

"FRACKING" AND CLEAN WATER:

A SURVEY OF NEW YORK STATE/ NEW YORK CITY RESIDENTS

December 21, 2010

Methodology

The survey was conducted November 26-30, 2010 among a sample of 838 adults comprising 402 men and 436 women, 18 years of age and older living in the state of New York.

- Completed interviews are weighted by three variables: age, gender and race to ensure reliable and accurate representation of the total population, 18 years of age and older.
- The margin of error for results based on the total sample is plus or minus 3 percentage points.

Executive Summary

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A survey conducted November 26-30, 2010 of 838 New York State residents shows that the issue of hydraulic fracturing (known as "fracking") is already a major concern as it relates to drinking water safety, though awareness in New York City trails the rest of the state. At the same time concerns about fracking in terms of a possible danger to drinking water is higher than the national levels among New York State and New York City residents who are already aware of the issue. Key survey highlights include the following:

• More than three out of five New York State residents (62 percent) had at least some awareness of fracking as an issue, including half who were "very aware" (22 percent) and "somewhat aware" (28 percent), with fewer than two in five state residents (37 percent) say they "not aware at all" about fracking concerns. Interestingly, over half (53 percent) of New York City residents are unaware of fracking as an issue, with only 38 percent who are "very aware" (16 percent) or "somewhat aware" (22 percent).

- While most New York State residents (and fewer New York City residents) are at least somewhat aware of "fracking," a smaller number are aware that "concerns have been expressed that the natural gas drilling process known as 'fracking' could lead to water contamination of the Catskill/Delaware River watershed that provides drinking water for New York City." Only about two out of five state residents were "very aware" (15 percent) or "somewhat aware" (26 percent) of the possible threat to New York City's drinking water, compared to 41 percent who were "not aware at all." Closer to half (46 percent) of New York City residents were "not aware at all," compared to 38 percent who are aware, including "very aware" (14 percent) and "somewhat aware" (24 percent.)
- Nearly nine out of 10 New York State residents (88 percent) who are very/somewhat aware that fracking could have an impact on a main source of drinking water for New York City are "very concerned" (54 percent) or "somewhat concerned" (34 percent) "about the potential for New York City drinking water sources to be compromised by the natural gas drilling process known as 'fracking'." An even stronger 93 percent of New York City residents have such concerns, including more than three out of four (77 percent) who are "very concerned" and 15 percent who are "somewhat concerned."

- Nearly two out of three New York State residents (65 percent) say that it would not be acceptable if the use of "fracking" to extract natural gas "could mean somewhat lower heating bills. About three out of five New York City residents (59 percent) expressed the same view.
- Two out of three New York State and New York City residents who are very/somewhat aware of fracking think state and federal officials are either "not doing as much as they should" (49 percent) or "not doing anything at all" (17 percent) to "require proper disclosure of the chemicals used in natural gas drilling."
- More than nine out of 10 New York State residents (91 percent, well over the national level of 73 percent) who are very/somewhat aware of fracking would be "very concerned" (73 percent compared to 58 percent nationwide) or "somewhat concerned" (18 percent) to "have such an energy project close enough to your home that there was even a small chance that it could have an impact on your drinking water." A slightly higher 93 percent of New York City residents share such concerns, including 75 percent who are "very concerned" and the same percentage of "somewhat concerned."

- Nearly nine out of 10 New York State residents (88 percent, compared to 69 percent nationwide) who are very/somewhat aware of fracking would be "very likely" (47 percent) or "somewhat likely" (41 percent) to "get involved at the community level to raise concerns about ... a 'fracking' project" if one was "proposed close enough to your home that there might be an impact on the quality of your drinking water." The numbers for New York City are roughly the same: "very likely" (48 percent) and "somewhat likely" (39 percent).
- More than four out of five New York State residents (83 percent) would "strongly support" (59 percent, compared to 49 percent nationwide) or "somewhat support" (24 percent) "tighter public disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling." Fewer than one in five (14 percent) would oppose requiring such additional disclosure. Support in New York City is at the same level of 83 percent, though an even higher 62 percent say they "strongly support" stronger disclosure requirements.

