasing use of interstate organizations to promote policy goals (Bowman and Woods 2010). Environmentalists favor the utilization of interstate organizations like the Delaware River Basin Commission (DRBC) that include federal representation. When concerns over fracking were raised within the DRBC, commissioners responded with a set of draft regulations that seek a balance between environmental protection and energy development goals. The proposed regulations would allow the withdrawal of freshwater for fracking purposes as well as the diversion of treated wastewater and recovered flowback and production water back into the river basin. On the other hand, the proposed rules require gas companies to obtain a water quality permit for each well pad. There are additional requirements calling for stricter scrutiny of reservoirs or public water supplies, actions designed to appease worried public officials in Pennsylvania and New York (Sullivan, 2011). This raises the possibility that interstate organizations can aid in the process of legitimizing supra state fracking policies, a transitional move that may reduce the political fallout from DOI or EPA regulatory initiatives.
Support for retaining natural gas regulatory authority at the state level of government is particularly strong among industry trade groups like America’s Natural Gas Alliance and the American Petroleum Institute, some larger companies like Chesapeake Energy and Halliburton, the Interstate Oil and Gas Conservation Commission, and state elected officials and regulatory staffers (Ground Water Protection Council and ALL Consulting, 2009; Wiseman, 2009). Regulatory agencies or commissions have enjoyed considerable administrative autonomy over time, including organizational separation from departments of environmental protection or natural resources. Avoiding federal involvement in state regulatory matters is bolstered by arguments directing attention to the interstate geological diversity of shale plays, the economic importance of the industry to the state, and the complexity of regulatory tasks (Davis, 2012).

Opposing federal involvement in state policy concerns occurs through several pathways. One of these is group testimony before Congressional committees that are considering a larger federal role in the regulation of fracking operations. When the FRAC Act was introduced in 2009 in an effort to allow EPA oversight of state regulatory decisions, industry officials quickly voiced strong objections using what Cobb and Ross (1997b) would characterize as a medium cost strategy; i.e., suggesting that the proposal carried hidden costs and burdens. Policy opponents pointed to research completed by Advanced Resources International that estimated that federal oversight could increase costs by $100,000 per well. An executive representing Chesapeake Energy echoed this sentiment, warning attendees that regulating fracturing under the SDWA would add a redundant layer of regulation and risk thousands of jobs while costing the industry billions of dollars (Lustgarten, 2009c; see also Soraghan, 2010a). Additional testimony included a prediction that federal regulations would mean the closure of over one-third of onshore gas wells and that the federal government would lose over $1 billion in revenue (Lustgarten, 2009a).

Members of the natural gas policy community also track fracking policy decisions that have been proposed or implemented by federal agencies. When the Obama Administration directed EPA to undertake a comprehensive study of the environmental impacts associated with fracking operations, API and other industry actors responded by reiterating the likely negative impacts that subsequent regulations might have on gas production activities and jobs. On another front, industry analysts closely scrutinized the President’s appointments to the scientific advisory board providing guidance for EPA’s study for evidence of favoritism reflected in the educational and occupational background of appointees. When EPA concluded that contaminated water supplies in Pavilion, Wyoming were attributable to nearby drill activities, Encana Corporation officials responded by criticizing the methodology used by agency scientists (O’Meara, 2011).

More recently, natural gas trade associations have warned of a slowing of drilling activities because of the compliance costs linked to new EPA regulatory proposals calling for a reduction in air pollution from drilling operations and the disposal of produced waters from frack jobs as well as fracking chemical disclosure rules currently under consideration at the U.S. Interior Department (Soraghan, 2011j). The USDI proposal was particularly upsetting to Representative Doc Hastings (R-WA), Chair of the House Natural Resources Committee. In a letter sent to Interior Secretary Salazar, he complained that “the distinct implication is that the administration has already decided to move forward with a plan to increase permitting requirements on federal land with a policy that would threaten thousands of jobs, deepen the
federal deficit through reduced revenues, and harm natural gas development and our nation's energy security” (quoted in Taylor, 2010b).

