Robert E. Forbis Jr*

The Political History of Hydraulic Fracturing's Expansion Across the West

Abstract: This article presents an historical-based analysis of how executive branch actions altered federal domestic energy policies and the effect of that shift on the Bureau of Land Management's (BLM) domestic energy policies and resource allocations. The analysis is supported by interview data collected from among Department of Interior officials who served during the Bush-Cheney administration as well as BLM administrators located in Wyoming, Colorado, and New Mexico. The analysis and interviews were conducted at the close of President Bush's tenure in office (2008–2009). The article includes an analysis of archival and government documents describing executive branch actions directing the BLM to favor the energy development industry's use of the hydraulic fracturing development process. First, these events are presented chronologically to illustrate how a president and his executive appointees established changes to federal energy policies at the agency level that led to the reallocation of resources favoring domestic energy development. Second, an interpretive analysis of the interview data is presented as a means of validating the initial, document-based analysis. As the article concludes, documents as well as the voices of those most closely involved in the policymaking process confirm that executive branch actions shifted federal domestic energy policies, which then resulted in increased numbers and types of federal development projects using the hydraulic fracturing and directional drilling energy resource development process expanded rapidly across the states of the Rocky Mountain West.

Keywords: Bureau of land management; energy policy; environmental policy; executive branch; hydraulic fracturing; subgovernment theory.

***Corresponding author: Robert E. Forbis Jr,** Texas Tech University, Political Science, P.O. Box 41015, Lubbock, TX 79409-1015, USA, Tel.: 806-742-4047, Fax: 806-742-0850, e-mail: robert.forbis@ttu.edu

1 The Political Will-Power to Achieve a Domestic Policy Objective

Prior to being sworn in President George W. Bush announced his first nomination to oversee the federal energy-related administrative agencies. In December of

1999, President Bush nominated Gale Norton as the administration's new Secretary of the Interior. He did so because, mindful of his campaign promise to reduce America's dependency on foreign energy resources, President Bush and Vice President Cheney required like-minded political allies who were supportive of their strategy for expanding domestic energy development as a means of achieving national security. Thus, President Bush appointed a cadre of political and policy loyalists to leadership positions within the federal administrative units charged with the management and oversight of domestic energy development.

These political loyalists were expected to take an executive-led energy task force's recommendations, apply the president's executive orders, and increase the nation's supply of domestic energy resources. If successful, the administration would fulfill the promise of reducing the country's dependency on foreign energy resources, achieve a measure of national security, and secure a political victory for the administration. This is because political appointments, like task forces and executive orders, are expressions of a presidential will-power in their ability to wield direct influence on existing legislation and administrative processes. As it turned out, the Bush administration was exceptionally adept at expanding and using executive power. And, over the course of Bush administration's two terms in office, the administration's political appointees would faithfully carry through with the implementation of the Bush-Cheney domestic energy plan. Beginning in 2001 the political-will of the Bush administration was clearly articulated in the early use of presidential powers that emphasized the development of one commodity: Energy.

2 Asserting Political Control over Administrative Decision-Making

Known simply as the "delegation problem," the efficacy of political control over bureaucratic decision-making remains a debated topic among political scientists (Moe 1993; Spence 1997; Moe and Howell 1999). While the majority of scholarship explores congressional efforts to control the bureaucracy (Moe 1993; Spence 1997; Moe and Howell 1999), there is also a comprehensive body of literature devoted to exploring presidential efforts of political control (Moe 1993; Spence 1997; Moe and Howell 1999). However, no matter the institutional location of politically-motivated efforts to achieve bureaucratic control, attempts to measure the resulting efficacy with any degree of accuracy have met with mixed results.

As David B. Spence argues, neither theoretical positivists nor quantitative empiricists have "demonstrated that politicians can overcome the delegation

problem" as they have a tendency to "model the problem away" in one of two ways (Spence 1997: p. 199). According to Spence, researchers have a tendency to presume that political control is exerted in either ex post or ex ante fashion. On the one hand, positive theorists tend to over-emphasize political control as a matter of ex post political oversight of bureaucratic agencies' procedures and processes. On the other hand, quantitative empiricists over-emphasize the dependent variable of ex ante political control as a matter of the bureaucratic agencies' enabling legislation. In either case, Spence argues, because researchers "overestimate the degree to which political control occurs," they can offer neither explanation nor prescription to the "delegation problem" (Spence 1997: p. 215). The problem, according to Spence, is that in measuring the impact of political control, researchers have missed the critical distinction between "policy making" and "policy implementation" (Spence 1997: p. 212).

Spence concludes his argument with the assertion that, "If the technologies of social scientific investigation have trouble accounting for the complexity of agency policy choice, we must improve existing technologies or find new ones" (Spence 1997: p. 215). While Spence's argument is justly critical of this body of work, his recommendation for improvement relies on the hope of technological advancements in the singular methodological realm of quantitative-based research. This rather narrow approach ignores the promise and possibility of improving this area of scholarship via other methodological means, including qualitatively-based methodological research.

Methodological choices aside, qualitative researchers have not fared any better in their attempts to describe fully and account for the effectiveness of elected officials to politically control the bureaucracy. This is not to say that there have not been important and significant qualitative contributions made in the institutional study of the relationship between Congress and the bureaucracy or, for that matter, the presidency and the bureaucracy. Researchers have made significant strides in providing rich descriptive narratives of these complex institutional relationships. Spence's critique of quantitative research in this field of inquiry is equally applicable to similarly oriented inquiries of a qualitative nature. This is because they too suffer from the same malaise articulated by Spence in his criticism of theoretical positivists' and quantitative empiricists' inquiries.

The "delegation problem" debate and the issues associated with it will not be resolved here. What follows instead is an attempt to provide a descriptive narrative tracing the causal pathway through which the Bush administration utilized the unilateral nature of presidential power in order to politically control the BLM and alter its energy policies. In essence, changes in the executive branch led to changes in domestic energy policy. The changes described here do not underestimate the effect of technological breakthroughs in domestic energy exploration

and development – namely hydraulic fracturing – nor do they underestimate the impact of economic conditions affecting the price of energy. This is, in a manner of speaking, a narrative measure of how politically effective the Bush administration was in its strategic use of executive powers to politically control the BLM in the attempt to successfully achieve its desired political objectives of expanding domestic energy development.

3 Executive Power and the Capacity to Affect Administrative Change

In his analysis of the Nixon and Reagan administrations, Richard P. Nathan argues that "elected chief executives – presidents, governors, mayors – and their appointees should play a larger role in administrative processes" (Nathan 1983: p. vii). The argument's premise, "management tasks *can and should* be performed by partisans," hinges on Nathan's belief in the executive branch pursuing implementation of its policy objectives through the strategic use of executive power (Nathan 1983: p. 7).

According to Nathan, the use of executive power is legitimate so long as the executive's policy objectives are carried through within the confines of existing legislation and administrative procedural processes. Nathan's prescription for the realization of this strategy is one of political delegation. This means that strategic delegation of executive authority is a manifestation of presidential influence. This influence can affect a bureaucratic policy domain in a manner that "penetrates the [domain's] administrative process (Nathan 1983: p. 82). This type of political authority is necessary because, as Nathan argues, "in a complex, technologically advanced society in which the role of government is pervasive, much of what we would define as policymaking is done through the execution of laws in the management process" (Nathan 1983: p. 82). The message to Presidents here is straightforward; in order to successfully achieve executive policy objectives it is imperative that a president wield the tools of executive authority within the confines of existing legislation and administrative procedures in a manner that influences agency-level decision-making.

In a follow-up to Nathan's research, Robert F. Durant's (1992) account of the Reagan administration is notable for its narrow focus on a single politically-oriented policy objective: altering federal resource management in a manner favoring economic development. Durant's investigation of Reagan's strategic administrative efforts to effect changes in how federal resources were managed by the DOI and the BLM in particular, finds that the Reagan administration's efforts were in the end highly ineffectual. Notably, Durant's findings imply that

one reason for the Reagan administration's failures is that within the BLM, there existed a deeply entrenched and resourceful subgovernment policymaking environment that sought to protect the agency's status quo. As Durant argues,

> *[The] political us[e] of the administrative presidency to reorient policy...to alter bureaucratic agendas substantially... [is] unlikely to find an agency's 'dominant coalition' predisposed to change. Coalition members are prone to buffer organizational cores from such 'turbulence' and to protect their organization's fragile political economy. Equally unsympathetic to change are clienteles accustomed to existing agency rules, relationships, and largesse. This, in turn, makes policy initiatives distinctly vulnerable to fire alarm oversight, with the type of agenda item pursued by [political officials] conditioning the nature, scope, and intensity of resistance mounted by opponents* (Durant 1992: p. 238).

Durant notes that any future attempts to untangle the dynamics of agency subgovernments in the face of a sustained political effort to alter the existing policy orientation of administrative agencies should embrace the "validity of the causal theory" (Durant 1992). Thus, clearly accounting for causal pathways between executive power and administrative agencies will help clarify the means by which presidents pursue political control of bureaucratic decision-making. In turn, clarifying the causal pathways of executive influence will assist in capturing the dynamic of strategic actions among subgovernment actors as they seek to sustain the decision-making status quo.