More than four out of five New York State residents (81 percent) would tell their Member of Congress, governor or state lawmaker: "When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my vote would be for coming down on the side of the public's health and the environment. We should favor cleaner energy sources that use the least water and involve the lowest possible risk to the public and environment." Only about one in five (12 percent) would say the following: "When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my view is that energy production priorities have to come first. There is always going to be some risk involved when it comes to energy production. We have to accept that there are going to be tradeoffs when it comes to the public's health and the environment." Clean water is favored over energy production by the same number of New York City residents, versus 11 percent who would place the greater emphasis on energy production.

- Where should America focus its energy production in the future? Four out of five New York State residents (84 percent) and even more New York City residents (87 percent) agree that: "Water shortages and clean drinking water are real concerns. America should put the emphasis on first developing new energy sources that require the least water and have minimal water pollution. Fewer than one in five New York State residents (12 percent) and only one in 10 New York City residents agree that: "Energy supply needs should override concerns about water shortages and water pollution. America should proceed first with developing energy sources even if they may pollute water or create water shortages." Water was favored over energy production here by Republicans (79 percent), Independents (83 percent), and Democrats (87 percent).
- A roughly equal share of New York State residents (81 percent) and New York City residents (82 percent) agree with the following statement: "Smarter energy choices are the key to creating new jobs and a future that is healthy and safe because fossil fuels create toxic wastes that are a threat to our health and safety." Fewer than one in five New Yorkers (15 percent both statewide and in New York City) disagrees with that statement.

- About two out of three New York state residents (69 percent) and slightly fewer New York City residents (63 percent) would pay up to 10 percent or more extra for "the development of renewable energy sources that protect the air and water better than other alternatives." Statewide, that includes: up to 10 percent more (31 percent); 10-25 percent more (27 percent); and 25-50 percent more (11 percent). Fewer than three out of 10 statewide residents (28 percent) would pay no additional amount for cleaner energy. For New York City, the percentages are: up to 10 percent more (29 percent); 10-25 percent more (21 percent); and 25-50 percent more (13 percent). Slightly more than one out of three New York City residents (35 percent) would pay no additional amount for cleaner energy.
- While the number of New York State residents who think that it is more urgent to protect "our drinking water from chemicals used in drilling for natural gas and from the wastes generated from burning coal" (23 percent) is about three times that who say the No. 1 concern is "addressing climate change and its impacts" (7 percent), many more (66 percent) say that "these are both major concerns of roughly equal concern." Even more New York City residents put the No. 1 priority on drinking water protection (26 percent) over climate change solutions (6 percent), with nearly two out of three (64 percent) saying both priorities are of equal concern.

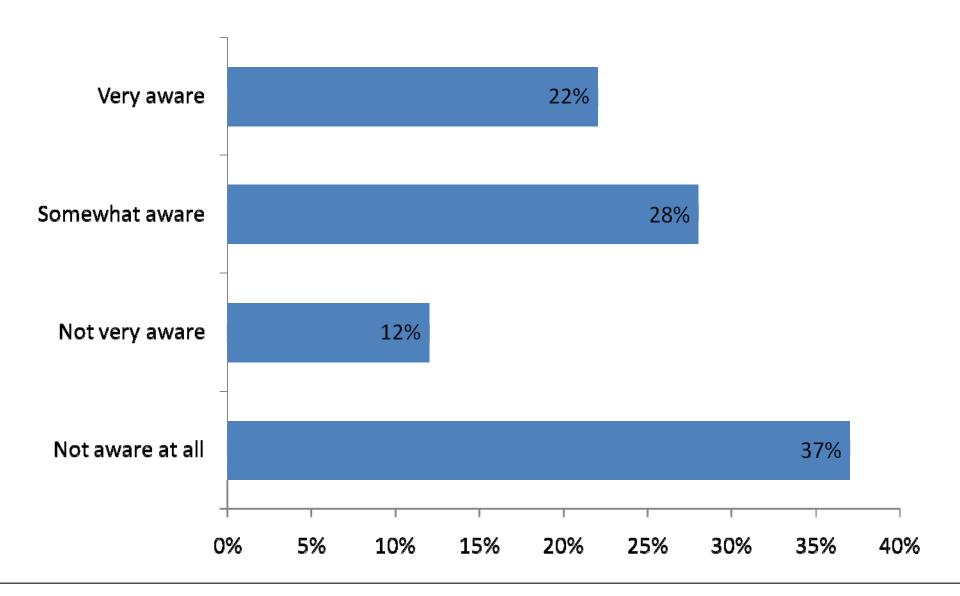
Detailed Findings

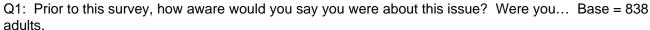
Awareness of the Issue of "Fracking"

Half of adults in New York state (51%) are aware of the issue of fracking. Forty-nine percent are not aware.

