

Free thesis on fracking regulation and agenda setting

[Environment](#), [Water](#)



An Analysis of the Formulation of California Senate Bill 4

Chapter 1

The purpose of this research is to analyze the process creating, SB 4, the legislation on hydraulic fracking as an opportunity to understand how and why the fracking issue gained enough momentum to reach the level of legislative decision. Policies that reach the decision-making level on a legislative agenda have been driven to that level by internal and external factors of the government (Kingdon, 1995). The factors and actors that worked together to put 'fracking' on the agenda of the California Assembly and Senate are interesting because of the wide range of opinions held by the proponents and opponents of the bill. The only thing lobbyists and organizations on opposite sides of the issue agreed upon was that they criticized the final bill, but for different reasons (Seifried, 2013). The controversy over the legislation was strong, and many arguments and compromises were part of the SB 4 law-making journey. In spite of the stormy debates and disagreements, California Senate Bill (SB) 4 was signed into law on September 20, 2013 by Governor Jerry Brown. The final form of SB 4 establishes a permitting system for hydraulic fracking and acid stimulation for petroleum products drilling on land in the state of California (Seifried, 2013a).

An assumption made at the beginning of the research was that two external factors initiated the policy-making process. One was the perception that the country needed to exploit local fossil fuel resources instead of relying on imports. The second was that a person described as an "unmitigated liberal," the Democrat Jerry Brown, became the governor of California

(Calefati, Richman & Rogers, 2013, para. 1). Brown's career demonstrated that he was a supporter of environmental protection issues and labor issues that were opposed to the traditional Republican stand, on the other hand, he was recognized as a "fiscal conservative" (Calefati et al., 2013). Libertarians regarded him positively during his two earlier terms as governor starting in 1974 following Ronald Reagan, ". . . (Brown's) combination of fiscal austerity and social tolerance might seem libertarian" (Walker, 2009, 'The Second' para. 10). The perspective of environmentalists changed when he signed SB 4. Environmentalist were disappointed, because it only specified regulating fracking, not banning oil and natural gas fracking (Calefati et al., 2013)

Statement of the Problem

Fracking has occurred for years in California, but permitting regulations were never required. The driving forces have been organized and discussed so that the reason the issue of fracking reached the legislative agenda for the first time can be understood. The research has evaluated SB 4 from the beginning when the issue was at the problem framing stage to the events that kept the process moving along and finally, to the resulting legislation. Political science theories have been used to better understand the interaction of drivers such as the events, actors, and persuasion that forced the issue to become SB 4.

Background

"It seemed to me that we knew something about how issues were decided, but that we knew much less about how they got to be issues in the first place" (Kingdon, 1984., p. xvii). The research evaluates how fracking

became an issue that was put onto the decision making agenda after being used for several years in California without regulation. Research by Davis and Hoffer (2013, p. 1) has shown that regulating and setting policy for fracking “ has become increasingly contentious because of rising public concern about pollution impacts.” Boudet, Clarke and Bugden (et al., 2013) conducted a survey of nationally representative Americans to determine their knowledge of fracking and their opinion about government policies. Most of the sample did not know about the technology or its impacts so they were unsure about supporting fracking or not (Boudet et al., 20133, p. 1). American citizens are important stakeholders in public policy concerning fracking because their sources of drinking water (groundwater aquifers) could be drained or could be polluted by extraction strategies and the handling of fracking wastes. The links between fracking policies and water and wastewater policies are important to understand. The agenda setting component of educating the public on public policies needs to be examined. Michael Kiparsky is the Associate Director of the Wheeler Institute for Water Law and Policy at Berkeley Law. His colleague, Jayni Foley Hein is the Executive Director of the Center for Law, Energy & the Environment at Berkeley Law. In April 2013 they published a policy study about regulating hydraulic fracturing in California from the perspective of water quality and wastewater treatment. The regulations were written by California’s Department of Conservation’s Division of Oil, Gas & Geothermal Resources (DOGGR); DOGGR has primary regulatory authority over hydraulic fracturing (Kiparsky and Hein, 2013, p. 5; Seifried, 2013b). The agency had prepared a draft of the regulations based on discussions that were held before the final

version of the SB 4 was presented.

