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A Summary Report of the Politics of Shale Gas Development and High- Volume Hydraulic Fracturing in New York

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Executive Summary

This report presents the findings from a survey conducted in the fall of 2013 of people in New York State who are involved in the debates and politics of shale gas development that utilizes high-volume hydraulic fracturing. A total of 379 people were administered a survey and 129 people responded for a response rate of 34%. These respondents, termed “policy actors”, include individuals from local, state, and federal governments, oil and gas service providers and operators and industry associations, environmental and conservation groups, local citizen groups, and academics and consultants. During the time period of the study, New York State had a *de facto* moratorium on high-volume hydraulic fracturing, which halted shale gas development in the state. This study aims to understand the preferences and concerns of policy actors if the moratorium were to be lifted, as well as to explore their perceived impacts of the moratorium on the state. Additionally, the study examines policy actors’ strategies, resource capacity, and influence in the debate on shale gas development in New York. The five specific objectives of the survey and a summary of the findings related to each objective are summarized immediately below.

Objective 1: To identify respondents’ general positions about shale gas development and high-volume hydraulic fracturing nationally and their preferences for shale gas development in New York.

When asked about shale gas development at the national level, 54% of respondents believe that high-volume hydraulic fracturing should be stopped or limited and 46% believe it should be continued or expanded. All environmental and organized citizen groups can be organized into a *stop or limit* group. The oil and gas industry comprise the majority of respondents in a *continue or expand* group. Local and state government respondents and academics / consultants favor a range of positions. Respondents’ preferences for shale gas development that uses high-volume hydraulic fracturing in New York are similar to their national preferences, with 50% preferring to either ban it or continue New York’s *de facto* moratorium, and 45% preferring to permit it in some regions or statewide. A small number (5%) prefer to permit high-volume hydraulic fracturing on an experimental basis. The data also show a majority of respondents (86%) are dissatisfied with the *de facto* moratorium on high-volume hydraulic fracturing in New York.

Objective 2: To understand the extent that respondents perceive potential benefits and problems associated with shale gas development and their opinion of New York’s *de facto* moratorium on high-volume hydraulic fracturing.

On average, the *continue or expand* group strongly agrees that shale gas development benefits local landowners, can benefit the New York economy, leads to energy independence, can serve as a bridge fuel to renewable energy, and mitigates climate change. The *stop or limit* group generally disagrees with each of these potential benefits. In terms of potential problems, the perceptions of the two groups are divided more on environmental problems than on political problems. The *stop or limit* group believes that the State of New York has insufficient capacity to regulate shale gas development and the disposal/treatment of produced water,

degradation of air, nuisances to the public, and contamination of ground and surface water were the most severe potential problems. The *continue or expand* group does not view these issues as potential problems. The *continue or expand* group believes that scare tactics by groups opposing hydraulic fracturing are a relatively severe problem. Both groups view the public distrust of the oil and gas industry as a problem.

Policy actors in the *stop or limit* group generally believe that the *de facto* moratorium has had a positive impact on environmental quality and public health. Conversely, the respondents who support hydraulic fracturing believe the *de facto* moratorium has had a negative impact on economic vitality, trust in government, and political debates.

Objective 3: To identify with whom respondents agree or disagree and with whom they collaborate on shale gas development and high-volume hydraulic fracturing policy.

Respondents in the *stop or limit* group agree most with the position of organized citizen groups and environmental organizations on high-volume hydraulic fracturing related issues, but also agree with local governments, state courts, and local courts. These respondents disagree most with the oil and gas industry, the federal government, and mineral rights groups. The respondents in the *continue or expand* group agree most with the oil and gas industry and mineral rights groups, and disagree most with the Governor's Office, environmental organizations, and the New York State Assembly. Both groups of respondents disagree with the positions of the Governor's Office, the New York Department of Environmental Conservation (DEC), the New York State Senate, and the media, with the most similar responses between the groups being their level of disagreement with the NY DEC and the NY State Senate.

The respondents in the *stop or limit* group are more active in collaborating with other groups than the respondents in the *continue or expand*. Over 75% of respondents from the *stop or limit* group collaborate with organized citizen groups, other environmental groups, academics /consultants, the New York State Assembly, and the media. The most frequent collaborations for the *continue or expand* group are with the oil and gas industry (69%), the NY DEC (67%), and academics /consultants (66%). Relative to other collaboration rates, neither group collaborates often with the Governor's office, the New York Department of Health, or various courts. The groups gave similar responses regarding their rationale for collaborating.

Objective 4: To understand respondents' political activities and resource capacity in relation to shale gas development and high-volume hydraulic fracturing.

Both groups report that forming and building coalitions is their most important activity to reach their policy goals related to hydraulic fracturing in New York. The two groups also view generating and disseminating reports and posting information online as important. The *stop or limit* group believes participating in or organizing public meetings is a more important activity for achieving their policy goals than the *continue or expand* group.

Both groups of respondents report having similar levels of capacity across a range of

resources and both report the highest levels of capacity through their support from other organizations who share their position. While the *continue or expand* group reports slightly higher financial capacity, the *stop or limit* group has higher capacity in terms of public support.

Objective 5: To examine the perceived influence of different actors or venues on politics and policy related to shale gas development and identify which venues respondents target to achieve their goals.

The most influential actors in the politics and policy of shale gas development in New York across all respondents are the Governor's Office, environmental organizations, and organized citizen groups. The *stop or limit* group perceives the oil and gas industry to be relatively influential, but the *continue or expand* group believes the oil and gas industry has limited influence. The two groups both report targeting the media most frequently, relative to other venues or organizations to achieve their political objectives. The *stop or limit* group, however, also targets local government frequently, while the *continue or expand* group targets the Governor's Office more often.

Across the five objectives, the survey findings highlight that the respondents in the *stop or limit* and *continue or expand* groups diverge significantly on their positions and concerns related to this issue, the organizations they collaborate with, and with whom they agree with on the issues. However, these groups have similar perceptions of the policy debate and engage in similar strategies to influence that debate. In terms of policy preferences, the majority of neither group favors the *de facto* moratorium on high-volume hydraulic fracturing. Similarly, neither group agrees with the state policy actors who are making the official decisions regarding the moratorium, namely the Governor's Office, the New York DEC, and the New York State Senate. In terms of who is influential both groups agree the Governor's Office and environmental organizations are the most influential policy actors in New York. There are also some similarities between the groups on the strategies they use in their efforts to shape shale gas development politics and policy in New York State. Both groups see building coalitions and targeting the media as key strategies for influencing the future of shale development in New York. Overall, there are two definite positions in opposition about the issue of shale gas development that utilizes hydraulic fracturing in New York, but there are similarities in how they perceive and engage in the policy debate.

Introduction

This report summarizes a survey administered in the fall of 2013 to individuals who are involved with the politics, policies, and rulemaking concerning shale gas development that utilizes high-volume hydraulic fracturing in New York. The survey was conducted through the School of Public Affairs at the University of Colorado Denver and funded by the Alfred P. Sloan Foundation.

The goal of this report is to provide an understanding of the politics surrounding shale gas development, inclusive of the process of high-volume hydraulic fracturing. We recognize that people relate to this issue from a variety of viewpoints that are impossible to describe entirely in a single report. This summary report provides a description of the opinions and perceptions of a sample of individuals who are actively involved in the policy dialogue and debates on this issue in New York. These individuals come from diverse professional and organizational affiliations including all levels of government, the oil and gas industry, businesses and trade associations, nonprofits, environmental groups, academia, consulting groups, and local citizen organizations.

In surveying this politically active population, we were guided by five objectives.