- Men are more likely than women to be aware (59% vs. 43%).
- Awareness among those living in New York City or on Long Island is the lowest in the state (36%). It is highest among those living in the rural up state (70%).
- Respondents with household incomes of less than \$75,000 are a lot less likely to be aware (45%) than are those with household incomes of \$75,000 or more (62%).
- Across party lines, awareness is higher among Republicans (57%) than Independents (46%) or Democrats (48%).

Awareness of the Issue of Fracking





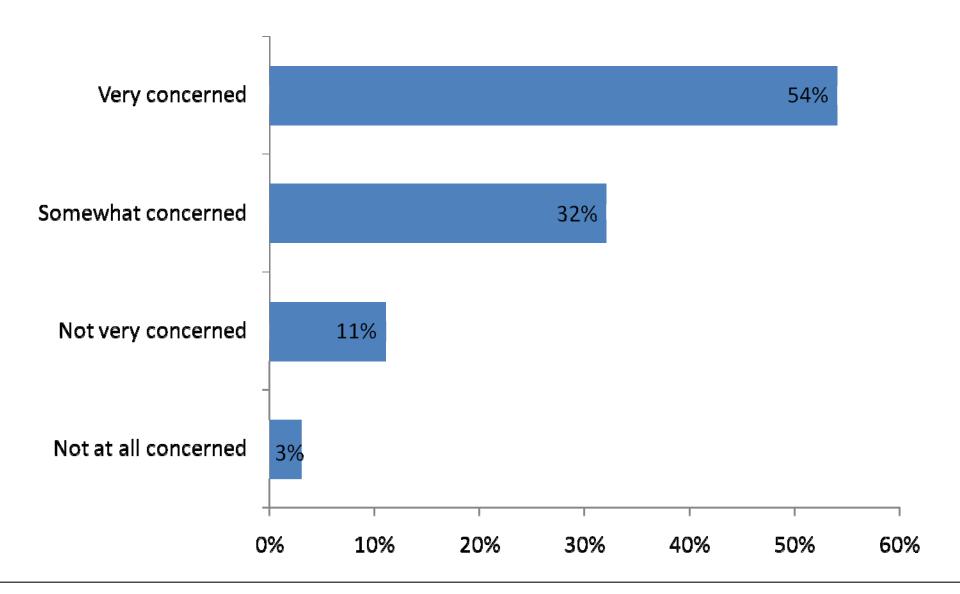


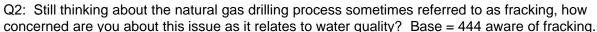
Concern About Fracking and Water Quality

Among those aware of fracking, nearly nine out of 10 New York state residents (86%) are concerned about the issue and how it relates to water quality. Only 14% are not concerned.

- Women are more likely than men to be concerned about fracking and water quality (92% vs. 81%).
- Even though those living in New York City or Long Island were the least likely to be aware of fracking, those that live there and are aware are quite concerned (91%).
- Across party lines, concern is greatest among Democrats (89%) and Independents (90%) and somewhat lower among Republicans (78%).