DOGGR has jurisdiction over the State Water Resources Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs). These two water boards are responsible for California's surface and ground water resources; their responsibilities include the impacts of oil and gas operations on water resources (Kiparsky & Hein, p. 5). These agencies are critical to overseeing the health and safety issues associated with California's water resources.

DOGGR had the responsibility of writing draft regulations on hydraulic fracturing. In August, the chair of SWRCB stated that DOGGR was delaying release of the draft until the legislative session was over (Seifried, 2013b). The reason was because they were waiting to see if SB 4 would pass and if it did pass, would the final version of the bill be more stringent than the regulation discussed beforehand (Seifried, 2013b).

An important observation of Kiparsky and Hein (2013) in their report was that neither the California state regulatory agencies nor the California public have clear opinions about whether they do or do not support fracking. For example, actors need to make fracking's impacts on water supplies more understandable; stakeholders need to be able to compare the experiences of fracking in other states, the risks associated with fracking and the identified best regulation and management practices (Kiparsky & Hein, 2013, p. 5).

Agenda setting and decision-making theories have been used, such as rational comprehensive, incrementalism, network policy, multiple streams, and others to understand why and how the issue of regulating fracking finally reached the legislative agenda. The theory of Policy Networks could be used to represent the California SB 4 case because the actors in the process are “

clusters of actors, each with an interest, or 'stake' in a given policy sector and the capacity to help determine policy success or failure" (Peterson, 2003, Abstract). Refining the use of Policy Networks to help evaluate and understand setting policy agendas and decision making. The California fracking issue has many clusters of actors who have diametrically opposed goals. Interestingly, as the research progressed, it was found that sometimes the actors with very different aims were on the same side of one or more policy issues. The variety and diversity of policy players makes the dynamics of the fracking issue in California an especially remarkable agenda setting and public process situation. For example, from the beginning the petroleum industry had a unique perspective as expressed in this statement by the CEO of the California Independent Petroleum Association "Hydraulic fracturing has occurred safely in California since the 1950s. There is not one case of water contamination because of hydraulic fracturing" (Zierman, p. 1). From the perspective of water and wastewater quality the deep concern is because of the plans to greatly increase the amount of fracking due to external, national energy policy goals and the fluctuating costs of petroleum products like oil and natural gas.

Another circumstance that is driving the greater production plans is the cutting edge new technology available. The impetus to increase drilling by the fracking process has been explained as "new, and potentially alarming, are projections of dramatically increase fracking activity in California" demonstrating that the issue is perceived by some as highly emotional (Kiparsky & Hein, 2013, p. 5). The policy network theory has been shown to be a good application for the study of policies to encompass

interorganizational research when matched with collective action theory or to an analytical framework. For example, Institutional Analysis and Development framework has been used to give structure to the network theory so it can be used more effectively (Carlsson, 2005, p. 502).

Incrementalism theory allows for evaluation of a flexible theory. As the process flows and the dynamics of actors between each other and in relationship to the process change, incrementalism theory can adapt. In democracies with a free flow of information, no one actor has all the information, therefore policy making and agenda setting activities are self-guided. In a controlled society some people would have more information than others and the decision-making approach could be considered as a scientifically guided society (Fischer & Miller, 2007, p. 207). The application of scientific principles in a decentralized society could not work, because the variables cannot be carefully controlled. During the policy making process for fracking in California, policy makers had to be ready and willing to adjust to different dynamics as the process was gaining momentum.

Many actors were in the fracking issue are very powerful, like gas and oil production companies, while others were powerless such as families who had negative impact on the water they used for drinking and bathing.