Another approach pursued by natural gas policy activists is the adoption of a strategy aimed at discrediting groups that are seeking tighter regulation of fracking. For example, a statement from Fuller, the executive director of Energy In Depth, that the 1987 EPA report demonstrates a history of safety and not a pattern of contamination seems to suggest a position that environmentalists are intentionally distorting the facts and finding patterns where there are none. In a similar vein, after The New York Times published a series of articles questioning the safety of hydraulic fracturing, Pennsylvania’s former Governor Ed Rendell (D) characterized the series as a scare campaign: “If the goal of your report about natural gas drilling was to gratuitously frighten Pennsylvanians, then congratulations on a job well done” (EID, 2011b). In a similar vein, Colorado’s Democratic Governor, John Hickenlooper characterized the Times reports as factual distortions that created public paranoia and mistrust (EID, 2011b).

The basis for attacks often follows group interpretations of policy terms (Stone, 2002). For example, as the controversy over natural gas development and hydraulic fracturing heated up, many people began to equate fracking with drilling operations. While the two processes are separate, industry officials have used public confusion “to their advantage.” When drilling companies assure Congress that there has never been a proven case of fracking fluids contaminating groundwater, they are attempting to foreclose further debate by arguing that “no one has ever proven that hydraulic fracturing fluid rises up a mile or so from the production zone, through layers of rock, to pollute drinking water aquifers” (Lustgarten, 2009a).

Oil and gas companies and their supporters have also adopted strategies that appear to be less adversarial, medium-cost efforts at symbolic placation or perhaps, co-optation. A major sticking point in the conflict over hydraulic fracturing has been controversy surrounding disclosure requirements for the ingredients of fracking fluids. Environmentalists and Democratic supporters in Congress have pushed for regulations that would require disclosure on a well-by-well basis through a national, publicly accessible database. In response to increasing pressure for transparency, oil and gas companies, the states, and the Interstate Oil and Gas Compact Commission (IOGCC) have made moves on disclosure.

Texas-based Range Resources Corporation has announced that it would voluntarily disclose, on a well-by-well basis, the components of the fracking fluid that it uses. Chesapeake Energy Corporation considering making a similar decision, and members of API were working to draft their own proposal for voluntary disclosure. Some saw these moves as reflecting an industry-wide desire to “get out ahead of the issue” to avoid federal regulation of fracturing. This speculation was bolstered by comments provided by Cathy Landry, API spokeswoman, who stated that “The four basic principles of the disclosure policy … will be ‘no federal regulation,’ maintaining state control over regulation of fracturing, ‘confidentiality of proprietary information,’ and transparency”. Further support for the speculation that industry is seeking to avoid federal oversight comes from industry claims that voluntary disclosure actions provides ample evidence that federal oversight is not necessary (Soraghan, 2010c).

State policymakers have also drafted their own disclosure rules. In Colorado, well operators are required to maintain a “well-by-well chemical inventory” for the operational life of that well plus five years to be submitted to the COGCC upon request. That information can be shared with health officials pending a confidentiality agreement, or it can be shared broadly if protection as trade secrets was not requested (Soraghan, 2010b). In Wyoming, state officials have decided to order drillers to disclose the ingredients of the fracking fluids they are using to
the state’s Oil and Gas Conservation Commission. After taking steps to ensure that proprietary information would be protected, the Commission began posting disclosure forms in September of 2010 (Soraghan, 2010b; Taylor, 2010). Arkansas has developed well-by-well disclosure requirements to be implemented this year (Soraghan, 2011f). California began considering similar requirements this summer with a bill introduced in the state’s Senate that would develop requirements modeled after Wyoming’s (Rodriguez, 2011). The moves by states may also be an effort to forestall federal regulation; e.g., former Governor Dave Freudenthal (D-WY) “directed the [Commission] to draft the rules as a way to assure federal officials that Wyoming adequately regulates fracturing” (Soraghan, 2010b).