- Objective 1:** To identify respondents' general positions about shale gas development and high-volume hydraulic fracturing nationally and their preferences for shale gas development in New York.
- Objective 2:** To understand the extent that respondents perceive potential benefits and problems associated with shale gas development and their opinion of New York's *de facto* moratorium on high-volume hydraulic fracturing.
- Objective 3:** To identify with whom respondents agree or disagree and with whom they collaborate on shale gas development and high-volume hydraulic fracturing policy.
- Objective 4:** To understand respondents' political activities and capacity in relation to shale gas development and high-volume hydraulic fracturing.
- Objective 5:** To examine the perceived influence of different actors or venues on politics and policy related to shale gas development and identify which venues respondents target to achieve their goals.

To achieve these five objectives, the survey asked respondents to answer several value-oriented questions. We asked such questions not to push a political agenda or a position about high-volume hydraulic fracturing, but instead to measure the perceptions of the respondents and to identify areas of agreement and disagreement. Our hope is that through soliciting the perceptions of those actively involved in the issue, we might assist people inside and outside of government in understanding the differences in their positions and potentially find shared understandings that may be used to inform the governance of hydraulic fracturing in New York and elsewhere.

This New York survey is part of a larger research project that includes work in Texas and

Colorado. In each state, researchers from the School of Public Affairs at the University of Colorado Denver explore the politics of hydraulic fracturing inclusive of oil and gas development through interviews, surveys, and document analysis.

Brief Overview of Shale Gas Development Politics in New York

New York State is one of four states that overlie the Marcellus Shale formation. The Marcellus Shale formation is one of the largest reserves of natural gas in the U.S. containing an estimated 489 trillion cubic feet. The amount of natural gas it holds in New York is not yet known (NY DEC 2014). In the past, shale gas in the Marcellus Shale was not extracted due to the depth and tightness of the shale rock, which made natural gas exploration and extraction difficult and expensive. However, in the past decade, this has changed due to a multitude of factors including 1) recent developments in the technology of drilling in relation to hydraulic fracturing and horizontal drilling; 2) the proximity of natural gas supplies and infrastructure to markets in New York and the surrounding region; and 3) the increase in price of natural gas as well as its value as a relatively clean burning energy source compared to coal or oil (NY DEC 2014). These factors have all made shale gas development profitable in the Marcellus Shale play.

Regulatory decisions related to oil and gas development are largely made by state governments. Each of the states that overlie the Marcellus Shale (New York, Pennsylvania, Ohio, and West Virginia) has reacted differently to the potential to develop the resources in the shale deposits. For example, in Pennsylvania, state decision makers and regulators have issued permits for wells using high-volume hydraulic fracturing and horizontal drilling and the production from shale gas wells has increased from zero in 2007 to 2,042,632 million cubic feet of natural gas in 2012. In comparison, in New York, the production from shale gas wells remains at zero (U.S. EIA 2014).

The lack of Marcellus Shale development in New York is a result of the state's decision to maintain a *de facto* moratorium on high-volume hydraulic fracturing since 2008. The *de facto* moratorium has been in place while the New York Department of Environmental Conservation (DEC), the agency that regulates and permits oil and gas drilling in the state, conducts a formal review of the environmental impacts of high-volume hydraulic fracturing and develops parameters for a Supplemental Generic Environmental Impact Statement (SGEIS) for oil and gas permits that include high-volume hydraulic fracturing. The DEC released drafts of the SGEIS in 2009 and 2011 for public comment. After each draft of the SGEIS was released, the DEC was forced to reevaluate and reorganize their process due to public and political pressure. Most recently, in the fall of 2012, the DEC was prepared to release a version of the SGEIS when New York Governor Andrew Cuomo ordered that the New York Department of Health also review the potential health impacts of high-volume hydraulic fracturing. This led to the continuation of the review process and the *de facto* moratorium on permits for hydraulic fracturing.

Since 2008, those who oppose high-volume hydraulic fracturing and those who are in favor of using it to extract shale gas in New York have engaged in highly visible and

contentious political debates. Those in the debates often discuss whether the state should formally ban high-volume hydraulic fracturing or whether it should permit the practice, and, if it is to be permitted, how high-volume hydraulic fracturing should be regulated and the areas of the state where it would be permitted. Those who are in favor of a ban have formed a coalition including hundreds of environmental and local grassroots organizations. As the state government continues to wait for the DEC to complete its review before acting, the coalition opposing high-volume hydraulic fracturing is targeting local governments to influence policy outcomes. Those in opposition successfully advocated for the ban of the practice in 73 municipalities and are advocating for a ban in 87 other municipalities in New York (FracTracker 2014).

Despite the intensity of the politics of this issue in New York, there has been little systematic research on the perceptions of individuals active in high-volume hydraulic fracturing politics and its governance in New York. As a result, many unexplored questions remain. What are the areas of disagreement and agreement with respect to potential costs and benefits between those involved in the high-volume hydraulic fracturing debates? Are there costs or benefits resulting from the moratorium on high-volume hydraulic fracturing? How are actors in the policy debates interacting? Who are the influential actors in the debates? While a single report cannot offer unqualified answers to these questions, our hope is to provide insight into the different sides and positions on this issue.

Survey Methodology and Demographic Characteristics of Respondents

The content of the questions and answer categories was informed by interviews with 15 policy actors representing various organizations and positions on high-volume hydraulic fracturing in New York. The survey consisted of 16 sections of substantive questions. A copy of the survey is available in the Appendix.

Survey respondents were identified through multiple sources, including the attendees of state and local public hearings; attendees and presenters at academic, government, environmental, and industry sponsored conferences and meetings; organizers of public protests; and news media and online media covering events related to hydraulic fracturing and oil and natural gas development in New York. In total, the survey was emailed to 379 individuals and was completed by 129 people, resulting in a response rate of 34%.¹ Table 1 provides a summary of the demographic information for respondents.

¹ Out of the total sample surveyed per organizational affiliation type, the response rates are the following: academics (33%), environmental and conservation groups (36%), federal government (34%), industry and professional associations (38%), local government (38%), news media (0%), oil and gas service providers and operators (37%), organized citizen groups (53%), other (50%), regional government (33%), and state government (27%). Across the different types of organizations surveyed we received at least a 30% response rate from all except for media and state government. In the case of the media we received no responses and claim no representation of their viewpoints on this issue.

Table 1. Demographic Summary Information for Respondents

	Summary Responses
Highest level of formal education	
High school	2%
Some college	12%
Bachelor's degree	31%
Master's or professional degree	38%
Ph.D. or M.D.	17%
Age distribution	
18 to 29	3%
30 to 39	7%
40 to 49	15%
50 to 59	32%
60 or older	42%
Percent male and female	
Male	64%
Female	36%
Organizational affiliation	
Local Government	22%
State Government	3%
Federal Government	1%
Oil and Gas Service Providers and Operators	26%
Mineral Rights Organizations	5%
Environmental and Conservation Organizations	12%
Organized Citizen Groups	16%
Academics and Consultants	11%
Other ²	5%
Years involved in hydraulic fracturing issues	
0 to 1 years	2%
2 to 4 years	35%
5 to 9 years	49%
10 to 20 years	5%
21 or more years	10%
Hours spent per week on hydraulic fracturing issues	
9 hours or less	51%
10 to 20 hours	24%
21 to 30 hours	15%
31 to 40 hours	4%
41 or more hours	7%

² "Other" includes respondents who are anonymous or those from organizations that do not fit into existing categories (such as Business Council of New York State, Inc. or Breast Cancer Coalition of Rochester).

Objective 1: To identify respondents' general positions about shale gas development and high-volume hydraulic fracturing nationally and their preferences for shale gas development in New York.