Incorporating the appropriate theories the complicated process can be better understood. For example, Kingdon's model allows for the addition of many diverse variables that are complex, above and beyond the policy issue, but impact setting agendas and making laws. The complexities of an issue become easier to understand when broken down into smaller pieces of information. The legislative process is more often or not at a stand-still

because timing is everything when creating or changing a public policy law (Kingdon, 1984). Chances for a policy to reach the legislative agenda are not often available. Three policy making streams, the political, policy, and problem streams, work together to drive a policy to reach the legislative agenda (Kingdon, 1989). A window of opportunity opens when the three streams coincide with a political entrepreneur (Kingdon, 1984).

Another theory discussed is the punctuation equilibrium model developed to better understand how public policy is chosen based on “ disproportionate information processing” because the attention to the policy and how “ political systems process information” are outcomes of the model (Jones & Baumgartner, 2005, p. 325).

The “ art of political decision making” from the point of view of policy paradox has been applied from a basic perspective of the activities that took place (Stone, 2011). California’s SB 4 contains some embedded paradoxes that became evident while the legislation was being developed. Making policies involves a political struggle between stakeholders with different agendas, priorities and values at a fundamental level. If the assumption is accepted that a push and pull dynamic exists, then policies are not based on rational thought so much as the struggle to meet a particular agenda; a perspective that offers new insights into policy making The dynamics of power and emotion surrounding hydraulic fracking, because of the profit motives and the clean environment motives, for example, means that there are no neutral lessons to be learned (Stone, 1999, p. 52).

One component of the permitting issue was the discord between the advocates of federal regulatory oversight and the advocates of state

regulatory oversight. Hydraulic fracking and acid stimulation are onshore drilling systems for extracting petroleum products. The methods have been used for a long time in California but were never regulated and never required permits for drilling. California SB No. 4 Chapter 313 (Sect. 1a) establishes the definitions applicable to fracking and describes fracking and acid stimulation as two acceptable stimulation technologies that can be used in California. The political focus for petroleum companies and fracking advocates has been for state level control. On the other hand, the proponents of sustainable environmental practices have pushed for greater oversight from the Environmental Protection Agency (EPA) and other appropriate federal agencies (Davis & Hoffer, 2012, p. 221).

Kingdon's papers that resulted from interviewing congress members have been studied. He developed a model on the agenda setting processes in the federal government, but the model is also useful at policy making on the state level (Kelly, 2005, 3). Analyzing the decision-making for SB 4 has encompassed national such as the EPA (a national regulatory agency), as well as California state government departments.

Governmental agenda setting can change quickly so analyzing how priorities shift and why priorities shift is important to understanding policy formulations. SB 4, SEC. 7 Section 10783.(a) (2013, pp. 22-23) states " The Legislature finds and declares that protecting the state's groundwater for beneficial use, particularly sources and potential sources of drinking water, is of paramount concern." Therefore the legitimate origins and developments of California SB 4 with an emphasis on agenda setting for the protection of

California drinking water will be identified and evaluated during this research.

Research Question

What factors contributed to the development and passage of Senate Bill 4?

Aim

The aim of the research is to gain an understanding of the California public policy process that resulted in the creation of SB 4 using public policy theories for agenda setting and decision-making.

Objectives

- Identify the stakeholders of the fracking involved in the CA SB 4 debate.

Scope

California's Senate Bill 4 is the first law regulating fracking in the state although fracking has been practiced there for many years. As such, it is relevant to explore why and how and how the issue was put on the legislative agenda. Network policy theory, multiple streams, incrementalism, rational comprehensive, learning from information transfer public policy theories for agenda setting and decision-making have been used as well as other theories. The events resulting in a general consensus that fracking called for legislation, have been identified. The search for a solution by policy experts has been discussed as a step-by-step process. The research has identified the stakeholders ranging from the companies carrying out the hydraulic fracturing drilling to the environmental organizations . and clean, safe water issue. Stakeholders have been categorized in a range from

powerful to no power in the agenda setting and decision making processes.