Durant concludes by cautioning that establishing bright-line causal pathways of political control over administrative procedures in the course of implementing policy objectives is dependent on the ability to account for the inherent characteristics of "bureaupolitical dynamics during implementation" (Durant 1992: p. 238). Here, Durant argues that two characteristics of bureaupolitical dynamics condition any success for politically controlling the implementation of executive policy objectives: 1) validity of the novel policy initiative and 2) softening of policy communities and larger publics over time (Durant 1992: pp. 238–239). Durant argues,

> *In the real world, of course, these two variables can interact to produce distinct bureaupolitical dynamics...however, the bureaupolitical politics occasioned are not 'caused' by the interaction of the two variables...rather, their interaction either affords or constrains opportunities for challenge to those opposed to drastic policy reorientation* (Durant 1992: p. 239).

Both Nathan and Durant's research efforts illustrate the strategic use of broad executive power and its potential to affect administrative decision-making and subgovernment activity. Nevertheless, Nathan's research remains a narrative prescriptive bordering on a polemical treatise. And while Durant's research accounts for interest group efforts to maintain the status quo in the face of the Reagan administration's attempt to politically affect a shift in federal land use management within the BLM,

his effort focuses on finding the degree of effectiveness in the executive's realization of favored land management policy objectives. As such, the turbulence caused by Reagan's executive actions and their effect on the existing coalition of interest groups that constitute the BLM's land-use subgovernment is never fully articulated. Thus, as Durant himself notes, "the types of policy initiatives, bureaucratic responses, and political dynamics outlined are hardly exhaustive, must be further elaborated, and require empirical testing (Durant 1992: p. 321).

Political science scholarship concerning the influence of the President is wide-ranging. Beginning with Richard Neustadt's (1960) argument that presidential power is reflected in the ability to influence others political scientists have sought to extend our understanding of presidential power and its impact. Since Neudstadt, researchers have sought a better understanding of presidential power by investigating a variety of presidential initiatives to strengthen their control over administrative agencies. They have done so through a variety of means, e.g., personnel management, appointments, White House staffing, reorganization, assertion of legal prerogatives, executive orders, and signing statements (Pfiffner 1999). The ability of President George W. Bush to disrupt a relatively stable land-management subgovernment policymaking environment presents a unique opportunity to understand the impact of presidential power.

4 The Election of President George W. Bush

With the election of George W. Bush in 2000 the government of the US undertook an ambitious approach in responding to the energy needs of the nation. From the time of the presidential campaign to the election, President Bush promised the American public a policy initiative to address the nation's growing demand for energy and secure energy independence. The Bush administration often premised its argument for securing the nation's energy resources and independence on the basis of strengthening national security. With the terrorist attack of 11 September, 2001 the administration's argument gained substantial validity in the minds of elected officials, the policy community, and the general public.[1]

1 Note: Gallup Poll of 23 May, 2001 shows public support for the Bush Energy Plan at 44%. Public belief in the Bush Energy Plan's success was 65%. Gallup Poll of 5 June, 2001 shows public concern over energy resources as America's most important and pressing problem at an historic high of 58%. Gallup Poll of 3 April, 2002 shows overall public approval for President Bush's handling of energy policy at 57%. Gallup polling data (March, 2001–2003) shows public opinion that the US will face critical energy shortages over the next 5 years, as 60% (March 2001), 48% (March 2002), 56% (March 2003).

The Bush administration utilized the increased level of public and political support for its argument and strategically wielded executive power in a manner that would advantage existing legislation and administrative processes to achieve the objective of expanding domestic energy resource development. The tragedy of 11 September, 2001 was, in many ways, simply a fortuitous event allowing the Bush administration to successfully implement the means for achieving its energy policy objectives. Thus, with the support of like-minded congressional leadership, and over the course of their 8 years in office, the Bush administration successfully implemented a series of political and administrative strategies that resulted in: 1) a shift in domestic energy policy, 2) the disruption of a long static subgovernment policymaking environment within the Bureau of Land Management, and 3) expanding the energy resource development process of hydraulic fracturing across the Rocky Mountain West.

5 President Bush's Energy Related Political Appointments at DOI

President Bush's choice of Department of Interior (DOI) nominees was a direct reflection of his administration's desire to expand domestic energy. Most significant among the president's "energy nominees" was Gale Norton to head the Department of the Interior. As the president's nominee, Secretary Norton's history of professional and political accomplishments were notable for their consistent support and defense of deregulation and free-market principles in the management of federal lands and resources. A former DOI attorney under President Reagan's controversial and short-lived Secretary of the Interior James Watt, Norton's nomination was met with great cheer from conservative free-market thinkers as well as industry representatives of the timber, mining, and energy development lobby (Jehl 2000). To others, most notably members of the environmental protection community, Ms. Norton's nomination was greeted with dismay. As the national spokesman of the Sierra Club, Allen Mattison, famously remarked, "Our view is that she's James Watt in a skirt" (Jehl 2000).

Mentored by Watt during her tenure at the politically conservative Mountain States Legal Foundation (MSLF), Norton was a true believer in the pro-development management principle for public lands and resources. Other important Bush-Cheney DOI political appointees had similar backgrounds. For example, following Gale Norton's appointment, President Bush nominated another Reagan-Watt era alumni, J. Stephen Griles. As undersecretary of the Interior, Griles was second only to Norton in the chain of political authority

being assembled at DOI. Under Secretary Watt's tenure at DOI and afterwards, Griles served as deputy director of the Office of Surface Mining, and as Assistant Secretary and Deputy Assistant Secretary of the Interior for Lands and Minerals Management. It is important to note that it was Mr. Griles who, in anticipation of his Senate confirmation, served as the DOI's representative during the course of the Cheney Energy Task Force deliberations in 2001 (US Department of Interior 2001).

President Bush also nominated Rebecca Watson as undersecretary of the Interior for Lands and Minerals Management. Having served as Assistant General Counsel for energy policy at the Department of Energy (DOE) in the previous Bush administration, Ms. Watson was a former law school classmate of Secretary Norton's and, at the time of her nomination, a MSLF colleague of both Norton and Watt. With the Senate's approval of Watson's appointment she was charged with administrative and managerial responsibility for the Bureau of Land Management, the Minerals Management Service and the Office of Surface Mining Reclamation and Enforcement (US Minerals Management Service n.d.).

Finally, President Bush nominated Kathleen Clarke as Director of the Bureau of Land Management. At the time of her appointment, Clarke served as Executive Director of Natural Resources for the State of Utah under then Governor Michael Levitt (Gov. Levitt would himself become President Bush's nominee as Secretary of Health and Human Services). Prior to her appointment as Utah's Director of Natural Resources, Clarke served as a member of Rep. James Hanson's (R-UT) administrative staff. Rep. Hanson, a conservative, was himself a fervent legislative advocate of developing resources on public lands and vocal champion of "sagebrush rebels" (Spangler 2001). Congressman Hanson would serve as Chair of the House Committee on Natural Resources during the early years of the Bush administration when the expansion of domestic energy development was beginning to gain political and popular support (Neustadt 1960).

Given the Bush administration's broad policy objective of achieving national security by means of energy independence, these appointments were not the only political appointments with professional ties to varied energy-related development entities. Throughout the federal government, Bush-Cheney political appointees with ties to the energy industry or other extractive industries dominated energy and environment-related administrative agencies. The extent to which the administration's appointees were tied to the energy lobby was so profound that the administration is often referred to as the "oil and gas administration" (Finley 2003).

The administrative hierarchy of federal agencies charged with managing the nation's energy, environmental, and public lands and resource related policies from the president and vice president down were dominated by former fossil fuel energy development executives, attorneys, and lobbyists. With the history of political defeat suffered by previous administrations' failure, most notably the Reagan administration's failure (Nathan 1983; Durant 1992), to expand domestic energy development the choice for the new Bush administration was clear: use executive power to shift the political leadership of administrative agencies, charge them with implementing executive policy directives to facilitate change in existing energy policy, and expand domestic energy resource development by means of the latest technological breakthrough: hydraulic fracturing and directional drilling.

6 Vice President Cheney's Energy Task Force

Chaired by Vice President Cheney, meetings of the "National Energy Policy Development Group" were by invitation only and conducted behind closed doors. Aside from invited members from the newly elected administration and America's leading energy producing companies, no stakeholders participated in these strategic discussions. Indeed, these discussions were so secretive in nature that the administration resisted General Accounting Office (GAO) and non-profit organizations' attempts to force the public release of the group's member list and meeting transcripts. And, although nearly forty task force meetings with industry representatives took place, the Bush administration successfully resisted the official release of any information concerning task force members or the closed-door policy discussions. The administration's resistance was validated in 2005 when the US Federal Court of Appeals for the District of Columbia ruled unanimously in favor of the administration's "executive privilege" argument for not releasing any internal documentation regarding the energy task force (Judicial Watch Press Office 2005; Abramowitz and Mufson 2007).

Controversy notwithstanding, the Bush-Cheney energy policy development group issued its final report to the president and the public on 16 May, 2001. The report, entitled "National Energy Policy," detailed the administration's energy plan and offered strategies for its implementation (National Energy Policy Development Group 2001). Within two days of the report's release, President Bush issued two Executive Orders (E.O. 13211 and E.O. 13212) charging federal agencies to facilitate and expedite the means by which the expansion

of developing America's domestic energy resources would be achieved. In essence, these executive orders signified that the report's findings had been accepted and strategies for its implementation had been adopted by the administration (Mayer 2001).[2] While the executive branch's objective was to increase the development of domestic energy resources by expanding the use of hydraulic fracturing and directional drilling, achieving that goal was a daunting task. As suggested by Nathan (1983), in order to meet the overarching objective the administration would have to directly engage existing legislation in a manner that would affect change in the administrative processes of federal agencies to hasten the desired expansion of domestic energy resource exploration and development.