In what is perhaps yet another move to avoid federal regulation through a strategy of placation, the IOGCC and the Groundwater Protection Council (GWPC) developed a national voluntary disclosure registry, accessible on the Internet at fracfocus.org. The registry is intended to serve as a template for state-based systems of disclosure. API, IPAA, the American Exploration and Production Council, and America’s Natural Gas Alliance have endorsed the site (Soraghan, 2010f). Another preemptive strike is the GWPC’s development of the State Review of Oil & Natural Gas Environmental Regulations (STRONGER), an organization that evaluates state regulatory agencies to determine whether the agency is addressing the right issues and whether it is devoting the necessary resources to the task at hand. If a state voluntarily submits to an evaluation from STRONGER and receives a stamp of approval, the net effect is to achieve a type of certification akin to accreditation that signals to others that environmental quality concerns are in good hands. However, such moves mean little without public awareness of industry actions. A conference for gas company public relations specialists was recently held in Houston to offer solutions for ensuring that industry officials will maintain consistency in terms of the message communicated to external constituencies (Clanton, 2011).

Media Attention and Fracking

Policy actors concerned about the programmatic status quo realize that the quest for change begins with the process of shedding light on perceived problems. The media play an important role here not only in terms of the frequency of news reports dealing with topics that have received little or no attention in the past but also in terms of how these topics are covered. Table 1 indicates that the frequency of fracking-related stories has increased considerably from 2009 to the present in Colorado, New York and Pennsylvania. Greater media attention can largely be attributed to the relationship between fracking operations and the subsequent increases in jobs and proven natural gas reserves as well as growing public concern about the potential link between the use of newer drilling practices and environmental problems such as groundwater contamination or small scale earthquakes.

Even in “oil patch” states like Texas, the coverage of fracking issues has risen exponentially and many of these stories were essentially “nonpolitical” reports of newer shale plays that were responsible for higher rates of energy production and job growth. The lone case of fewer stories in a succeeding year; i.e., Denver Post coverage of fracking in 2010, is somewhat puzzling. However, natural gas policy issues in Colorado that year were largely devoted to controversial state policy battles that addressed statutory changes to the Colorado Oil and Gas Commission as well as policy shifts requiring major utilities to use less coal and more natural gas in generating electrical power, effectively shifting fracking issues to the political back burner (so to speak). Denver Post news coverage of fracking in 2011 increased considerably.
While the data also indicate that over half the stories published in all three states made some reference to the potential problems associated with fracking, a common feature is the amount of coverage devoted to real or potential local impacts associated with drilling. For example, the Denver Post was less likely than the other newspapers to report the critical side effects of hydraulic fracturing in 2009 and 2010 because of the location of shale plays within the states. The larger natural gas fields in Colorado were then located in Weld County (Greeley) and along the western edge of Colorado, well removed from the more populous front range cities. Much of the drilling occurred in rural areas where gas production jobs were and continue to be greatly appreciated and criticism has been muted. But things changed in 2011 with the decision by several energy firms to drill within the Niobrara play that covers more of the state’s populated areas, including Denver and Colorado Springs. This led to mounting political opposition from affected communities. And in Texas, the largest shale plays are found in the Fort Worth area and, more recently, near San Antonio. Many of the Houston Chronicle stories deal with aspects of fracking operations that are more noticeable and controversial in urban areas than in smaller communities such as road damage associated with large truck traffic, setback requirements for drilling operations that ensure some distance from nearby neighborhoods, air pollution from gas leaking from compressors or pipelines, and reports of contaminated water supplies.