The scope included whole policy making process from the initiation of the idea that fracking was a problem until the passing of SB 4.

The research should be of interest to policy makers, the California public, the government agencies involved in regulating fracking (both state and federal), and the scientific community. The research will attempt to establish the attitudes and motivations of all the stakeholders. The origins of the movement have been described as well as the development of the policy to pass California legislation on hydraulic fracking will be evaluated. The process from conception of the idea to post-legislative impacts has been evaluated.

Chapter Summaries

Chapter 1 introduces the basics of CA SB 4 in the context of some agenda setting and public policies that have been applied to the senate bill. Some of the contradictions and paradoxical goals of the bill have been identified.

Various perspectives have been given as examples to show the controversial aspects of SB 4 because the range of opinion is from the fossil fuel industry's pro-fracking attitude to the no fracking attitude of environmentalists interested in guaranteeing clean water resources to the non-informed stance of the California public. The research question, aims and scope of the research are offered.

Chapter 2 is the literature review on the different perspectives of the various stakeholders. The factors that influence public policy and political decision-making have been offered from academic research. The relevance of public

policy and agenda setting models have been discussed in reference to the real-life process of recognizing fracking as a problem to finally, passing a bill of the issue. The way the governor will continue the agenda setting process by addressing some of the loose ends have been noted.

Chapter 3 contains the methodology used during the research. The methodology is qualitative. The methodology section will include a chart of the steps taken to carry out the research. A detailed discussion of the sources, references and the search terms was included. The theoretical models used to evaluate the process of SB 4 will be described.

Chapter 4 reports the results of applying the public policy theories and the models to the California fracking policy. The results will be broken down into the components of the models and linked to relevant activities in the example.

Chapter 5 discusses the implications of the results, the limitations of the research and suggests future areas of study.

Chapter 6 concludes with a summary of the research findings and the degree of success in meeting the goals set in Chapter 1.

References

Primary Data

Balaba, RS, Smart, RB. (2012). Total arsenic and selenium analysis in Marcellus shale, high-salinity water, and hydrofracture flowback wastewater.

Chemosphere

Brooks, M. (2013). Frack on or frack off? Can shale gas really save the

planet? New Scientist

Centner, T. J. (2013). Oversight of shale gas production in the United States and the disclosure of toxic substances. *Resources Policy*, 38

Davies, R. and Foulger, G. and Bindley, A. and Styles, P. (2013). Induced seismicity and hydraulic fracturing for the recovery of hydrocarbons.

Manuscript to be published in *Marine and petroleum geology*, <http://dro.dur.ac.uk/10679/1/10679.pdf?DDD15+DDD10+dgl0rjd>

Hein, J. F. and Kiparsky, M. (2013). Regulation of hydraulic fracturing in California: A wastewater and water quality perspective. Wheeler Institute for Water Law & Policy, Center for Law, Energy & the Environment, UC Berkely School of Law, April, 2013, pp. 61, <http://www.law.berkeley.edu/cee.htm>

King, G. E. (2012). Hydraulic fracturing 101: What every representative, environmentalist, regulator, reporter, investor, university researcher, neighbor and engineer should know about estimating fracking risk and improving fracking performance in unconventional gas and oil wells. SPE 152596, Society of Petroleum Engineers Hydraulic Fracturing Technology Conference, Woodlands, Texas, USA, 6-8 February 2012, pp. 80.

Kingdon, J. W. (1984). *Agendas, alternatives, and public policies*. MI: Little and Brown.

Kingdon, J. W. (1989). *Congressmen's Voting Decisions*. 3 ed. Ann Arbor: University of Michigan Press.

Lauver, L. S. (2012). Environmental health advocacy: an overview of natural gas drilling in northeast Pennsylvania and implications for pediatric nursing. *Journal of Pediatric Nursing*, 27

Stone, D. (2011). *Policy paradox: The art of political decision making*. W. W.