A key element to the success of the political objective was the administration's ability to move the bureaucracy and expand access to federally administered lands and resources. Moving the bureaucracy would require altering the procedural processes for leasing public lands and issuing approved permits to drill (APD). Expanding access to federal lands and resources required that the administration make a choice between two political strategies (Howell 2005).[3] One political strategy was to simply send the "National Energy Policy" to Congress for legislative deliberation and action.[4] The other was to wield executive power in a manner that would facilitate executive implementation of the energy plan. Given the legislative history of defeat suffered by energy interests to expand domestic energy development, the choice for the administration was clear: use executive power to affect a shift in federal energy policy via political appointments and then issue executive orders directing agencies charged with administering domestic energy development to alter their administrative processes.

---

2 Note: Mayer argues that the presidential power to control the actions of executive agencies is manifest in the issuing of executive orders. Mayer finds that executive orders are an expression of political will in the face of an intractable or indecisive Congress, and that executive orders enhance bureaucratic accountability by creating a clear decision trail that leads directly to the president.

3 Note: Howell argues that in order to "advance their policy agenda, presidents have two options. They can submit proposals to Congress and hope that its members faithfully shepherd bills into laws; or they can exercise their unilateral powers – issuing such directives as executive orders, executive agreements, proclamations, national security directives, or memoranda – and thereby create policies that assume the weight of law without the formal endorsement of a sitting Congress," pp. 417.

4 Note: The Bush administration did eventually realize legislative success for their domestic energy strategies and policies. The Energy Act of 2005 was passed and signed into law by President Bush. As some have noted, the net effect of the Act was an affirmation of the administration's actions to bring about the expansion of domestic energy development.

7 Executive Orders 13211 and 13212

The Bush administration issued Executive Orders 13211 and 13212 on 18 May, 2001. These executive orders directed all federal land management agencies – particularly the BLM – to expedite the leasing of federal lands for energy development and the approval of existing – and future – Approved Permits to Drill (APD). Executive Order 13212, entitled "Actions To Expedite Energy-Related Projects" directed federal agencies – particularly the BLM – to "expedite their review of permits or take other actions as necessary to accelerate the completion of such [energy-related] projects." Executive Order 13212 also ordered the establishment of an interagency task force, chaired by the chairman of the Council of Environmental Quality, "to monitor and assist the agencies in their efforts to expedite their review of permits or similar actions, as necessary, to accelerate the completion of energy-related projects, increase energy production and conservation, and improve transmission of energy" (Finley 2003).[5] Finally, Executive Order 13212 directed the interagency task force to "monitor and assist agencies in setting up appropriate mechanisms to coordinate Federal, State, tribal, and local permitting in geographic areas where increased permitting activity is expected" (Executive Order 13,212, 2001).

Entitled "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," Executive Order 13211 required that all federal agencies "prepare a Statement of Energy Effects when undertaking certain agency actions." And, as described in Executive Order 13211, these Statements of Energy Effects were intended to:

> *...describe the effects of certain regulatory actions on energy supply, distribution, or use... [And] consist of a detailed statement by the agency responsible for the significant energy action relating to: i. any adverse effects on energy supply, distribution, or use (including a shortfall in supply, price increases, and increased use of foreign supplies) should the proposal be implemented, and ii. reasonable alternatives to the action with adverse energy effects and the expected effects of such alternatives on energy supply, distribution, and use* (Executive Order 13,211, 2001).

These two executive orders sought to comprehensively change existing federal energy policy and administrative processes within land and resource agencies.

It has been argued that most executive-led strategic efforts to influence policy change within administrative agencies or their decision-making subgovernments

5 Note: Another Bush-Cheney appointment with ties to extractive industries, the Chair of the White House Council on Environmental Quality was James Connaughton, legal counsel for General Electric and Atlantic Richfield and their challenge to the EPA's directive regarding responsibility for cleanup of Superfund sites.

cost too much political capital given the relatively modest levels of success of those efforts (McCool 1989). Still others have argued that, as executive orders go, most presidential policy directives are relatively unnoticed as the change they affect is limited to the administrative agency targeted by the president (Durant 1992; Mayer 2001). In the case of Executive Orders 13211 and 13212 there was not much political capital to spend as the president had just months earlier been sworn into office. Nevertheless, in issuing Executive Orders 13211 and 13212 the administration had signaled the opening move in its effort to control the BLM's energy policies and administrative procedures. Executive Orders 13211 and 13212 should be considered one piece among the many political strategies employed as a means of achieving the administration's domestic energy policy objectives. These executive orders are notable because within the National Energy Policy, released on 16 May, 2001 and just two days prior to President Bush's issuance of Executive Orders 13211 and 13212, 105 recommendations had been designed specifically to increase domestic energy development, and among those recommendations, 73 could be implemented via presidential directives to energy related agencies, while the remaining 32 required Congress to pass new legislation or amend existing laws (Longley 2001).

8 The BLM Responds to Change in the Executive Branch

The bureaucratic response to the unilateral use of executive powers was immediate. Within roughly 2 years of President Bush's political appointments being in office and his issuing of Executive Orders 13211 and 13212, the BLM began the process of changing its existing energy policies to reflect the political goal of expanding domestic energy development. On 8 August, 2003, BLM Director Kathleen Clarke notified state and field offices that implementation of President Bush's National Energy Policy would begin immediately. The new administrative management policies instructed all BLM offices and land-use planners to reduce or eliminate regulatory impediments to oil and gas leasing and production on BLM lands. The director's order instructed BLM staff to concentrate their efforts on what Clarke had designated as "focus areas" where the potential for oil and gas development was high. The order also instructed BLM field managers to prioritize work related efforts that would promote oil and gas planning, leasing, and permitting (Longley 2003).

In issuing the directive Director Clarke established the deadline of 31 December, 2003 for BLM personnel to evaluate and report the need to change "existing

land-use plans to facilitate oil and gas exploration and development" in accordance with Energy Policy and Conservation Act of 2000 (Longley 2003). In establishing new energy policies, BLM land-use planners were instructed to act in a manner that would "not unduly restrict access to federal lands, while continuing to protect resources when they review[ed] oil and gas lease stipulations, especially in those cases where an unnecessary stipulation could result in the abandonment or delay of a project" (Longley 2003). Finally, Director Clarke's order required all BLM state offices with significant energy-related programs "to conduct at least one meeting with industry representatives" within a year of the directive's issuance to "share findings and discuss oil and gas related policy changes" (Longley 2003).

Clearly, a change in the presidency led to a change in domestic energy policy from within the DOI and more importantly, throughout the BLM. As most field offices with significant oil and gas development projects are located throughout the Rocky Mountain West, the directive had its greatest effect in the states of New Mexico, Colorado, Wyoming, Montana, and Utah. As a result, the easing of oil and gas development regulations and administrative oversight, as well as prioritizing oil and gas hydraulic fracturing and directional drilling activity, in 2003, triggered a modern energy boom throughout the states of the American West. This was particularly true of energy resource development in the form of coal-bed methane (CBM) natural gas.

One example of how quickly the administration was realizing success in achieving its policy objective is taken from the Wyoming State Office of the BLM and the Wyoming Oil and Gas Conservation Commission. In 2003, 39,000 CBM Approved Permits to Drill (APDs) were issued by the State of Wyoming. These 39,000 APD's represented an average of 18 permits being approved per day and an average of seven wells being drilled per day throughout the State of Wyoming. Additionally, the rate of permit hearings in Wyoming increased that year as well. In 2003, the state's oil and gas commission held 814 area drilling permit hearings with 55% of those hearings concerning the use of hydraulic fracturing and directional drilling in the exploration and development of CBM. These hearings resulted in 900 individual parcel drilling permits being issued by the State of Wyoming. Respectively, the state's 814 area development permit hearings represented a 100% increase over the previous 5 years with – what was at the time – an expectation that permit hearings would again experience a 100% increase in 2004. Additionally, the 900 individual parcel drilling permits issued in 2003 represented a 100% increase from the previous 30 years and they too were expected to experience a 100% increase in 2004 (Likwartz and Parfitt 2004).

The Wyoming Oil and Gas Conservation Commission and the Wyoming BLM estimated in 2004 that the agency would, until the year 2014, issue an additional

71,000–76,000 drilling permits for the exploration and development of oil and natural gas in the State of Wyoming. At the time, those estimates stood in stark contrast to the documented 70,000 drilling permits the State of Wyoming had issued since its statehood in 1890 [Bureau of Land Management, n.d.(c)]. While these numbers provide evidence only of the State of Wyoming's unprecedented level of oil and gas exploration and development, the numbers were indicative of what was occurring throughout the states of the Rocky Mountain West.

Expanded exploration and drilling were not the only energy-related activities affected by the BLM's change in energy policies. For example, the BLM also expanded its energy leasing activities in accordance with the new administrative directives and policies. One example of expanding energy leasing is the Utah office of the BLM's energy lease auction for the exploration and development of the subsurface energy resources across 281,000 acres in June 2004. As was reported by the *Salt Lake Tribune*, "the federal government set a record with its June oil and gas auction in Utah…as part of the Bush administration's push toward domestic energy production…Records were made to be broken, though… The next quarterly lease auction slated for September 8 easily outpaces the June sale, with 362,665 acres spread across 223 parcels" (Nailen 2004).

