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Explaining Current and Future Trends in Adoption by California Municipalities and Counties of Policies Limiting or Banning High-Volume Hydraulic Fracturing

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Project Summary

This project investigates the factors affecting whether California municipalities and counties adopt policies limited or restricting high-volume hydraulic fracturing (HVHF, also called “fracking”). HVHF is a new, controversial form of hydrocarbon extraction. Concerns have grown over HVHF’s potentially adverse impacts to public health and the environment. HVHF is of particular concern in California because it involves large water withdrawals and has been connected to contamination of California aquifers. Some California sub-state jurisdictions have passed policies intended to prevent HVHF locally. Restricting HVHF locally may be an important way to protect the quantity and quality of California water resources, so it is important to understand the conditions that facilitate or inhibit passage of such restrictions.

We administered a survey to all California municipalities to assess whether and how they have addressed the issue of HVHF in local policy, and to gain insights into local attitudes toward and concerns about HVHF. We received responses from at least one individual associated with 292 California municipalities, or roughly 60% of the 482 municipalities statewide. The individual-level response rate is lower (approximately 21% of the surveyed individuals responded). However, the data suggest that most respondents viewed themselves as speaking for their municipality.

We catalogued measures passed by California counties to restrict or prevent HVHF. Then, we identified and interviewed 15 individuals associated with efforts in eight California counties to pass such measures. Additional interviews are planned and completed interviews are currently being transcribed in preparation for analysis. We also continued collecting public meeting minutes from California municipalities, since these will include any policies or resolutions passed concerning HVHF. We have collected minutes for 2010-2015 for 245 municipalities thus far. Each set of minutes is hundreds of pages and these requests typically involve the California Public Records Act.

Research Program

We are investigating the factors that affect whether a sub-state jurisdiction in California adopts a policy intended to restrict or prevent HVHF locally. To do this, we surveyed jurisdictions regarding the actions they have taken with respect to HVHF, their evaluation of the opportunities and challenges posed by HVHF, and the attitudes toward and concerns about HVHF held by their citizens. We are collecting public meeting minutes from all California municipalities so that we can search these records for policies, resolutions, or other policy actions taken by municipalities to tackle HVHF. Finally, we are interviewing stakeholders and decision-makers involved in campaigns to pass county-level anti-HVHF measures.

Public record collection is an important part of our research program because our experience doing a similar investigation in New York over the last few years showed us that if we contact municipalities and ask them (via the state’s public records statute) to provide us with documentation of laws, resolutions, and regulations pursued vis-a-vis HVHF, they may overlook important policy actions and documents. (They do not necessarily index their records by subject

and thus the records we can obtain is often dependent on the clerk's memory of policy passage.) By collecting the minutes of their public meetings, we can comprehensively search them for references to HVHF ourselves, applying the same search terms and protocols. In this way, we can ensure that we have comparable policy data for all jurisdictions.

We have not yet comprehensively analyzed the survey data. Our initial assays of those data suggested that few municipalities passed anti-HVHF measures, in part because of the issue's relatively low salience in most places in California and in part because counties play a large role in local land use governance. Our increasing awareness of the importance of county action on HVHF prompted us to investigate county-level efforts via secondary source data collection and interviews. We have interviewed 15 stakeholders and decision-makers involved in county-level anti-HVHF efforts, and have additional interviews slated. Completed interviews are being transcribed. We are still transferring survey data from hard copy surveys to an electronic database, but we deemphasized this task to focus on the interviews.

Collecting public records is an involved task that we continue to pursue. Many municipalities do not post (all) of these materials online, and they must be accessed via queries submitted pursuant to the California Public Records Act. It can take a municipal clerk 1-2 months to process a CPRA request, particularly given the fact that we are asking for hundreds of pages of documents. Many municipalities send their records in hard copy, and we must scan them as electronic documents before we can store them and ultimately analyze them.

These research tasks are labor-intensive and time-consuming, in part explaining why we do not yet have substantial preliminary findings. Our reorientation this during the reporting period, to explore county-level anti-HVHF campaigns, also helps explain why we do not have completed analyses/publications. We are, however, making good progress toward the goal of obtaining (via the survey) insights into how citizens and officials in California view and address HVHF, and (via the public records) documenting and analyzing policy actions that localities have pursued with respect to HVHF, 2010-2015.

Information Transfer/Outreach Program

Because we have not finished data collection and analysis, we have not pursued substantial information transfer and outreach activities. The PI, Dr. Arnold, gave multiple presentations in which the ongoing California research was mentioned; the main focus of the presentations was providing an overview of HVHF and/or describing the findings from related, prior research on municipal HVHF policymaking in New York. (The New York project paved the way for the California project.) These presentations include:

- A presentation at the American Political Science Association annual conference in San Francisco in September 2016
- A presentation at the American Association for Public Policy and Management in October 2016

- A presentation to the Midwest Political Science Association annual conference in Chicago in March 2017

Notable Achievements

Because we have not finished data collection and analysis, there are few notable achievements to report. Perhaps the most notable achievement thus far is the fact that, during the reporting period, the data collection process has been substantially fueled by approximately 14 students (mainly undergraduates) seeking to learn more about HVHF policy and academic/policy-relevant research. Some of these students are interns working for research credit, others are volunteers, and a handful of others are paid from various grants.

The students gain first-hand experience with research as they contact municipal officials to file and follow up on CPRA requests, analyze public meeting minutes, call survey and follow up with survey recipients, and track and organize survey returns and data. One undergraduate student, Eleni Jacobson, has focused exclusively on the California research and has played a key role in survey data entry, interviewee identification, secondary source data collection and analysis, and actual completion and transcription of interviews.

Student Support

The number of students supported by the grant, described below, does not reflect the number of students who worked on the project, described above. This is because many students are not paid, but rather work as interns or volunteers or to earn academic credit.

	Students Funded Through This Project		Supplemental Awards (Hellman)	Total
	Federal Funding	State Funding		
Professional Researchers	1	0	0	1
Masters Students	0	0	0	0
PhD. Students	2	0	0	2
Acad. Coordinator	0	0	0	0
Other Acad./Researchers	8	0	2	10
Professor/summer	0	0	0	0
Total	0	0	0	0