<https://assignbuster.com/free-thesis-on-fracking-regulation-and-agenda-setting/>

Norton & Co.

Vidic, R. D., Brantley, S. L., Vandenbossche, J. M., Yoxtheimer, D., Abad, J. D. (2013). Impact of Shale Gas Development on Regional Water Quality, *Science*, 17 May 2013, 340 (6134), doi: 10. 1126/science. 1235009

Zierman, R. (2012). Hydraulic Fracturing. White paper executive summary, California Independent Petroleum Association (CIPA), pp. 10, http://www.cipa.org/files/public/CIPA_HF_White_Paper.pdf

Zoback, M. D. (2012). Written Testimony to the Committee on Energy and Natural Resources, United States Senate, June 19, 2012, http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=4f086706-79aa-43df-a6e9-1ce1169f6312

Secondary Data

Andrews, J. (2013). As California Begins Regulating Fracking, Agricultural Concerns Arise. *Food Safety News*, <http://www.foodsafetynews.com>

Biello, D. (2013). Fracking Can Be Done Safely, but Will It Be? *Scientific American*, <http://www.scientificamerican.com/article.cfm?id=can-fracking-be-done-without-impacting-water>

Boudet, H., Clarke, C., Bugden, D., Maibach, E., Roser-Renouf, C. & Leiserowitz, A. (2013). “ Fracking controversy and communication: Using national survey data to understand public perceptions of hydraulic fracturing. *Energy Policy*, article in press, <http://environment.yale.edu/climate-communication/article/american-perception-of-hydraulic-fracturing>

Davis, C. & Hoffer, K. (2012). Federalizing energy? Agenda change and the politics of fracking. *Policy Sciences*, 45(3), 221-241.

<https://assignbuster.com/free-thesis-on-fracking-regulation-and-agenda-setting/>

Elias, S. A. (2013). Fracking – the pros and cons. Elsevierconnect, <http://www.elsevier.com/connect/fracking-the-pros-and-cons>

Energy Information Administration (EIA)(6 July 2012). Monthly coal-and natural gas-fired generation equal for the first time in April 2012. Today in Energy, EIA, <http://www.eia.gov/todayinenergy/detail.cfm?id=6990>

Jones, B. D. & Baumgartner, F. R. (2005). A model of choice for public policy. JPART, 15, 325-351. http://www.unc.edu/~fbaum/articles/JPART_2005_A_Model_of_Choice.pdf

Kiparsky, M. & Hein, J. F. (2013). Regulation of hydraulic fracturing in California: A wastewater and water quality perspective. Wheeler Institute for Water Law & Policy, Center for Law, Energy and Environment, UC Berkeley School of Law, Berkeley, CA, pp. 5-6.

McDonnell, G. (2011). The Policy Process. Diagram. <http://www.systemswiki.org/index.php?title=File:Im-758.jpg>

Mills, M. N. and Guiao, R. C. (2013). Potential Legal Challenges likely to California New Fracking Law. California Environmental Law Blog, Stoel Rives LLP Attorneys at Law, <http://www.californiaenvironmentallawblog.com/ceqa/potential-legal-challenges-likely-to-californias-new-fracking-law/>

Seifried, R. (2013a). California Assembly Committee Passes a Fracking Bill. California Environmental Law Blog, 11 September 2013, <http://www.californialawblog.com>

Seifried. (2013b) Surviving Fracking Bill Amended to Include Acid Well Simulation.

Walker, J. (2009). Five Faces of Jerry Brown. The American Conservative, <http://www.theamericanconservative.com/articles/five-faces-of-jerry-brown/>

<https://assignbuster.com/free-thesis-on-fracking-regulation-and-agenda-setting/>

Zierman, R. 2012. California Independent Petroleum Association http://www.cipa.org/files/public/CIPA_HF_White_Paper.pdf