All across the West, record numbers of APDs were being issued by state energy commissions and the BLM and a record number of acres were being offered by the BLM. The observation among those most directly affected by the change in federal energy policy was this: a change in the executive had led, successfully, to a change in domestic energy policy. These executive-led changes to the BLM's traditional energy policies had the unintended consequence of establishing the conditions required to trigger political conflicts over the environmental impacts being realized by expanded use of the hydraulic fracturing development process.

9 The Effect(s) of Expanding Hydraulic Fracturing on Western Landscapes

The process of hydraulic fracturing is disruptive on multiple-levels. The process, even when performed properly, negatively impacts the natural environment of most landscapes found across the West. The process of drilling for and extracting energy resources, particularly CBM, "can turn ranches and prairies into sprawling industrial zones, laced with wells, access roads, power lines, compressor stations and wastewater pits" (Hardin and Jehl 2002). The long-term impact of these extractive processes can be debilitating to residents of the West.

> *...the artesian well on Roland and Beverly Landrey's ranch has failed. After producing 50 gallons a minute for 34 years, the well, the ranch's only source of water, stopped flowing in September. A well digger who examined it blames energy companies drilling for gas nearby, but the companies dispute that. So the couple – he is 83 and ailing; she describes herself as "no spring chicken" – hauls water in gallon jugs and rives 30 miles to town weekly to wash clothes and bathe...Dave Bullach, a welder who lives near Gillette, couldn't take it anymore. For two sleep-deprived years, he endured the incessant yowl of a methane compressor, a giant pump that squeezes methane into an underground pipeline. There are thousands of these screaming machines in Wyoming, where neither state nor federal law regulates their noise. Mr. Bullach stormed out of his house at midnight last year with a rifle and shot at the compressor until a sheriff's deputy hauled him off to jail* (Hardin and Jehl 2002).

Energy resources, particularly inexpensive energy resources, like that of CBM, had become increasingly feasible for industry to extract, develop and market because of breakthroughs in energy technology. A process known as hydraulic fracturing, or "fracking," where chemically treated water is forced into tight seams of coal formations in the effort to loosen the methane gas for collection had been perfected (US Environmental Protection Agency 2000). The engineering feat of being able to collect and capture the methane gas from multiple-points at a single location, a technique known as "directional drilling," had also been perfected (Kennedy 2000).[6] Furthermore, hydraulic fracturing and directional drilling emerged just prior to the Bush-Cheney administration taking office. In their infancy neither the process of hydraulic fracturing nor the technique of directional drilling was widely used by industry; both were considered cost-prohibitive. But by 2001, as the cost of energy resources raised as rapidly and as steadily as the energy-friendly political decisions being made by the Bush-Cheney administration and Congress. In turn, hydraulic fracturing and directional drilling became cost-effective. While these new means of extracting hard-to-get energy resources are cost-effective and efficient, the process of hydraulic fracturing is problematic.

> *As it runs through Orin Edwards's ranch, the Belle Fourche River bubbles like Champagne. The bubbles can burn. They are methane, also called natural gas, the fuel that heats 59 million American homes. Mr. Edwards noticed the bubbles 2 years ago, after gas wells were drilled on his land. The company that drilled the wells denies responsibility for the flammable river* (Kennedy 2000).

Most CBM energy resources lie within very tight, close-to-the-surface seams of coal. This fact is one reason why states of the Rocky Mountain West experience the largess of the modern energy boom: its benefits as well as its problems. One problem with the process of hydraulic fracturing is its effect on the water

6 Note: Kennedy is commenting on: Summary and Analysis of Department of Energy Office of Fossil Energy Reports concerning the advancement of directional/horizontal drilling technologies.

resources of a state, a community, a subdivision, or a ranch. The water required for the CBM hydraulic fracturing process varies depending on a number of factors, including the depth and type of coal seam formation being utilized. Nonetheless, in shallow seams, like those found in the Powder River Basin of Northeast Wyoming, a typical vertical, single fracture, CBM well will use 400 barrels (42 gallons/barrel) of water per day (16,800 gallons/day) [United States Geological Service (USGS) 2000].

Throughout the CBM producing states of the West, energy development's use of water is a contentious issue. One 2002 estimate expected that in the Powder River Basin alone the energy industry would "pump out 3.2 million acre feet of water – as much as New York City uses in two and a half years" (Hardin and Jehl 2002). This water's use is limited. For example, when treated properly, the extracted water can be beneficial to ranchers. However, when not treated properly, much of the water is riddled with saline which, if untreated and dispersed over pasture lands can turn grazing lands into barren wastelands (Clifford 2001; Hardin and Jehl 2002; Mitchell 2005). To make matters worse, wastewater is disposed by reinjection or spraying across pasture lands, a common practice among energy developers. Additionally, most wells or clusters of wells produce far greater amounts of water than is normally used by an entire western community much less a single rancher. Water use aside, the hydraulic fracturing of the coal seam has the attendant effect of releasing un-captured methane gas and transferring it to free-flowing water sources like irrigation streams or water wells. The effect of which turns irrigation streams into Champagne-like bodies of water as ranchers make a habit of documenting the effect of the hydraulic fracturing process by taking matches and lighting the bubbles on fire (Anderson 2009).

Water is not the only impact to surface owners from the process of extracting CBM energy resources. The effect that energy development can have on a surface owner's property interests ranges from a simple nuisance like dust to depleting a water aquifer to the point where water pumps burn out and fail (Clifford 2001; Hardin and Jehl 2002; Mitchell 2005). Ranchers in particular have borne the brunt of multiple impacts that disrupt their stock raising operations: cattle and sheep killed by energy traffic, chemical spills from poorly constructed drill holes, as well as erosion from newly cut and heavily traveled roads, pipelines cutting across grazing lands, and drilling pads dotting the land [Clifford 2001; Hardin and Jehl 2002; Mitchell 2005; Earthworks, n.d. (b)].

Finally, the exploration and development of energy resources occurs primarily on federal public lands. As one would expect, most fluid mineral extraction has and continues to take place on public lands administered by the BLM. It has been relatively well-documented that the use of public lands for the extraction of energy resources is but one of the traditional uses of public lands. By 2003, the

expanded use of hydraulic fracturing energy development activities had begun to substantially interfere with, and disrupt the environmental quality of public resources, particularly water. The consequences of disrupting water resources cannot be understated because as hydraulic fracturing expanded in the quest of developing domestic energy resources had begun to encroach upon the privately owned ranches of the West.

10 Energy Politics and Policy: Congressional Committees (2000–2008)

From 2001 to 2008 numerous congressional committee meetings were held to address energy policy. The topic of most of these energy-related hearings was focused on the nexus of national security and the programmatic expansion in developing domestic reserves. While hearings were convened to address a wide range of topics, hearings held to address problems associated with the expansion of hydraulic fracturing and directional drilling energy development were few. The record of committee hearings indicates that when complaints were heard, the testimony of other interests, including the powerful ranching lobby, was often included but the focus of the inquiry was more concerned with removing regulatory road-blocks to expand domestic energy development [Congressional Hearings (107th–110th Congresses)]. Thus, voices representing activities impacted by the rapid expansion of hydraulic fracturing energy development were secondary to voices representing the interests of energy developers.

The testimony of other interest groups often followed statements from the committee's chair expounding the virtues of expanding domestic energy development. For example, on numerous occasions ranchers' testimony preceded the testimony of numerous energy spokespersons. A review of the record of House Natural Resource Committee and Subcommittee hearings between 2000 and 2008 clearly indicates that testimony from ranching interests were wedged between articulations of political support from elected officials and the policy recommendations of energy representatives [Congressional Hearings (107th–110th Congresses)]. While lone ranchers spoke on behalf of ranchers besieged by the effects of hydraulic fracturing energy development, elected representatives, state officials, energy scientists, and members of the energy lobby spoke on behalf of speeding up the regulatory permitting process or expanding energy leasing sales (Oversight Hearing on the orderly development of coalbed methane resources from public lands, 2001; Hearing on enhancing America's energy security 2003). More specifically, during the 107th Congress, in an oversight hearing

before the House Energy and Mineral Resources Subcommittee, its subcommittee chair, Barbara Cubin (R-WY) described the effect of hydraulic fracturing energy development as "unconventional" and the effects of that development on private landowners (i.e., ranchers) as "growing pains."

> *As with any resource, such an explosion of activity comes with "growing pains" while individuals, communities, local and state government and public land managers attempt to plan for the costs and benefits associated with the extraordinary interest in CBM...Split-estate mineral development is often contentious - and when conflicts arise they grab the headlines. Steady royalty income to a fee mineral owner happy with his check is a "dog bites man" story. When a rancher gets cross-wise with a driller seeking to access his federal lease, or other fee mineral ownership from which the rancher does not financially benefit, then that becomes a "man bites dog" story. When a lot of ranchers without minerals get upset, that's a [c]over story in Time Magazine...eastern media reporters have written tales of ranchers with new pick-ups paid for by CBM royalties, followed by tales of grazing lands ruined by the unregulated discharge of produced waters. On top of this are stories that Montana and Wyoming governments are "at war" with one another over surface water quality...Well, I live out there, and if there is a war going on, it's about the federal government getting sufficient funding for the Bureau of Land Management to complete a cumulative impacts analysis of anticipated CBM development so that land-use plans can be updated, and mitigating measures drawn up, to allow federal lessees to drill and bring their gas to market...the real question is "how can we best mitigate these conflicts?" Do ranchers need a "surface owners" Bill of Rights", and if so, which level of government ought to be considering it? On the other hand, when surface owners acquired the title to their property did they not understand what it meant to have mineral rights reserved to the government or another individual (Oversight Hearing on the orderly development of coalbed methane resources from public lands, 2001)?*

This statement is indicative of the favorable political environment of congressional hearings as members of Congress considered the administration's proposal to expand domestic energy development by means of hydraulic fracturing and directional drilling. Importantly, these hearings were held before committees chaired by political allies from the energy producing western states [Congressional Hearings (107th–110th Congresses)]. Thus, the merits of the proposed expansion to domestic energy development, and the technological and regulatory means by which to achieve the objective, as outlined in the report of the President's Energy Task Force met with considerable political favor. This was particularly true of committees whose oversight responsibilities concerned the administration of public lands and resources.