We asked respondents whether their current position is most closely aligned with the belief that shale gas development that uses high-volume hydraulic fracturing in the United States should be *stopped, limited, continued at its current rate, expanded moderately, or expanded extensively*. The results are shown below in Figure 1. Over half of the respondents prefer to either stop or limit development, with over 30% preferring to expand development. Only 10.5% of respondents support continuing development at its current rate.³

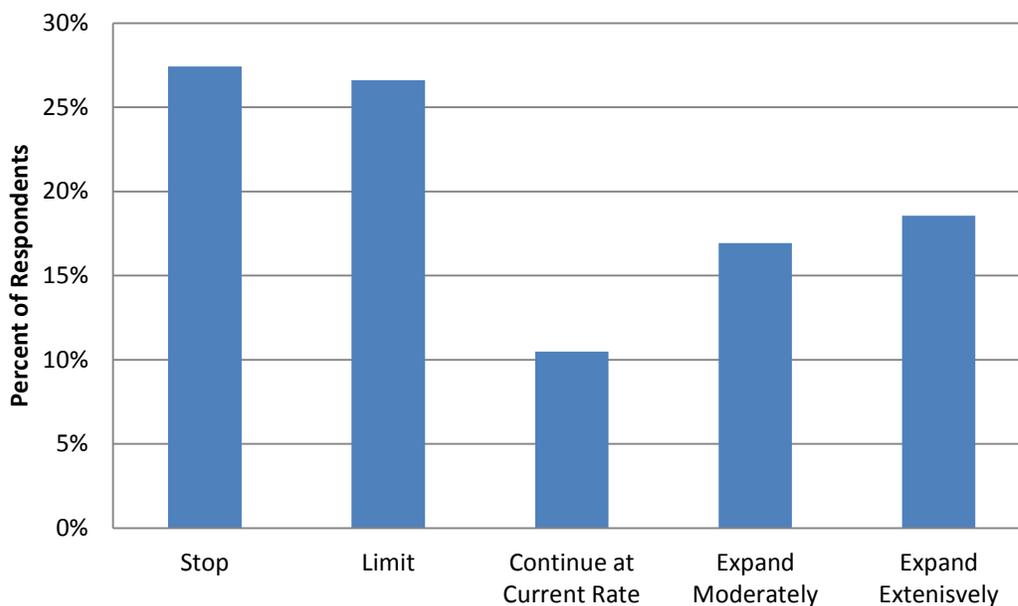


Figure 1. General positions regarding shale gas development that uses hydraulic fracturing in the United States (n = 124)⁴

Respondents were also asked about their position on shale gas development policy preferences for the State of New York. As shown in Figure 2, about 50% prefer to ban hydraulic fracturing or continue the *de facto* moratorium, while over 25% would prefer to permit statewide drilling and a smaller percentage would like to permit it in some regions or on an experimental scale. A small percentage is in favor of the current rate of shale gas development in the U.S. and the current *de facto* moratorium ($\approx 14\%$) in New York. The patterns in policy preferences at the state level follow similar patterns to those identified at the national level.

³ The mean was calculated by assigning numerical values to responses (1 indicates a belief that development should be stopped and 5 indicates a response that development should be expanded extensively). The mean response among respondents was 2.62.

⁴ Please note that not everyone who completed the survey responded to all of the questions. Therefore, while 129 individuals responded to the survey there is variation in the total responses for each question.

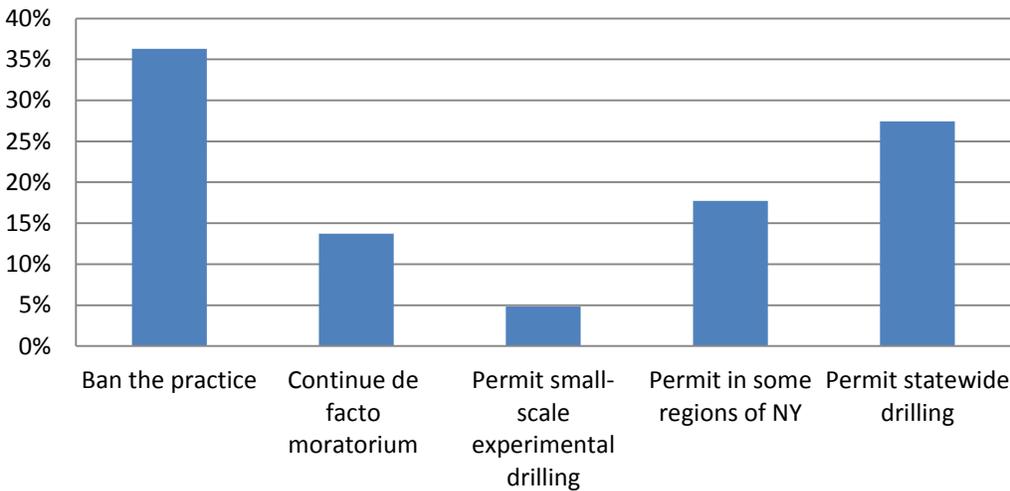


Figure 2. Policy positions regarding shale gas development that uses hydraulic fracturing in New York (n = 124)

We used the national position on shale gas development shown in Figure 1 to categorize respondents in reporting the results for other survey items by dividing respondents into two position groups: a *stop or limit* group (n = 67) and a *continue or expand* group (n = 57). Both position groups include respondents representing various organizational affiliations. Figure 3 shows the distributions of these organizational affiliations among each position group. Academics and consultants as well as members of the state government are distributed fairly evenly between the position groups. Oil and gas service providers and operators and industry and professional associations make up a majority of the *continue or expand* group (55%). Local government, mineral rights groups, and academics/consultants each constitute about 12% of this group. All respondents from environmental organizations and organized citizen groups believe that development should be stopped or limited, and they combined comprise 49% of the *stop or limit* group. Local government comprises 33% of the *stop or limit* group, followed by a smaller percentage of academics/consultants.

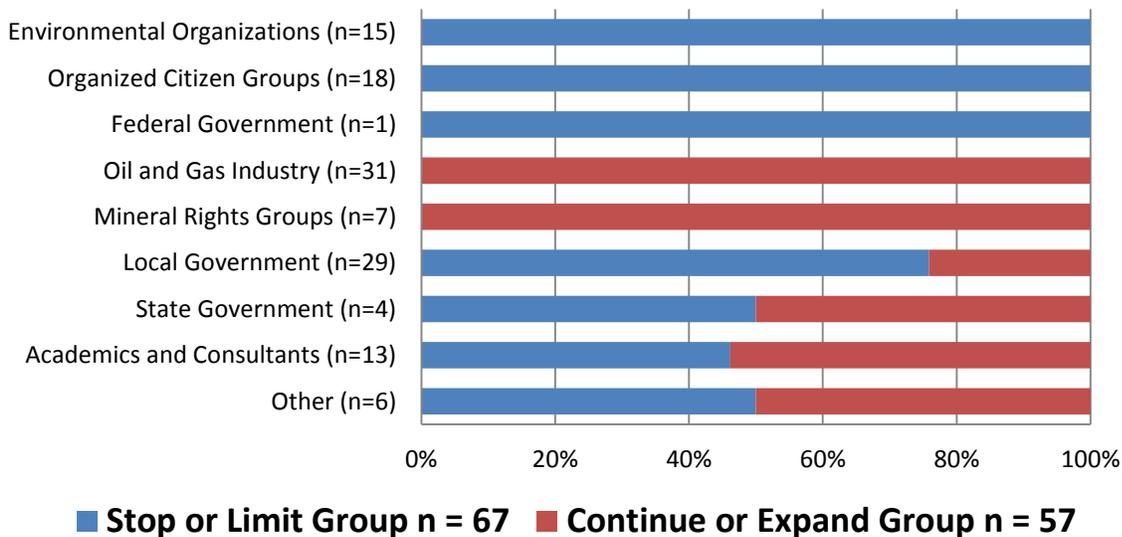


Figure 3. Organizational affiliations by position group

Objective 2: To understand the extent that respondents perceive potential benefits and problems associated with shale gas development and their opinion of New York’s *de facto* moratorium on high-volume hydraulic fracturing.