Table 1 here

There is also coverage of local opposition to fracking in the Philadelphia Inquirer but it carries the urban-rural dimension depicted in pre-2011 Colorado. Most of the shale gas reserves are not close to larger cities like Pittsburgh or Philadelphia; hence, the receptiveness of policymakers and property owners in the more economically depressed rural parts of the state to natural gas drilling activities above the gigantic Marcellus Shale play is considerably higher than is true for their counterparts in the more populous areas. This is exemplified by the largely symbolic decision by local officials in Pittsburgh to ban fracking operations within city limits (there are no known shale gas reserves in the area).

Finally, media coverage in the three states includes both positive and negative assessments of a potential regulatory role for federal agencies such as the EPA or DOI. Not surprisingly, the Houston Chronicle and the Philadelphia Inquirer offered few mentions of a federal role early on in 2009 when industry use of fracking technology was beginning to increase but their coverage of EPA and other federal agencies rose considerably by the end of 2011. More recent Inquirer reports have been more likely to suggest a need for natural gas industry oversight from EPA or the DRBC. On the other hand, much of the Houston Chronicle coverage of this issue was based on actions taken by regional EPA officials in the Dallas-Fort Worth area to investigate citizen claims of contaminated water arising from nearby fracking operations after the Texas Railroad Commission concluded that the claims did not warrant regulatory actions.

The Denver Post devoted far more ink to the question of federal involvement in fracking in 2009 than the Chronicle or the Times. This can be attributed to two factors. First, the importance of focusing events is illustrated by stories depicting alleged incidents of water pollution in western Colorado (Garfield County) linked to nearby gas wells that had been fracked. Region VIII EPA scientists were subsequently involved in analyzing water samples. Second, Denver Congresswoman Diana DeGette sponsored the first bill calling for the removal of the natural gas industry’s exemption from the regulatory authority of the SDWA (originally secured under the Energy Act of 2005). Thereafter, the federal link was covered less often.
In short, the news coverage of fracking operations and policymaking in Colorado, Texas, and Pennsylvania has increased dramatically, particularly in 2011. In general, media analysts in all three states have reported on EPA’s forthcoming study of the risks associated with utilizing fracking technology and its implications for expanding the intergovernmental division of labor for the regulation of natural gas drilling operations. However, the general tone of news reports varies. The *Houston Chronicle* and to a somewhat lesser extent the *Denver Post* tend to focus on state regulators like Railroad and Oil and Gas Commissions as the primary agencies responsible for ensuring safe and environmentally responsible drilling practices. EPA is rarely, if ever, mentioned as a potentially viable source of regulatory oversight. The *Inquirer* is more likely to depict suprastate agencies like the DRBC in a positive light in its efforts to balance energy development with the protection of groundwater resources in the tri-state area.

**Conclusion**

The politics of fracking in the U.S. has been gradually transformed over the past three years from news accounts about an energy game changer (e.g., media references to the “shale gale”) that would substantially increase known natural gas reserves to a still promising technological advance that has become increasing worrisome because of known or suspected environmental quality impacts. We examined how the policy agenda for this issue has become more contentious, pitting a natural gas policy coalition that favors state control and voluntary disclosure of fracking fluids against an environmental policy coalition that advocates more regulation of drilling practices along with a larger policy and oversight role for EPA and other federal agencies. Our discussion utilized secondary sources and some media content analysis to examine group strategies aimed at expanding or containing fracking policy issues as well as efforts to preserve or shift preferred venues for regulatory decision-making.

As expected, natural gas policy actors have been actively engaged in pursuing an *issue containment* strategy that actively opposes any jurisdictional shift for fracking policies from the state level to EPA or DOI. They benefit from a built-in structural bias that ensures a greater degree of administrative autonomy from the get-go since most natural gas regulatory agencies or commissions are organizationally separated from departments of environmental conservation or protection and tend to have an organizational mission that places emphasis on the orderly development of energy resources. State regulators also gain political advantage from their ability to manipulate technical information. This includes testimony at state and federal hearings that new regulatory policies are largely unnecessary since no scientific evidence exists that links fracking operations from underground shale formations to the contamination of water supplies. Members of the natural gas coalition have also been proactive in pushing for an industry-wide agreement for voluntary disclosure of fracking fluids that restricts the dissemination of actual ingredients to medical professionals should an accident occur. Coalition members effectively publicize information about the job-related benefits of natural gas development in states that are still reeling from the economic downturn. Finally, industry officials have made good use of interstate organizations like the IOGCC to emphasize that gas producing states have made progress in addressing environmental concerns thereby minimizing the need for any federal participants in the regulatory process.