Republican dominance of congressional committees helped the Bush-Cheney administration achieve the objective of expanding the use of hydraulic fracturing to facilitate increased domestic energy resource development. In part, this is because the 2000 presidential election marked the return of Republican control to both houses of Congress and political control of congressional public lands and resource

committees [Congressional Hearings (107th–110th Congresses)]. And, once again, the events of 11 September, 2001 would provide much needed justification and public support to partisan committee chairs and members as they acted to support and enact the administration's energy policy master plan. For instance, a quick survey of congressional hearings held during the 107th Congress (2001–2003) shows that roughly 30 hearings have been devoted to deliberations of energy policy in the context of national security [Congressional Hearings (107th–110th Congresses)].

At the time of the 107th Congress, there was near unanimity among western states' congressional delegations in support of expanding domestic energy development [Congressional Hearings (107th–110th Congresses)]. Their support, however, was only partially ideological in nature. If the rationale of self-interest among elected officials was true, then support was primarily a result of political reality in their desire for reelection (Habermas 1975; Offe 1985; Kelman 1987; Edelman 1988; Douglas 1990; Levine and Forrence 1990; Kingdon 2003). This is because, as elected representatives from the energy producing states of the West, they were very cognizant of the economic benefits that result from increasing energy development in their home states.

The economic incentive is realized because the BLM is mandated by the Congress to hold quarterly energy lease auctions (Competitive Leases 1988). Monies from federal sales of these energy leases and royalties from the energy's development are shared with the states. Thirty-five percent of monies collected from these auctions go directly to the state where the energy leases are located (Oil and Gas Royalty 1988). Thus, every three months in each of the energy producing states of the Rocky Mountain West, energy leases are auctioned to the highest bidder. However, some energy producing states, like Wyoming and Montana, regularly offer energy lease sales on a bi-monthly basis [Bureau of Land Management, n.d. (a)]. Once the development of the lease occurs, the royalty from the fluid energy mineral produced is a 50%–50% split between the federal government and the state [Bureau of Land Management, n.d. (a)]. In the rush to extract domestic energy resources, these financial incentives proved very beneficial in industry's ability to achieve federal and state support from elected decision-makers for expanding their hydraulic fracturing energy development activities in their respective states.

11 The Voice of Government

From the perspective of federal political appointees to the Department of the Interior (DOI), and career administrative officials within the Bureau of Land

Management (BLM),[7] disruption of the BLM's land-use subgovernment[8] resulted from a variety of conditions. In the opinion of these government officials, hydraulic fracturing and directional drilling expanded across the Western US as the Bush administration directed the expansion of domestic energy development. Motivated by the executive and legislative decision-making referred to previously, the BLM shifted its land management policies to emphasize domestic energy development. Among the government actors interviewed here, each remains deeply immersed in the evolving controversy of hydraulic fracturing and energy development in the Rocky Mountain West. The voices represented here are those of governmental elites; they are a select sample who have interacted within the networks of the BLM's land-use subgovernment at the highest levels during the period of time in which domestic energy development expanded across the Western US.

12 Energy as a Policy Objective

The Bush administration's policy objective of expanding domestic energy development was the result of an energy resource shortage, technological advancements, and market costs associated with limited energy supplies. According to Rebecca Watson, former Deputy Secretary of the Department of Interior for Lands and Minerals under former President George W. Bush,

> *In 2002, 3, and 4 there was a natural gas shortage, I'm a firm believer in the market, and it was demonstrated that you had Chairman Greenspan testifying to Congress in 2003 about the impacts on the economy of natural gas shortage. Obviously, a shortage in our market economy drives up the price of natural gas. And so, natural gas was in short supply. There was a need to get it. That was something the Bush administration was quite focused on 'cause we were seeing the loss of chemical industries were going overseas, fertilizer industries, it was having a huge impact on the agricultural economy because all of those are heavily dependent on*

7 Note: (1) Bureau of Land Management (BLM) participants include: Pat Shea, former Director of the BLM under President William J. Clinton; Don Simpson, State Director of Wyoming BLM; Larry Claypool, Deputy State Director of Minerals and Lands Wyoming BLM; Lynn Rust, Deputy State Director of Minerals and Lands Colorado BLM; and Tony Herrell, Deputy State Director of Minerals and Lands New Mexico BLM.
(2) Department of Interior (DOI) participants include: Rebecca Watson, former Assistant Interior Secretary for Lands and Mineral Management under former President George W. Bush; and an Unnamed DOI political appointee under former President George W. Bush.

8 Note: The term "subgovernment" refers to the policymaking environment within a public agency where stakeholders interact with each other as well as government decision-makers as public policies are being created.

> *natural gas. Ethanol, heavily dependent on natural gas. So there was a drive, an important social goal to get more natural gas into the system (R. Watson, personal communication, June 16, 2009).*

According to Ms. Watson, pursuit of energy resources increased and energy costs were reduced by the advent of fracking and directional drilling. The difference, according to Watson, between conventional and unconventional energy resource development allowed for the administration to intensify domestic energy development in areas where energy development had once been considered impossible. As Watson notes,

> *The other thing that supported [development] was the Department of Energy had done research in the late 80s and early 90s on how you can release this unconventional natural gas. And unconventional natural gas was in tight sands, in coal, the coal-bed methane or coal-bed natural gas. And, that was something that was a huge resource, but it was not able to be developed. That began to be developed, fracking is fundamental to that, the ability of fracturing this tight rock to release the gas. And directional drilling really didn't come until I would say 2004 or 5, that's when they were really able to maximize the use of directional drilling (R. Watson, personal communication, June 16, 2009).*

Prior to these technological advancements, development on the surface was intense as the energy industry sought to take advantage of market prices for energy. In essence, as government and industry responded to resource shortages in energy markets, the pace of energy development was permitted to speed up prior to perfecting the technology of directional drilling. As Watson observed, the combined effect of energy markets and technological advancements led to energy development "on quite tight spacing, lots, lots of straws to get the gas…and that intense surface development that was different than what ranchers and surface owners were used to" (R. Watson, personal communication, June 16, 2009).

From Watson's perspective, it was the intensity of capturing energy resources from unconventional areas which led to a shift in energy development policies. According to Watson, "The thing that struck me the most after I left Interior was the difference between unconventional natural gas development and conventional natural gas [is] the fact that in order to develop unconventional natural gas it's much more intensive on the surface" (R. Watson, personal communication, June 16, 2009). But, energy companies cannot drill without an Approved Permit to Drill (APD), and, while energy development activity was on par with the Clinton administration, Ms. Watson notes that "what changed was the development; the actual issuance of permits to drill" (R. Watson, personal communication, June 16, 2009). According to Watson, "there were more permits to drill by quite a few, but again that comes out of the fact that we're dealing with unconventional natural gas. We, you have to have a number of permits. For each well you need a permit.

You don't have a permit for multiple wells until you get that directional drilling phase" (R. Watson, personal communication, June 16, 2009).

In the early years of the Bush administration, rising energy shortages and costs were addressed by efforts to expand domestic energy development. This meant that APDs had to be issued quickly. And this meant directing the BLM to expedite the APD administrative process. In Watson's opinion, if the Bush administration was going to effectively increase energy resources and lessen energy costs, the administration would have to increase the number of APDs being approved by the BLM. According to Watson, "That's why expediting energy permits was put in there. Because even with the so-called expediting, which if you look at, it never got that expedited. It could never meet; it could never match the demand for permits that was there in the industry. The industry wanted permits" (R. Watson, personal communication, 16 June, 2009). Legally, the BLM is required to adhere to the National Environmental Policy Act's (NEPA) environmental and collaborative planning process. And as Watson notes, that process takes substantive amounts of time with "no clock on it" and "goes for as long as it's needed" (R. Watson, personal communication, 16 June, 2009). And, according to Watson, "Industry never understood that. They wanted a tight clock and even though permitting accelerated it never matched that demand. And, I do not think I fully appreciated [until some years into it] how unconventional gas changed things, the pace of development because of the permits you needed" (R. Watson, personal communication, 16 June, 2009).