Potential Benefits of Shale Gas Development in New York

To understand whether respondents perceive any potential benefits from shale gas development, we asked them to identify the extent to which they agree on a scale of 1 to 5 (1 = strongly disagree; 5 = strongly agree) with five different potential benefits. The results in Table 2 show that the *continue or expand* group agrees or strongly agrees with all five benefits. The highest ranking categories on this question are benefits to local landowners and growth to the state economy. Members of the *continue or expand* group also agree that energy independence, serving as a bridge fuel, and mitigation of climate change are potential benefits of shale gas development. The *stop or limit* group generally do not agree that these are potential benefits from shale gas development in New York. The mean scores between the two groups are significantly different across all potential benefits.

Table 2. Mean perceptions about the extent of potential benefits related to shale gas development that uses hydraulic fracturing by position groups

	Stop or Limit Group, n = 67	Continue or Expand Group, n = 57	Absolute Difference in Perception
Benefits local landowners in New York	2.4	4.8	2.4
Grows the state economy through jobs and tax revenue in New York	2.2	4.8	2.6
Leads to national energy independence	2.1	4.6	2.5
Serves as a bridge fuel to renewable energy sources	1.9	4.5	2.6
Mitigates climate change	1.8	4.1	2.4
Average perception of potential benefits	2.1	4.6	2.5

1 = Strongly Disagree, 3 = Neither Agree nor Disagree, 5 = Strongly Agree. Statistically significant differences between the two position groups are highlighted in bold.

Potential Problems Related to Shale Gas Development in New York

To understand the problem perceptions of different policy actors in New York, survey respondents were asked to evaluate a list of issues commonly associated with shale gas development that uses high-volume hydraulic fracturing. Most of the issues included in these survey questions were previously identified during interviews. The range of response categories included whether respondents believe each issue is *not a problem*, *a minor problem*, *a moderate problem*, *a serious problem*, or *a severe problem*. We assigned values for the response categories on a five-point scale (1 = *not a problem*; 5 = *a severe problem*). We categorized the problems as related to either pollution and environmental degradation or politics. The results are shown in Table 3.

Table 3. Mean perceptions about the level of severity of potential problems related to shale gas development that uses hydraulic fracturing by position groups

	Stop or Limit Group, n = 67	Continue or Expand Group, n = 57	Absolute Difference in Perception
Pollution or Environmental Problems Mean	4.5	1.9	2.6
Disposing or treating produced water	4.7	2.0	2.7
Degradation of air quality from flares, diesel exhaust, and dust from well site operations	4.6	1.7	2.9
Contamination of ground and surface water supplies from the injection of hydraulic fracturing fluids	4.4	1.4	3.0
Nuisance to the general public caused by truck traffic, noise, and light from well site operations	4.4	2.3	2.1
Political Problems Mean	3.8	2.9	0.9
Insufficient capacity by state agencies for regulation	4.7	1.9	2.8
Conflict between landowners and their neighbors	4.1	2.4	1.7
Public distrust of the oil and gas industry	4.0	2.9	1.1
Competition over available water supplies	3.7	1.6	2.1
Scare tactics and demonizing of hydraulic fracturing by those who oppose the practice	2.5	4.3	1.8

1 = Not a problem, 3 = Moderate problem, 5 = Severe problem.

Statistically significant differences between the two position groups are highlighted in bold.

The *stop or limit* group generally perceives the issues related to pollution and environmental degradation as more severe than political issues. This group believes the most severe environmental / pollution problems are those associated with disposing or treating of produced water and degradation of air quality from site operations. The most serious political problem related to shale gas development identified by the *stop or limit* group is the insufficient capacity by state agencies for regulation. The only issue that the *stop or limit* group does not perceive to be a notable problem involves scare tactics or demonizing by opponents of hydraulic fracturing. Conversely, this is the only issue that the *continue or expand* group views as relatively serious.

As shown in Table 3, the differences in problem perceptions of all issues between the *stop or limit* and *continue or expand* groups are statistically significant. The *stop or limit* and the *continue or expand* groups generally diverge more on their perceptions of issues related to pollution or environmental problems than on political problems. The issues of degradation of air quality from development related processes and contamination of ground and surface water from the injection of hydraulic fracturing fluids have the largest disagreement in problem perception between the two groups (3 point difference on the 5 point scale). The *stop or limit* group see these two issues as severe or serious problems while the *continue or expand* group sees them as not a problem or a minor problem. The two groups are closest in their ranking of the public distrust of the oil and gas industry as a potential problem. The *stop or limit* group perceives this issue as a serious problem and the *continue or expand* group perceives the issue of public distrust of the oil and gas industry as a moderate problem.

Respondents were also asked to rank whether they believe New York’s *de facto* moratorium on high-volume hydraulic fracturing has resulted in negative or positive impacts on five different issues, shown in Table 4 below (positive impact scored as a +1, no impact as a 0, and negative impact as a -1). The *stop or limit* group believes the *de facto* moratorium has had a positive or neutral impact on all five issues, with the most positive impact on environmental quality and public health. The *continue or expand* group believes the *de facto* moratorium has had a negative impact, ranking the effects on economic vitality, trust in government, and political debates as the most negative.

Table 4. Mean perceptions of the impact of the *de facto* moratorium by position group

	Stop or Limit Group n = 67	Continue or Expand Group n = 57	Absolute difference in perception
Environmental quality	0.8	-0.3	1.1
Public health	0.7	-0.1	0.8
Political debates	0.4	-0.8	1.2
Trust in government	0.2	-0.8	1.0
Economic vitality	0.2	-0.9	1.1

-1 = Negative Impact, 0 = No Impact, 1 = Positive Impact.
 Statistically significant differences between the two position groups are highlighted in bold.

Objective 3: To identify with whom respondents agree or disagree and with whom they collaborate on shale gas development and high-volume hydraulic fracturing policy.

Agreement with Other Organizations' Positions on Shale Gas Development

Respondents were asked the extent to which they agree with a list of 15 organizations or groups involved in shale gas development issues in New York State, on a 5-point scale (-2 = strongly disagree; 0 = neither agree nor disagree; +2 = strongly agree). Table 5 summarizes the responses from the *stop or limit* and *continue or expand* groups. In looking at the mean level of agreement with each of the 15 organizations, we find statistically significant differences between the two position groups.

The *stop or limit* group agrees most strongly with environmental organizations, organized citizen groups, and local government, and disagrees most strongly with the oil and gas industry, the federal government, and mineral rights groups. The *continue or expand* group agrees most strongly with the oil and gas industry and mineral rights groups, and disagrees most strongly with environmental organizations, the Governor's Office, and the New York State Assembly. Both groups generally disagree with the media and key policymaking bodies, including the New York DEC, the New York State Senate, and the Governor's Office.

Table 5. Mean level of agreement with the following organizations' positions by position group

	Stop or Limit Group n = 67	Continue or Expand Group n = 57	Absolute Difference in Agreement
Organized Citizen Groups	1.0	-0.8	1.8
Environmental Organizations	1.0	-1.5	2.5
Local Government	0.8	-0.5	1.3
New York State Courts	0.6	-0.7	1.3
Local Courts	0.6	-0.6	1.2
New York State Assembly	0.5	-1.2	1.7
New York Department of Health	0.0	-0.7	0.7
Mineral Rights Groups	-1.0	1.0	2.0
Federal Government	-1.2	0.4	1.6
Oil and Gas Industry	-1.7	1.1	2.8
Media	-0.2	-1.0	0.8
Governor's Office	-0.3	-1.5	1.2
New York DEC	-0.7	-0.4	0.3
New York State Senate	-0.7	-0.4	0.3

-2 = Strongly Disagree, 0 = Neither Agree nor Disagree, 2 = Strongly Agree. Statistically significant differences between the two position groups are highlighted in bold.