The environmentalists have tended to tread carefully on fracking regulatory issues given the economic importance of the natural gas industry in states with large shale plays like Texas, Colorado, and Pennsylvania. But the environmental policy coalition has focused on the potential
costs of fracking to public and ecological health and has adopted an *issue expansion* strategy that shifts jurisdiction control over natural gas regulatory policies from a solely state regulatory stance to one shared with federal agencies like EPA. In the short run, environmental activists have sought to enlist the support of a different type of interstate organization; i.e., river basin commissions like the DRBC. These organizations represent both federal and state policy interests and possess limited regulatory authority over basin-wide water quality issues. Attention has also been directed to the hallways of Congress where some Democratic representatives have introduced legislation aimed at removing the regulatory exemption from the Safe Water Drinking Act that the natural gas industries received under the Energy Act of 2005. In addition, coalition members at the state level have pushed for stronger regulatory controls, including publicly available industry disclosure requirements for fracking fluids. Environmentalists have also taken issue with the “no scientific proof of contamination” industry arguments, citing a number of recent studies as well as a recently discovered EPA report from 1987 that found a direct relationship between fracking and contaminated water wells in a particular incident.

Finally, the federalization of fracking policies has been advanced by independent actions undertaken by agency officials within the Obama Administration (EPA, 2012). A potentially important catalyst was the decision made in 2010 to launch a comprehensive study under the direction of EPA scientists that addresses environmental impacts associated with natural gas drilling practices in general, including the narrower subset of fracking operations. A likely consequence of this study is the generation of information that may well justify an expansion of EPA regulatory authority following its expected publication in 2014. A number of regulatory initiatives have already been vetted and proposed by DOI Secretary Ken Salazar and EPA Administrator Lisa Jackson.

In short, our analysis suggests that students of energy or environmental policy may benefit from combining the insights drawn from agenda setting and federalism. Key studies like Baumgartner and Jones’s analysis of agenda-setting within a federal context can benefit from a more careful consideration of several factors. One is the possibility that policy expansion can occur for reasons other than bottom up strategies aimed at redefining policy issues and broadening coalitions. The presence or absence of a President with pro-environmental policy values greatly increases the likelihood that issues like fracking policy will begin at the institutional agenda and be addressed through executive use of administrative policy tools such as rulemaking or executive orders. Moreover, it appears that there are differing forms of interstate organizations that can be strategically deployed to mobilize policy actors for either expansion or containment purposes. Additional research could reveal the extent to which such strategies have been utilized in other substantive policy areas such as health care or transportation.

What does our research portend for fracking policies in the near term? Predictions concerning which side will gain the upper hand politically in forthcoming policy agenda contests are risky since a key factor is the prevailing political mood. The natural gas policy coalition benefits from a gloomy but rebuilding economic climate that places a premium on the expansion of drilling operations linked to the provision of well paying jobs. Environmentalists have benefitted from the expansion of media attention to fracking issues. This is reflected in public opinion polls that reveal growing public concern about the risks of pollution tied to drilling practices. Thus, agenda items tied to the regulation of fracking will be influenced not only by the prevailing economic climate but by the ability of natural gas companies to avoid the accidental
release of contaminants (and the attendant publicity that ensues) in the process of conducting business operations.

References


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Source: Lexis/Nexis

*a Based on stories containing a negative connotation such as adverse water quality impacts or effects on the depletion of groundwater resources

*b Based on stories suggesting a decisional role for federal agencies such as EPA