The federal expansion of domestic energy development was driven by three factors: energy markets, technological advancements, and political will-power. No amount of political will, rising energy costs, or advancements in drilling technology could have prepared government officials for the political conflict that emerged between ranching and energy developers. According to a senior Department of Interior appointee during the Bush administration, who requested anonymity, this was particularly true of the BLM as it responded to President Bush's executive orders. As this political appointee notes, "There's no question, they [BLM] were under tremendous pressure to get these APDs issued" (Unnamed DOI political appointee, personal communication, 26 May, 2009). According to Rebecca Watson, the idea that the BLM would respond as desired by the Bush administration regarding the APD approval process is "unrealistic" (R. Watson, personal communication, 16 June, 2009). In Watson's opinion, "the idea that the President writes an executive order and everyone snaps to and charges off, that's just unrealistic. But, yes energy was made a priority because the President and Cheney thought it was a priority for our economy and our economic well-being. So that was important and that message was clearly transmitted to people, that energy development was a critical issue" (R. Watson, personal communication, 16 June, 2009).

13 The BLM Responds to Political-Legislative Directives

Today when parcels of land are nominated for sale by energy interests, a detailed process of land management planning is begun by the BLM. Once the land management plan has been approved the auction and sale of the energy leases takes place. Prior to the lease sale the BLM is required to give 45 day public notice of the impending lease sale in order for any protests to be weighed by the BLM's field office. The cut off for filing a protest is 15 days prior to the lease sale. However, BLM notification of individual landowners affected by the lease sale is not required. This means that property-owners where energy development has been proposed are not contacted directly by the BLM prior to the auction and purchase of energy lease(s).

According to Lynn Rust, "We [BLM] publish it in the Federal Register. We post the list in our public room(s). We put out press releases. We mail individual booklets to anybody. They cost five bucks. Who wants one? We also send a letter to each county commission that has parcels for sale, notifying them. We also notify each Oil and Gas Conservation Commission liaison in each county and they post them to their website. So, we [Colorado] go quite a bit beyond what we're required to do as far as trying to get notification out there" (L. Rust, personal communication, 19 May, 2009). Consequently, landowners whose lands are subject to potential mineral development must be attentive to BLM public notifications of impending lease sales should they wish to file a protest.

Unless citizens throughout the Rocky Mountain West are attentive to any potential energy lease sales occurring in their area, they would likely be unaware of developing energy resources by means of hydraulic fracturing and directional drilling processes. Additionally, most citizens remain unaware of their property's potential for energy development until, as required by law, a representative of the company, commonly referred to as a "land-man," contacts the property's owner by certified letter. Once contacted, property owners have 45 days to respond to the company's notice of intended exploration and development. At the same time, the company seeks the required Approved Permit to Drill (APD) from the BLM if the mineral estate is federally owned. Once the APD has been approved, an onsite pre-drill inspection occurs where the surface owner is invited to attend either by the BLM or the developer.

It is during the pre-drill inspection that a surface owner can express any concerns to the BLM administrator regarding the proposed development activity (L. Rust, personal communication, 19 May, 2009). In addition to pre-drill inspection the BLM also requires that either a signed Surface Owner Agreement or a

certification that there is an agreement in place, be filed with the agency. The BLM "encourages the industry [to] get a Surface Owner Agreement worked out [because] we don't want to have to go to the bond on process" (L. Rust, personal communication, 19 May, 2009). If a Surface Owner Agreement cannot be reached, energy developers can simply post a bond to access the privately owned surface estate.

The consensus opinion among BLM administrators is that "bonding on," as the process is commonly referred to among those familiar with the process, is rare. And while DOI appointees and BLM administrators expressed concern over how surface owners were being treated by energy developers, BLM administrators were adamant in expressing that they had "no role" in the negotiation process (R. Watson, personal communication, 16 June, 2009). Thus, when it comes to negotiations over Surface Use Agreements, BLM administrators do not engage outside the legal boundaries of mandated legal oversight because, "The regs follow the law, fair or not. If somebody needs to change it, the law needs to be modified" (D. Simpson, personal communication, 23 March, 2009). Until the law is reformed BLM administrators will continue to be "good soldiers" as they respond to the "political agendas of Congress and of whatever administration, whoever is in the White House. [Because] each administration looks at things in their own way" (L. Rust, personal communication, 19 May, 2009). Or, as Rebecca Watson quipped, "Yeah, they [BLM administrators] don't want to be involved in blessing or cursing people's ills" (R. Watson, personal communication, 16 June, 2009).

14 BLM Oversight and Federal Revenue Appropriations

As domestic energy development expanded, administrative resources of the BLM strained to comply with their mandated oversight of hydraulic fracturing and directional drilling energy development activities. Clearly, the preferred policy objective of the Bush administration was to expand domestic energy development. BLM resources, however, did not increase as energy development expanded. As a result, while the number of acres under development increased to historical levels, BLM oversight of energy development activities – including that of how the new technologies of hydraulic fracturing and directional drilling – declined. Having been directed by the President and his political appointees to expedite the APD approval process, BLM administrators found compliance with mandated oversight responsibilities difficult to achieve. In the opinion of BLM administrators, operating under the context of a political mandate to expand

energy development, BLM lacked sufficient resources to expand administrative oversight of energy development activities.

Disbursement and designated use of federal resources by federal agencies is a matter for Congress. If a shift in policy direction is to take place, budgets must shift along with the objective being sought. According to Don Simpson,

> *We shift all the time, but we don't shift the money. Congress gives us line items, so I would say in the last 10 years, or some period like that, [funding for] range [management] has gone down; recreation has gone down; oil and gas has gone up. Those were line items from Congress, they reprioritize our money, then our boss, the Secretary of the Interior, passes them down to the [state] director and says 'Here's the priorities,' and they [priorities] just kind of bounce around, so it depends on what's going on (D. Simpson, personal communication, 23 March, 2009).*

Larry Claypool, Simpson's assistant director, clarifies that the shift in resources that occurred during the Bush administration was "the shift, in the APDs, the big shift in the APDs, the major shift is probably our pilot offices[9] in that we hired additional people to take care of that extra workload in the permit area" (L. Claypool, personal communication, 23 March, 2009). Shifting the administrative priorities of the BLM to expedite APDs had the effect of creating a backlog of regulatory compliance oversight in the field. In part, this is because agency budgets are created in years prior to any politically mandated shifts in policy priorities. There is a significant lag-time between BLM submitting a budget based on projected needs and requesting funding to meet immediate needs should a shift in administrative priorities occur.

Budget lag-time worked against BLM administrators' capacity to monitor energy activities. A June 2005 Government Accountability Office (GAO) report noted that energy permitting activities tripled from 1999–2004 (Government Accountability Office Report (GAO-05-418), 2005). BLM permitting in 1999 accounted for 1803 APDs being issued. By 2004 the number of approved APDs numbered had risen to 6399 per year and was climbing. GAO noted that "BLM officials in five out of eight field offices that GAO visited explained that as a result of increases in drilling permit workloads, staff had to devote increased time to processing drilling permits, leaving less time for mitigation activities, such as environmental inspections and idle-well reviews" (Government Accountability Office Report (GAO-05-418), 2005: p. 1). The report further noted that four of the eight

9 Note: The pilot offices Mr. Claypool is referring to are offices within close proximity to fields where the greatest energy development activity is occurring. The BLM pilot offices are unique features of land management agencies in that they are devoted to no other administrative function other than that of oil and gas development.

BLM field offices "reported that the most significant impact of policies to expedite and manage oil and gas development was the increased emphasis that some of these policies placed on processing permits, which in turn resulted in shifting staff responsibilities away from mitigation activities" [Government Accountability Office Report (GAO-05-418), 2005: p. 1]. Thus, a change in the presidency and the support of a friendly Congress led to changes in BLM's management of domestic energy policy.

The BLM's response to executive branch directives emphasizing the expansion of domestic energy development altered the agency's administrative priorities. In response to Executive Orders # 13211 and 13212, APD backlogs and new APD application were being addressed by BLM administrators. In turn, a backlog in the monitoring and inspection of hydraulic fracturing and directional drilling energy development activities was created. While the executive branch had effectively shifted the energy policies of the BLM, Congress was slow to respond in allocating funds to balance BLM workloads. As Don Simpson notes, "Okay, so you've [Congress] got enough money here and you've told us this should account for some number of APDs. Well, guess what? It does, but as we add 5000 more APDs per year to manage the compliance workload is going up by that amount. So we run back and say, 'Well, that's not enough money. You're funding the front part, but not the back part'" (D. Simpson, personal communication, 23 March, 2009). The lack of funding was not, however, simply the result of the BLM responding to executive branch policy objectives. Congress too had a role to play in creating the administrative imbalance.

A Republican-dominated Congress reacted favorably to Bush energy policy objectives. According to Rebecca Watson,

> *You have to remember how the federal government works. Congress, in the Constitution, is given authority over public lands and Congress also, of course, controls the budget. So, Congress and the White House were in concert in their belief that natural gas supply was diminished and we needed more natural gas. Congress reacted by focusing on energy and the Energy Policy Act. The Bush administration, from the very beginning was focused on energy and the need to supply domestic energy. And then the budget reflected that and the Bush budget drives policy and it's the budget that reflected the need for more money to develop natural gas and other energy and Congress passed those budgets (R. Watson, personal communication, 16 June, 2009).*

Political control of both the BLM's administrative activities as well as their budget, in part, helps explain how the BLM shifted resources toward energy development activities. It is common that elected officials, and particularly appointed officials, understand controlling the budget means controlling the agency. As former BLM Director Pat Shea notes "I came away from my experience in the department

[Department of Interior] and in BLM absolutely convinced that the only way a political appointee can make a difference is by the control he or she took of the budget. You could make all sorts of administrative changes, and there would be temporal victories, but the real sustainable victories were the ones that you put into the budget" (P. Shea, personal communication, 2 June, 2009). If a political appointee's control of an agency's budget sustains policy change, it can be surmised that in carrying out President Bush's executive orders, BLM's policy and budgetary priorities shifted away from ranching activities and toward energy development activities.