Collaboration

The survey included a roster of organizational affiliations for respondents to indicate the types of organizations they collaborate with to achieve their goals related to shale gas development and high-volume hydraulic fracturing in New York. Respondents could check zero or all of the organizational affiliations with whom they collaborate. The results, divided by respondent position group, are shown in Figure 4. Figure 4 shows the percent that the *stop or limit* and the *continue or expand* groups collaborate with each organization on at least monthly, annually, or never. Figure 4 is sorted by the most to least frequent collaborations for the *stop or limit* position group.

The survey responses indicate that both position groups collaborate most frequently with other organizations that share their position; that is, the *stop or limit* group collaborates most often with organized citizen groups and environmental organizations, while the *continue or expand* group collaborates most often with the oil and gas industry. Both position groups report relatively little collaboration with local courts, state courts, the federal government, and the New York Department of Health. Similarly, both position groups frequently collaborate with academics and consultants, the media, local governments, and the New York DEC. Outside of these organizations, the *stop or limit* group collaborate frequently with New York State Senate and the *continue or expand* group frequently collaborate with mineral rights groups.

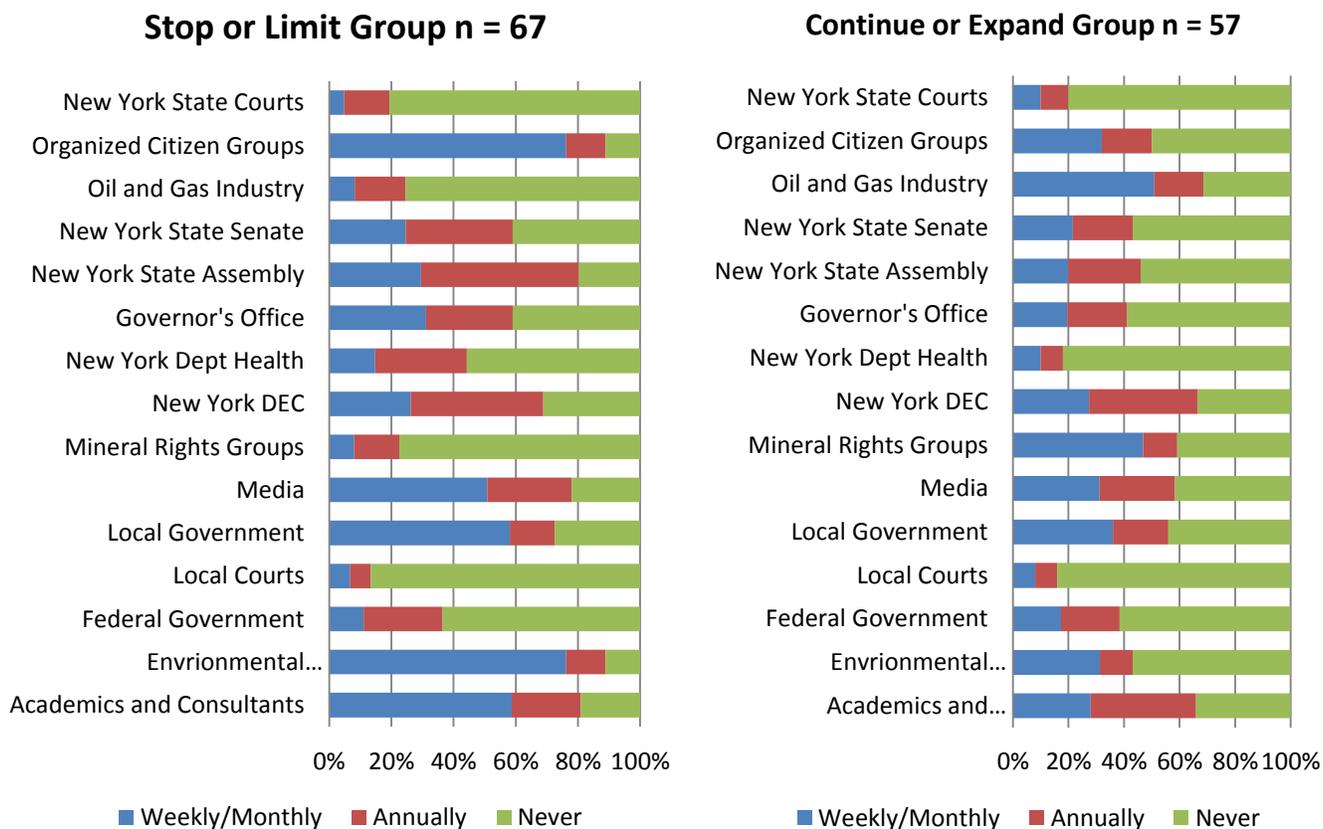


Figure 4. *Stop or limit* and *continue or expand* group collaboration frequencies

Respondents were then asked to describe the factors that are important to them when choosing an organization to collaborate with on issues related to shale gas development and hydraulic fracturing. We asked respondents to rate each factor on a five-point scale (1 = *not important*; 5 = *extremely important*). The mean scores per reason by the two position groups are shown in Table 7. The factors that are significantly different between position groups are in bold.

Respondents indicated that the most important factor in deciding with whom to collaborate is the professional competence of the collaborating party and the least important factor is financial resources. Professional competence is a significantly higher determinant of collaboration for the *continue or expand* group. Both groups identify trust in their collaborative partners and having a shared position with their partners as equally important reasons for collaboration.

Table 7. Mean reported reasons for collaboration by position groups

	Stop or Limit Group n = 67	Continue or Expand Group n = 57
1. They are professionally competent.	4.1	4.5
2. I trust them to keep their promises.	4.1	4.1
3. They share my position on major issues.	3.6	3.6
4. They have political influence.	3.0	3.2
5. They have access to human resources.	3.1	2.7
6. I have worked with them in the past.	2.8	2.9
7. They have access to financial resources.	2.3	2.6

1 = Not Important, 3 = Modetarely Important, 5 = Extemely Important.

Statistically significant differences between the two position groups are highlighted in bold.

Objective 4: To understand respondents' political activities and capacity in relation to shale gas development and high-volume hydraulic fracturing

The survey investigated the extent to which respondents perceive 10 specific political activities as important in achieving their organizational objectives related to shale gas development that uses high-volume hydraulic fracturing. We asked respondents to rate the importance of political activities on a three-point scale (1 = *not important*; 2 = *somewhat important*; 3 = *extremely important*). We compared the average score and the rank of each activity across the position groups to identify differences or similarities among their activities. Table 8 shows the average importance score for each position group and is ordered by the *stop or limit* group's most to least important activity.

As shown in Table 8, respondents from both the *stop or limit* and *continue or expand* groups report that the following activities are extremely important (mean score equal to or greater than a 2.5 and in the top 4 activities out of 10 for both groups): forming and maintaining a coalition with allies, posting information or advocating online, and generating and disseminating research and reports. Similarly, both groups report lawsuits and protests as less important activities with average scores between 1.79 and 2.46.

The most notable differences between the two position groups' activities are 1) participating in or organizing public meetings and 2) testifying at legislative or agency hearings. The *stop or limit* group sees participating in or organizing public meetings as its second most important activity with an average score of 2.81. Conversely, participating in or organizing public meetings is only somewhat important (mean score of 2.43) and ranked 7th out of 10 for the *continue or expand* group. The *stop or limit* group respondents also report testifying at legislative or agency hearings as important (2.68), and ranked 5th out of 10, compared to the *continue or expand* group, which sees this as one of its least important activities (mean score 2.4) and ranked 9th out of 10. While both position groups view providing written comments in response to state agency notices as important (2.65 for the *stop or limit* and 2.50 for the *continue or expand* group) this activity is the 3rd most important activity for the *continue or expand* group and 7th most important for the *stop or limit* group.

Overall the *stop or limit* group sees the 10 activities in the survey as more important than the *continue or expand* group in achieving its organizational objectives related to shale gas development that uses high-volume hydraulic fracturing.

Table 8. Importance of activities by position groups

	Stop or Limit Group, n = 67	Continue or Expand Group, n = 57	Absolute Difference in Agreement
Form/Build Coalitions	2.89	2.76	0.13
Participate/Organize Public Meetings	2.81	2.43	0.38
Posting information Online	2.77	2.51	0.26
Generate/Disseminate Reports	2.74	2.62	0.12
Testify at Hearings	2.68	2.40	0.28
Communicate with Media	2.65	2.49	0.16
Provide Written Comments to New York DEC	2.65	2.50	0.15
Participate in Regulatory Negotiations	2.60	2.46	0.14
Take Legal Actions	2.46	2.40	0.06
Organize or Attend Protests	2.41	1.79	0.62
Overall	2.67	2.44	0.23

1 = not important, 2 = somewhat important, 3 = extremely important.

Statistically significant differences between the two position groups are highlighted in bold.

Organizational Capacity

We asked respondents about the capacity of their organizations to use or mobilize nine types of resources for achieving their objectives in relation to shale gas development in New York. Organizational capacities with respect to each of the nine resources were asked on a four-point scale (1 = *no capacity*; 4 = *substantial capacity*).

Table 9 presents the means per capacity item by position group. The items measured for organizational capacity are ranked from the highest to lowest capacity for all respondents. We highlight in bold the resources that are significantly different between the two groups. Although the differences are not large, four resources are significantly different between the position groups. The *stop or limit* group reports relatively higher levels of support from those with similar positions and from the general public, while the *continue or expand* group reports higher levels of financial resources for paying staff and for lobbying.

Table 9. Mean organizational capacity by position group

	Stop or Limit Group n = 67	Continue or Expand Group n = 57
1. Support from those with similar position	3.7	3.4
2. Support from members of the organization	3.2	3.2
3. Support from the general public	3.3	3.1
4. Support from government officials	3.1	2.9
5. Scientific and technical expertise	3.0	3.1
6. Support from the media	2.9	2.8
7. Support from those with a different position	2.5	2.5
8. Financial resources for paying staff	2.2	2.4
9. Financial resources for lobbying	2.1	2.4
Average Capacity	2.9	2.9

1 = No Capacity, 2 = Limited Capacity, 3 = Moderate Capacity, 4 = Substantial Capacity.

Statistically significant differences between the two position groups are highlighted in bold.

Objective 5: To examine the perceived influence of different actors or venues on politics and policy related to shale gas development in New York and identify which venues respondents target to achieve their goals.

Perceived Influence of Actors

To identify which actors or venues are perceived as influential in the politics and policy related to shale gas development in New York, the survey included a question that asked respondents to rank various actors’ levels of influence on a 3-point scale (0 = not influential; 1 = somewhat influential; and 2 = extremely influential). The mean levels of perceived influence are shown in Table 10. Significant differences between the two position groups’ perceptions are highlighted in bold.

Both groups have similar perceptions that the Governor’s Office and environmental organizations are the most influential actors among the 15 included in the list. They also have similar perceptions that the New York DEC and state courts are relatively influential. Although the two position groups also see organized citizen groups, local government, and academics as relatively influential, the *stop or limit* group has a significantly higher perception of the level of influence of these three actor categories. At the same time, the *stop or limit* group views the oil and gas industry as influential, but the *continue or expand* group views the oil and gas industry (or themselves) as significantly less influential.

Table 10. Mean perceptions of organizations’ influence on politics and policy by position group

	Stop or Limit Group n = 67	Continue or Expand Group n = 57	Total n = 124
Governor's Office	1.6	1.7	1.7
Environmental Organizations	1.6	1.7	1.6
Organized Citizen Groups	1.6	1.3	1.5
New York DEC	1.4	1.3	1.3
New York State Courts	1.3	1.3	1.3
Media	1.1	1.5	1.3
Local Government	1.4	1.1	1.2
Academics and Consultants	1.3	1.1	1.2
Oil and Gas Industry	1.4	0.8	1.1
New York State Assembly	1.0	1.2	1.1
New York Department of Health	1.0	1.1	1.1
New York State Senate	0.9	1.0	1.0
Local Courts	1.0	0.9	1.0
Mineral Rights Owners	0.9	0.8	0.9
Federal Government	0.7	0.6	0.7

0 = Not Influential, 1 = Somewhat Influential, 2 = Extremely Influential.

Statistically significant differences between the two position groups are highlighted in bold.

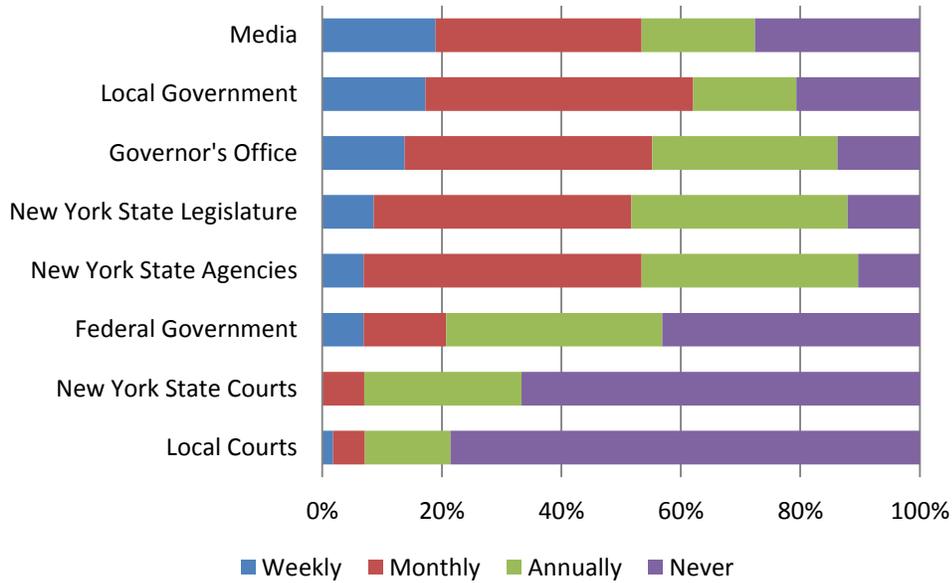
Targeting Venues

Respondents were also asked to identify the frequency at which they target various venues to achieve their goals in relation to shale gas development and hydraulic fracturing. The venues included the media, local government, the governor's office, the state legislature, state agencies, federal government, state courts, and local courts. Possible response categories included weekly, monthly, annually, or never.

As shown in Figure 5, both groups have similar patterns in the groups they target most frequently. For example, among those who reported targeting venues on a weekly basis, the venue targeted most commonly by all respondents is the media. In addition to the media, local governments, the governor's office, the legislature, and state agencies are also targeted at least monthly or weekly by over half of the respondents in the *stop or limit* group. About a third of the respondents in the *continue or expand* group say they target these same groups. In general, we find that the *stop or limit* group appears more active in targeting specific venues than the *continue or expand* group.