There is greater economic return to government on developing domestic energy resources than from other activities. While Rebecca Watson insisted that "There was no directive [to the BLM] to raise money" she also notes that as a result of market forces, government's economic gain from developing energy resources is "just the byproduct" (R. Watson, personal communication, 16 June, 2009). According to Ms. Watson, the Bush administration's message was not "go out and drill gas to raise money" because federal revenues from energy activities, when compared to other sources of revenue are relatively minor. As Watson notes, "Yes, natural gas and oil and coal and other mineral resources bring in billions of dollars to the Federal Treasury, but that's a pimple compared to the money that's raised through taxes" (R. Watson, personal communication, 16 June, 2009). While decision-makers were mindful of the impact of raising monies through energy development, DOI appointed officials laid significant blame at the feet of the Office of Management and Budget (OMB) for the inequitable distribution of financial resources. According to the senior DOI appointee,

> *You've got to remember, you had the Office of Management and budget that absolutely detested grazing on public lands. I mean, they do not like it. They never have. They don't think ranchers pay fair market value. So you've got an OMB that's going 'Fuck them. I'm not going to increase the budget for them. They're not paying fair market value. They want us to give them more money and to graze more and do more damage to the land.' So even though Interior would always ask for more money, the OMB would cut it back (Unnamed DOI political appointee, personal communication, 26 May, 2009).*[10]

Rebecca Watson also noted those problems with OMB and the allocation of resources to the BLM for meeting there oversight responsibilities is difficult to achieve. As Watson echoed, "I mean there's a whole other story about OMB and their role and what they do and who the people are at OMB and what kind of decisions they make on all manner of issues. That's a whole other debate"

10 Note: Fair-market value regarding monies paid by industry for energy leases averages $2.00 per acre.

(R. Watson, personal communication, 16 June, 2009). In some instances, according the unnamed DOI appointee, OMB baulked at funding energy development as well. The appointee notes that "The Buffalo [Wyoming] field office was predicated on the fact that if you [BLM] give them [energy developers] more APD approvals, you'll [government] get more royalties, so OMB are you stupid? The state's [Wyoming] out there draining the hell out of you producing oil and gas from their state lands, and their draining the federal reserves, and you're losing as much as 80 million dollars a year by not granting more APD reviewers to get these wells permitted so that you don't get drained by the state" (Unnamed DOI political appointee, personal communication, 26 May, 2009). BLM administrators did not take a position on the OMB debate, but they too regarded energy market forces as a significant factor in creating resource disparity between ranching and energy. BLM administrators were, however, as mindful as their DOI counterparts about the desirability of raising federal revenues from domestic energy development.

BLM administrators are mindful of their role in raising federal revenue from energy activities. If energy companies can extract and develop energy resources when prices are high, elected officials seek to take advantage of the market price as a means of deriving revenue. As Lynn Rust notes, "Price is a big thing with it. So many people talked about well, the Bush energy policy. It's all about price. If companies can make money out there, they're going to go out there and drill and produce. If they can't, they're going to go elsewhere" (L. Rust, personal communication, 19 May, 2009). Administrators like Rust are also mindful of the effect of elected officials seeking to pad the bottom-line and make up for any budgetary shortfalls that might befall them in the future. As Rust comments, "There's a lot of revenue that they [federal agencies] know the federal government is dependent upon particularly in the current [2009] budget situation that's occurring, they're really looking carefully at it. They're [elected officials] looking for every dime they can find" (L. Rust, personal communication, 19 May, 2009).

In states where energy resource development is greatest, such as Wyoming, the emphasis on the subsurface estate's capacity for raising revenue is particularly acute. For example, Larry Claypool notes that from the perspective of history, which estate derives more governmental revenue has changed. The surface estate is no longer viewed as the revenue producer it had once been. In Claypool's opinion,

> *You [government] own the land. Poof [Stock-Raising Homestead Act of 1916]. The rancher owns the surface. The surface, it's there, but it just didn't carry the same weight in historical times as it does now. It just wasn't important. And it is interesting that back in the early 1900s the government saw at that time the start of the production of oil and gas. I was really surprised they [federal elected officials] thought this [federal government retaining ownership of the mineral estate] was a wise move; let's keep those minerals for the government, and*

> *kudos to them [federal elected officials] that they foresaw that and took the steps to put that [mineral estate] back in the government's hands. It was a good move (L. Claypool, personal communication, 23 March, 2009).*

Currently, and for the foreseeable future, expanding domestic energy development will produce greater governmental revenues than will other activities. And, when the political objective is altered to take advantage of economic opportunity, the BLM shifts its policies as it responds to the political objective being sought. As Don Simpson notes,

> *We have congressmen, we have senators, we have the president, and they all dictate through funding, through priorities, through executive orders, through laws, through regulations, how it is that we should behave. Well, and the forefathers reserved it [mineral estate] for all of us, and those that have passed laws since then said, 'Use it.' I mean, the laws mostly say 'use it.' They don't say 'hang on.' So, I think it's pretty clear that for a couple of 100 years that's kind of been the marching orders and we're [BLM] the intermediary, I guess, to stand back and step in when asked (D. Simpson, personal communication, 23 March, 2009).*

In the modern energy economy the political, legal, and administrative behavior of governmental entities will continue to favor the development of domestic energy resources over other interests. And as the BLM responds, the interests of energy within the subgovernment policymaking environment of the BLM will become further entrenched. That energy interests will be the focus of governmental entities at all levels of the federal government does not bode well for the future interests of other stakeholders who depend on public lands and resources for their well-being.

15 Conclusion

President George W. Bush and Vice President Cheney, former executive officers of energy development companies from energy-producing states of Texas and Wyoming respectively, embarked upon an executive-oriented strategy to increase domestic energy production from the time of their election to office. Prior to their inauguration, and in the early years of their administration, they justified this strategy by arguing that without a significant increase in domestic energy development, the nation's national economy and security were at risk. And, fortuitously, a series of events occurred during the course of their first term that effectively solidified the administration's argument in the minds of the American public.

Spurred by global conflict and the growing economic power of global rivals helped establish conditions for unprecedented increases in the market price

for global energy resources. Combined with the tumultuous global events of the day, the steady increase in the price of energy resources, particularly the market rate for a barrel of oil, profoundly affected the American psyche. Indeed, America's military engagement in wide-spread global conflict; as well as contending with emerging foreign economic powers and their competition for energy resources, spurred an almost daily rise in the price of energy resources.

As these events unfolded, they were daily fodder for all the major American news outlets. In turn, the American public responded and viewed the administration's efforts to expand domestic energy production as necessary for securing the nation's economic and national security interests. In essence, those who would engage in activism to slow the Bush administration's efforts to expand domestic energy development were effectively marginalized.

First, the aggressive nature of the Bush administration's domestic energy policies had awakened the dormant, but inherently conflict-ridden federal legislation of homesteading, mining, oil and gas, and grazing. The politically motivated expansion of technologically modern domestic energy resource development activities had the effect of creating conflict between the principle actors – ranchers, energy, and environmentalists – within the land-use subgovernment of the BLM. Nothing less than control over the direction of the federal government's land use policy decisions was at stake. The stakes in the outcome of the conflict were enormous for these interest groups, and depending on which side won, it was expected that the winner would emerge as the dominate force over all other uses or future uses of the public domain. Simply put, the conflict's outcome held the potential to shift the operating paradigm of the BLM's decision-making subgovernment and, in turn, America's public lands and resources policy.

Second, domestic energy resources that were once easy to access and develop were then, and are now, played out. The domestic energy resources that remain are sources that have remained relatively off-limits in terms of the economy and technology of developing untraditional energy resources such as coal-bed methane natural gas (CBM). Because of limited energy resources, developing these non-traditional energy resources is now economically advantageous to the energy industry. Technological advancements like those of hydraulic fracturing and directional drilling have been made and new, previously undeveloped sources of energy are now available to the energy industry, and energy developers sought to take advantage of favorable market conditions, and new technologies came online at roughly the same time. This turn of events allowed drillers to develop non-traditional energy resources in previously inaccessible places.

Third, the economics and technological advancements of 21st century energy development coincided with political willpower favoring expanded domestic energy development. In essence, the modern energy boom of the late-20th and early-21st century created a "perfect storm."[11] The economics of other uses of the public domain as a means of generating federal revenue could no longer sustain themselves in the face of the revenue generated by energy development. As more and more non-traditional sources of energy were opened to development, federal revenue generated by the sale of energy leases – as well as the federal royalties derived from their development – far outpaced revenue generated by other use of the public domain. From the perspective of economics, the energy boom that had begun in the late 1990s had overtaken all other economic uses of public lands and resources as a means of generating revenue by the start of the Bush administration. And, as more areas were opened to energy development, that development spilled over and onto the interests of others with an economic and environmental stake in governing Western lands and resources.

And finally, the unfettered pace of energy development in the West occurred on both public and private lands and by 2003 energy development began to dominate western landscapes. In the San Juan Basin of New Mexico alone, 19,000 producing CBM wells dotted the open terrain where herds of grazing cattle had once roamed (Snell 2003). In the rush to develop America' domestic energy resources, pastoral scenes of grazing cattle on the public domain had been replaced with the urban-like hustle-and-bustle of energy development. The sights and sounds of energy development were unsettling to those who had grown accustomed to serenity. Where ranchers had just a year earlier grazed their herds, or where backpackers hiked and camped, or where hunters and fisherman sought their quarry, an infrastructure of active drilling rigs, thousands of concrete well-pads, miles of pipelines, and tens of thousands of miles of roadways, where hundreds of vehicles – large and small – rumbled throughout the day and the night, had taken their place. A modern day tragedy of the commons in the form of energy development was beginning to unfold across the Rocky Mountain West. With the benefit of hindsight, the public is only now coming to reflect upon the consequences resulting from the administration's sustained efforts to facilitate the use of hydraulic fracturing and directional drilling to achieve the political objective of expanding domestic energy production.

11 Note: Numerous governmental and non-governmental participants used the phrase "the perfect storm" as they responded to questions regarding the confluence of the energy market, technological advancements in energy development, and Bush administration activities aimed at expanding domestic energy development.

References

Abramowitz, M. and S. Mufson (2007) Papers Detail Industry's Role in Cheney's Energy Report. *The Washington Post*. Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2007/07/17/AR2007071701987.html?hpid=topnews.

Anderson, D. (Director). (2009) Split-Estate: *What You Don't Know CAN Hurt You* [Documentary]. USA: Red Rock Pictures.

Bureau of Land Management. (n.d.*c*) Wyoming: In the spotlight. Retrieved from http://www.wy.blm.gov.

Clifford, H. (2001) Wyoming's powder keg: Coalbed methane splinters the Powder River Basin. *High Country News*. Retrieved from http://www.hcn.org/issues/214/10823.

Competitive Leases, 43 C.F.R. pt. 3120.1–2, 3120.2–2, 3120.3–1, 3120.5–1. (1988).

Congressional Hearings (107th–110th Congresses). Retrieved from http://www.gpoaccess.gov/chearings/browse.html.

Douglas, A. R. (1990) *The logic of congressional action*. New Haven, CT: Yale University Press.

Durant, R. F. (1992) *The Administrative Presidency Revisited: Public Lands, the BLM, and the Reagan Revolution*. Albany, NY: State University of New York Press.

Earthworks. (n.d. *b*) Surface owner protection legislation. Retrieved from http://www.earthworksaction.org/SOPLegislation.cfm.

Edelman, Murray, E. (1988) *Constructing the political spectacle*. Chicago, IL: University of Chicago Press.

Executive Order No. 13211, 66 C.F.R 28355 (2001).

Executive Order No. 13212, 66 C.F.R. 28357 (2001).

Finley, D. S. (2003) The Bush appointees. Retrieved from http://restoringsanity.org/politics/bush_appointments.html.

Gallup News Service Poll (2001a) Public Divided in Reaction to Bush Energy Plan: Many Feel it Does not do Enough to Conserve or Produce Energy. Retrieved from: http://gallup.com/poll/4438/Public-Divided-Reaction-Energy-Plan.aspx.

Gallup News Service Poll (2001b) Energy crisis 2001: Where America Stands: 10 Findings about American Public Opinion on Energy. Retrieved from: http://www.gallup.com/poll/4441/Energy-Crisis-2001-Where-America-Stands.aspx.

Gallup News Service Poll (2003a) Public rates Bush Highly on Terrorism, Defense Issues: Gets Lowest Approval Ratings on Social Security, Campaign Finance. Retrieved from: http://www.gallup.com/poll/5563/Public-Rates-Bush-Highly-Terrorism-Defense-Issues.aspx.

Gallup News Service Poll (2003b) Americans Foresee Energy Shortage within 5 years: Majority Favors Conservation Over Production as Energy Solution. Retrieved from: http://www.gallup.com/poll/7987/Americans-Foresee-Energy-Shortage-Within-Years.aspx.

General Accountability Office (2005) Oil and Gas Development: Increased Permitting Activity has Lessened BLM's Ability to Meet its Environmental Protection Responsibilities (GAO-05-418).

Habermas, J. (1975) *Legitimation crisis*. Boston, MA: Beacon Press.

Hardin, B. and Jehl, D. (2002) Ranchers bristle as gas wells loom on the range. *New York Times*. Retrieved from http://www.nytimes.com/2002/12/29national/29METH.html.

Hearing on enhancing America's energy security: Hearing before U.S. House of Representatives, Committee on Resources, 108th Cong. (2003) Retrieved from http://bulk.resource.org/gpo.gov/hearings/108h/85771.pdf.

Howell, W. G. (2005) "Unilateral Powers: A Brief Overview," Presidential Studies Quarterly, 35(3):417–439.
Jehl, D. (2000) The 43rd President; Interior Choice Sends a Signal on Land Policy. *The NewYork Times*. Retrieved from http://www.nytimes.com/2000/12/30/us/the-43rd-president-interior-choice-sends-a-signal-on-land-policy.html.
Judicial Watch (2005) Appeals Court Permits Energy Task Force Records to Remain Secret. Press Release. Retrieved from http://www.judicialwatch.org/5442.shtml.
Kelman, S. (1987) *Making public policy: A hopeful view of American politics*. New York, NY: Basic Books
Kennedy, J. (2000) Technology limits environmental impact of drilling. *Drilling Contractor*, pp. 31–35. Retrieved from http://www.iadc.org/dcpi/dc-julaug00/u-doe.pdf.
Kingdon, J. (2003) *Agendas, alternatives, and public policies* (2nd ed.). Boston, MA: Longman.
Levine, M. E. and Forrence, J. L. (1990) "Regulatory Capture, Public Interest, and the Public Agenda: Towards a Synthesis," Journal of Law, Economics, and Organization, 6:167–198.
Likwartz, D. and T. Parfitt (2004) *Split-Estates*. 2004 BLM National Fluid Minerals Conference, June 22, 2004, Cheyenne, Wyoming.
Longley, R (2001) Bush Energy Policy: Make More, use Less. Retrieved from: http://usgovinfo.about.com/library/weekly/aa051701a.htm.
Longley, R (2003) Oil and Gas Development Regulations Eased. Retrieved from: http://usgovinfo.about.com/b/2003/08/08/oil-and-gas-development-regulations-eased.htm.
Mayer, K. R. (2001) *With the Stroke of a Pen: Executive Orders and Presidential Power*. Princeton, NJ: Princeton University Press.
McCool, D. C. (1989) "Subgovernments and the Impact of Policy Fragmentation and Accommodation," Policy Studies Review, 8(4):264–287.
Mitchell, J.G. (2005) All fired up: A natural gas boom is transforming public lands in the Rockies, pitting Westerner against Westerner. *National Geographic*. Retrieved from http://ngm.nationalgeographic.com/ngm/0507/feature5/index.html.
Moe, T. M. (1993) "Unilateral Action and Presidential Power," Presidential Studies Quarterly, 29(4):850–872.
Moe, T. M. and W. G. Howell (1999) "The presidential Power of Unilateral Action," The Journal of Law, Economics, and Organization, 15(1):132–179.
Nailen, D. (2004) Oil, Gas Auction Breaks Records. *Salt Lake Tribune*: Article ID: 105278D64C96A0DA.
Nathan, R. P. (1983) *The administrative presidency*. New York, NY: John Wiley & Sons Inc.
National Energy Policy Development Group (2001) *National Energy Policy*. Washington DC: U.S. Government Printing Office. Retrieved from: http://www.whitehouse.gov/energy/National-Energy-Policy.pdf.
Neustadt, R. E. (1960) *Presidential Power: The Politics of Leadership*. New York: John Wiley & Sons, Inc.
Offe, C. (1985) *Contradictions of the welfare state: Disorganized capitalism*. Cambridge, MA: Cambridge University Press.
Oil and Gas Royalty, 43 C.F.R. pt. 3103.3–1 (1988).
Oversight Hearing on the orderly development of coalbed methane resources from public lands: *Hearing before U.S. House of Representatives, Subcommittee on Energy and Mineral Resources*, 107th Cong. (2001). Retrieved from http://bulk.resource.org/gpo.gov/hearings/107h/75015.pdf.
Pfiffner, J. P. (1999) *The Managerial Presidency*. College Station, TX: Texas A&M University Press.

Snell, M. B. (2003) A Cowboy's Lament: Energy companies declare open season on New Mexico. Retrieved from http://www.sierraclub.org/sierra/200307/profile.asp.

Spangler, D. K. (2001) Utahnok'd to Lead BLM: Clarke is First Woman in Post, 2nd from State. *Deseret News*. Retrieved from www.deseretnews.com/article/881107/.

Spence, D. B. (1997) "Agency Policy Making and Political Control: Modeling Away the Delegation Problem," The Journal of Public Administration, Research, & Theory, 7(2): 199–219.

United States Department of Interior (2001) Biographical Information: Steven Griles. Retrieved from http://www.doi.gov/bio/griles.html.

United States Environmental Protection Agency. (2000) Profile of the Oil and Gas Extraction Industry. EPA Office of Compliance Sector Notebook Project. EPA/310-R-99-006. p.27. Retrieved from http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/oilgas.pdf.

United States Geological Service. (2000) Fact sheet: Water produced with coal-bed methane. Retrieved from http://pubs.usgs.gov/fs/fs-0156-00/fs-0156-00.pdf .

United States Minerals Management Service (2002) Rebecca W. Watson. Retrieved from www.mms.gov/mmab/Archives/policy-committee-archives/Meetings/Spring02/BioRebeccaWatson.PDF.