A large percentage of respondents in both position groups report that they never target state or local courts. Also, 43% of the *stop or limit* group respondents and 57% of the *continue or expand* group do not target the federal government as a venue. Between 39% and 46% of respondents in the *continue or expand* group report that they do not target the other venues (state agencies, the legislature, local government, the governor's office and media). A noticeably smaller percentage of the respondents in the *stop or limit* group report never targeting these other venues (between 10% and 28%).

Stop or Limit Group n = 67



Continue or Expand Group n = 57

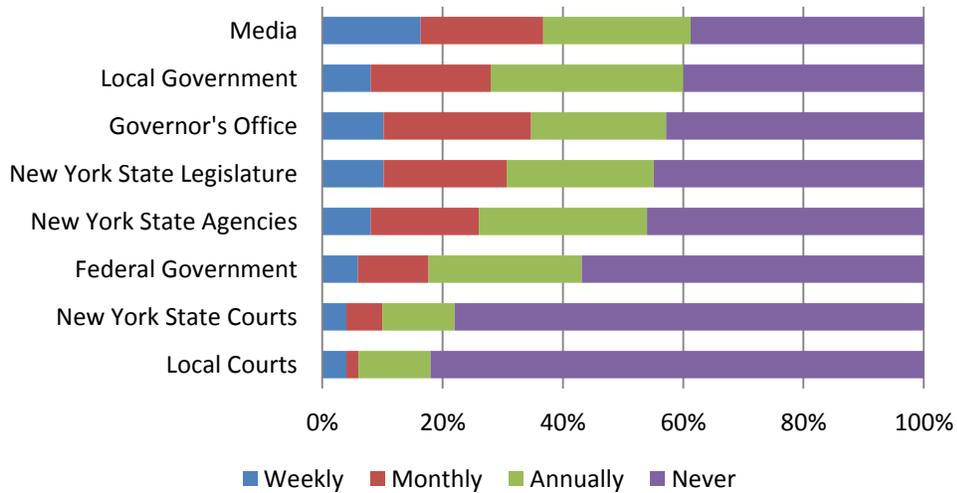


Figure 5. Frequency organizations are targeted to achieve political and policy goals by position group.

Conclusions

This report presents results of a 2013 survey administered to people directly or indirectly involved in the politics of shale gas development that utilizes high-volume hydraulic fracturing in New York. This report focuses on five objectives related to the beliefs and strategies of policy actors in relation to this issue. The findings in relation to each objective are summarized below.

Objective 1: To identify respondents' general positions about shale gas development and high-volume hydraulic fracturing nationally and their preferences for shale gas development in New York. The findings show that respondents can be grouped according to their position about whether hydraulic fracturing nationally should be stopped or limited (54%) or continued or expanded (46%). All environmental and organized citizen groups are members of the *stop or limit* group. In contrast, the oil and gas industry comprise the majority of respondents in the *continue or expand* group. Local and state government respondents and academics / consultants favor a range of positions. Respondents' preferences for shale gas development in New York are similar to their national preferences, with 50% preferring to either ban it or continue New York's *de facto* moratorium, and 45% preferring to permit it in some regions or statewide. A small number (5%) prefer to permit it on an experimental basis.

Objective 2: To understand the extent that respondents perceive potential benefits and problems associated with shale gas development and their opinion of New York's *de facto* moratorium on high-volume hydraulic fracturing. On average, the *continue or expand* group strongly agree that shale gas development has potential benefits for local landowners, can grow the New York economy, may lead to energy independence, can serve as a bridge fuel to renewable energy and may mitigate climate change. The *stop or limit* group tend to disagree with all of these potential benefits. In terms of problems, the *stop or limit* group perceive the following issues as potential problems: insufficient capacity by the State of New York to regulate shale gas development and the disposal or treatment of produced water, degradation of air, nuisances to the public, and contamination of ground and surface water were the most severe. The *expand group* perceive that scare tactics by groups opposing hydraulic fracturing are a relatively severe problem, and public distrust of the oil and gas industry as a moderate problem. Respondents belonging to the *stop or limit* group believe that the *de facto* moratorium has had the most positive impact on environmental quality and public health. Conversely, the respondents belonging to the *continue or expand* group believe the *de facto* moratorium has had a negative impact on economic vitality, trust in government and political debates.

Objective 3: To identify with whom respondents agree or disagree and with whom they collaborate on shale gas development and hydraulic fracturing policy. A large majority (over 75%) of respondents from the *stop or limit* group collaborates with organized citizen groups, environmental organizations, academics / consultants, the New York State Assembly and the media. A smaller percentage of respondents from

the *stop or limit* group collaborate with other types of organizations. Overall, the *continue or expand* group collaborates with various organizations less frequently than the *stop or limit* group. With whom the *continue or expand* group collaborate most frequently is the oil and gas industry (69%), the New York DEC (67%) and academics / consultants (66%). The *stop or limit* group agrees most with the policies of organized citizen groups and environmental organizations, but also with local governments, state courts and local courts. These respondents disagree most with the oil and gas industry, the federal government and mineral rights groups. Conversely, the *continue or expand* group agrees most with the oil and gas industry and mineral rights groups, and disagrees most with the Governor's Office, environmental organizations, and the New York State Assembly.

Objective 4: To understand respondents' political activities and capacity in relation to shale gas development and hydraulic fracturing. The most important activities for the *stop or limit* group are attending public meetings and building and maintaining coalitions. The *continue or expand* group views generating and disseminating reports and forming / building coalitions as most important. Both groups of respondents report having similar levels of capacity in terms of resources and both report the highest levels of capacity are support from other organizations who share their position. While the *continue or expand* group has slightly higher financial capacity, the *stop or limit* group has higher capacity in terms of public support.

Objective 5: To examine the perceived influence of different actors or venues on politics and policy related to shale gas development and identify which venues respondents' target to achieve their goals. The most influential actors in the politics and policy of shale gas development in New York across all respondents were the Governor's Office, environmental organizations and organized citizen groups. The *stop or limit* group perceive the oil and gas industry to be relatively influential, but the *continue or expand* group believe the oil and gas industry has limited influence. The two groups both report targeting the media most frequently as a venue, relative to other venues or groups to achieve their political objectives. The *stop or limit* group, however, also targets local governments frequently, while the *continue or expand* group targets the Governor's Office more often.

Across the five objectives, the survey findings highlight that the members of the two groups of policy actors diverge significantly on their positions and concerns in relation to shale gas development, their perceptions of New York's *de facto* moratorium, the organizations they collaborate with, and who they agree with on the issues. There are some similarities between the groups on the strategies used to shape shale gas politics and policy, and for whom they perceive to be relatively influential on this issue in New York State.

The issue of shale gas development that utilizes high-volume hydraulic fracturing in New York is a controversial issue. According to a February 2014 survey of the general public in New York by Quinnipiac University, 41% are in favor of shale gas development while 45% oppose the practice with 14% not having a position. In Upstate New York, where the practice would be

most prevalent, 46% support the practice while 45% oppose it with 9% not having a position (Quinnipiac University 2014). The results of the Quinnipiac University of the general public resemble the results of positions identified by the policy actors who were surveyed in our study. While the two opposing position groups identified in this report do not have a similar perception of shale gas development, they perceive and engage in the political debate about this issue in a similar way. For example, both perceive the Governor's Office and environmental organizations as being extremely influential in this policy debate, and both disagree with the position taken by the New York DEC and the New York State Senate on this issue. In terms of strategy, both groups perceive a range of activities as being extremely important including: forming and building a coalition, posting information online, generating and disseminating reports, communicating with the media, providing written comments to the New York DEC, and participating in regulatory negotiations.

The goal of this study is to help clarify the underlying concerns, preferences, and resources of a diverse range of people in New York involved in the debates, discussions and policy dialogue surrounding shale gas development that utilizes hydraulic fracturing. This survey offers only a partial representation of the politics at a specific point in time and it does not apply to the preferences and opinions of all citizens in New York. Despite these limitations, we hope to offer interested individuals and organizations a better understanding of one of the most politically contentious environmental issues today in New York and nationally.

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Appendix. Survey Questions

1. Please indicate to what extent you perceive the following issues as potential problems if shale gas development that uses high-volume hydraulic fracturing were allowed in New York.

	Not a Problem	Minor Problem	Moderate Problem	Serious Problem	Severe Problem
Insufficient capacity by state agencies for regulation	<input type="radio"/>				
Conflict between landowners and their neighbors	<input type="radio"/>				
Contamination of ground and surface water supplies from the injection of hydraulic fracturing fluids	<input type="radio"/>				
Public distrust of the oil and gas industry	<input type="radio"/>				
Degradation of air quality from flares, diesel exhaust, and dust from well site operations	<input type="radio"/>				
Nuisance to the general public caused by truck traffic, noise, and light from well site operations	<input type="radio"/>				
Scare tactics and demonizing of hydraulic fracturing by those who oppose the practice	<input type="radio"/>				
Competition over available water supplies	<input type="radio"/>				
Disposing or treating produced water	<input type="radio"/>				

2. Please indicate to what extent you perceive the following issues to be potential benefits if shale gas development that uses high-volume hydraulic fracturing were allowed in New York.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
Mitigates climate change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benefits local landowners in New York	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leads to national energy independence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grows the state economy through jobs and tax revenue in New York	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serves as a bridge fuel to renewable energy sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. For New York, please indicate what comes closest to your current position in relation to shale gas development that uses high-volume hydraulic fracturing. The New York State Government should...

- Ban the practice of hydraulic fracturing.
- Continue the de facto moratorium until all of the potential risks can be studied and mitigated.
- Permit hydraulic fracturing on a small-scale experimental basis to better understand the risks and benefits.
- Permit the practice of hydraulic fracturing in some regions of New York.
- Allow hydraulic fracturing to the extent that the market allows.

4. For the United States, please indicate what comes closest to your current position in relation to shale gas development that uses hydraulic fracturing. It should be...

- Stopped
- Limited
- Continued at Current Rate
- Expanded Moderately
- Expanded Extensively

5. What has been the impact of the de facto moratorium on the following issues in New York?

	Negative Impact	No Impact	Positive Impact
Environmental Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Vitality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Political Debates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trust in Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. When you first became aware of shale gas development that uses high-volume hydraulic fracturing, what was your position on the following issues?

	Strongly Disagreed	Disagreed	Neither Disagreed nor Agreed	Agreed	Strongly Agreed
The potential economic benefits are significant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The potential public health risks are severe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The potential environmental risks are severe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local governments should be able to ban the practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Today, what is your current position on the following issues?

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
The potential economic benefits are significant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The potential public health risks are severe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The potential environmental risks are severe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local governments should be able to ban the practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. To what extent do you currently disagree or agree with the following organizations' positions on shale gas development that uses high-volume hydraulic fracturing in New York?

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Federal Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Department of Environmental Conservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Department of Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Governor's Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Assembly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Senate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oil and Gas Industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organized Citizen Groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mineral Rights Owners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Since 2008, how influential has your organization been in politics and policy about shale gas development that uses high-volume hydraulic fracturing in New York?

- Not Influential
- Somewhat Influential
- Extremely Influential

10. Since 2008, how influential have the following organizations been in politics and policy about shale gas development that uses high-volume hydraulic fracturing in New York?

	Not Influential	Somewhat Influential	Extremely Influential
Federal Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Department of Environmental Conservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Department of Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Governor's Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Assembly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Senate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oil and Gas Industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organized Citizen Groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mineral Rights Owners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics and Consultants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Since 2008, please indicate how frequently you collaborate with the following organizations to achieve your political and policy goals related to shale gas development that uses high-volume hydraulic fracturing in New York.

	Weekly	Monthly	Yearly	Never
Federal Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Department of Environmental Conservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Department of Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Governor's Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Assembly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Senate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oil and Gas Industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organized Citizen Groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mineral Rights Owners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics and Consultants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please indicate how frequently you target the following organizations to achieve your political and policy goals related to shale gas development that uses hydraulic fracturing in New York.

	Weekly	Monthly	Yearly	Never
Federal Government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY Governor's Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NY State Legislature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Governments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Courts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Please indicate how important the following activities are for achieving your organizational political and policy goals related to shale gas development that uses high-volume hydraulic fracturing in New York.

	Not Important	Somewhat Important	Extremely Important	Not Applicable
Forming and maintaining a coalition with allies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Posting information online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating with the news media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generating and disseminating research and reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing written comments in response to State agency notices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in or organizing public meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Testifying at legislative or agency hearings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in regulatory negotiations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking legal action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizing or participating in public protests or rallies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. To what extent does your organization have the capacity to use or mobilize the following resources to achieve its objectives in relation to shale gas development that uses hydraulic fracturing in New York?

	No Capacity	Limited Capacity	Moderate Capacity	Substantial Capacity	Not Applicable
Financial resources for lobbying	<input type="radio"/>				
Financial resources for paying staff	<input type="radio"/>				
Support from members of the organization	<input type="radio"/>				
Support from members of the general public	<input type="radio"/>				
Support from government officials	<input type="radio"/>				
Scientific and technical expertise	<input type="radio"/>				
Support from people with a different position on hydraulic fracturing	<input type="radio"/>				
Support from people with a similar position on hydraulic fracturing	<input type="radio"/>				
Support from the media	<input type="radio"/>				
Other	<input type="radio"/>				

15. In general, what factors are important in choosing the organization(s) you collaborate with on issues related to shale gas development that uses high-volume hydraulic fracturing?

	Not Important	Somewhat Important	Moderately Important	Very Important	Extremely Important
They share my position about major issues.	<input type="radio"/>				
I trust them to keep their promises.	<input type="radio"/>				
They are professionally competent.	<input type="radio"/>				
I have worked with them in the past.	<input type="radio"/>				
They have access to financial resources.	<input type="radio"/>				
They have political influence.	<input type="radio"/>				
They have access to human resources.	<input type="radio"/>				

16. The following statements reflect general attitudes. Please indicate whether you agree or disagree with each statement.

	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
Government should put limits on the choices individuals can make so they do not get in the way of what is good for society.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The government should do more to advance society's goals, even if that means limiting the freedom and choices of individuals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes government needs to make laws that keep people from hurting themselves.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is not the government's business to try to protect people from themselves.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The government should stop telling people how to live their lives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The government interferes far too much in our everyday lives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We need to dramatically reduce inequalities between the rich and the poor, as well as between men and women.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our society would be better off if the distribution of wealth was more equal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is not enough to provide equal opportunities; we also have to try to make outcomes more equal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Please indicate if you are

- Male
- Female

18. Please indicate your age.

- 18-29
- 30-39
- 40-49
- 50-59
- 60 or older

19. Please indicate the highest level of education you have attained:

- Not a High School Graduate
- High School Graduate
- Some College
- Bachelor's Degree
- Master's or Professional Degree
- Ph.D. or M.D.

20. How many years have you been involved in issues related to shale gas development that uses high-volume hydraulic fracturing?

- 0-1 years
- 2-4 years
- 5-9 years
- 10-20 years
- 21 or more years

21. On average, how many hours per week do you spend on issues related to shale gas development that uses high-volume hydraulic fracturing?

- Less than 9 hours
- 10-20 hours
- 21-30 hours
- 31-40 hours
- More than 40 hours

22. If you have any additional thoughts, considerations, or opinions you would like to share with us about shale gas development that uses high-volume hydraulic fracturing, please provide them below.

23. Do you want a copy of the final report?

- Yes
- No