Concern About Fracking and Water Quality





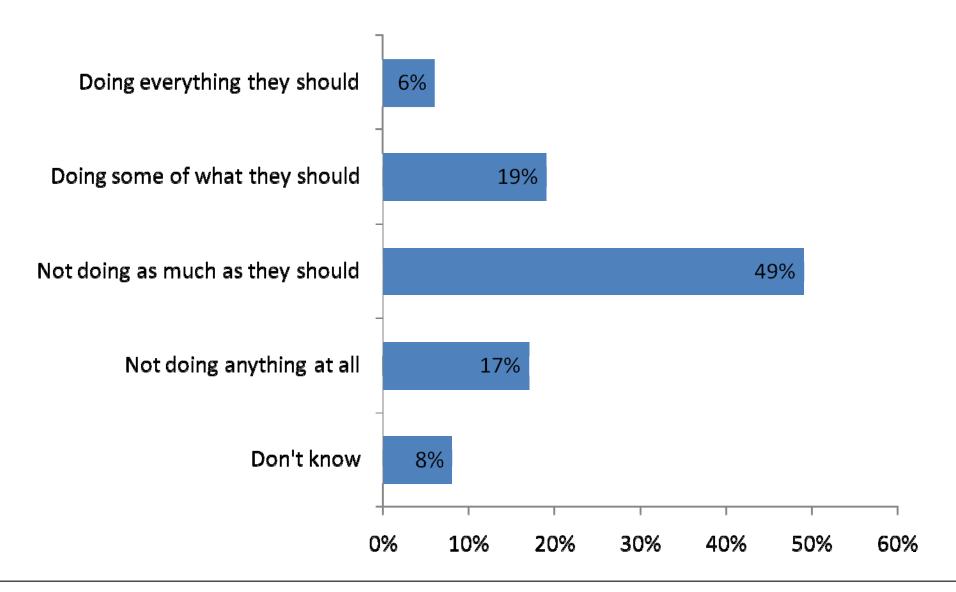


Disclosing the Chemicals Used in Natural Gas Drilling

More than two thirds (67%) of those aware of fracking say the government is not doing enough to require disclosure of the chemicals used in natural gas drilling. One fourth (25%) think they are doing enough.

- Women are more likely than men to think government is not doing as much at it should (75% vs. 60%).
- Democrats are the most likely to think government isn't doing enough in this area (72%) compared to 60% of Independents and 58% of Republicans.

Disclosing the Chemicals Used in Natural Gas Drilling



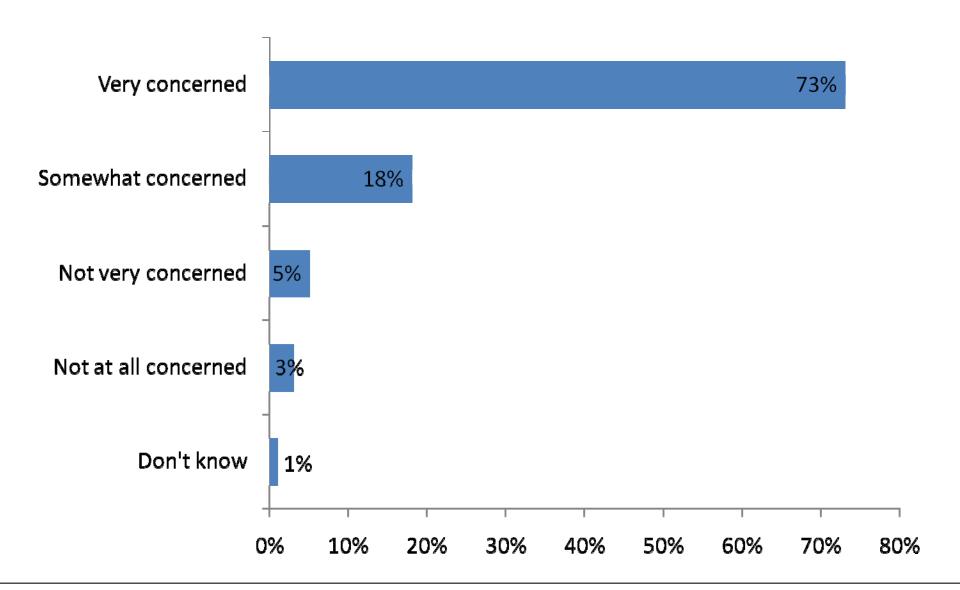


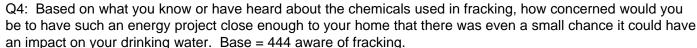
Concern About Fracking Close Enough to Impact Drinking Water

Nearly all (91%) of those aware of fracking, would be concerned about the process if there was an energy project close enough to their home that there was even a small chance it would affect their drinking water. Only 8% would not be concerned.

Democrats are the most likely to be concerned (97%), compared to 86% of Independents and 85% of Republicans.

Concern About Fracking Close Enough to Impact Drinking Water





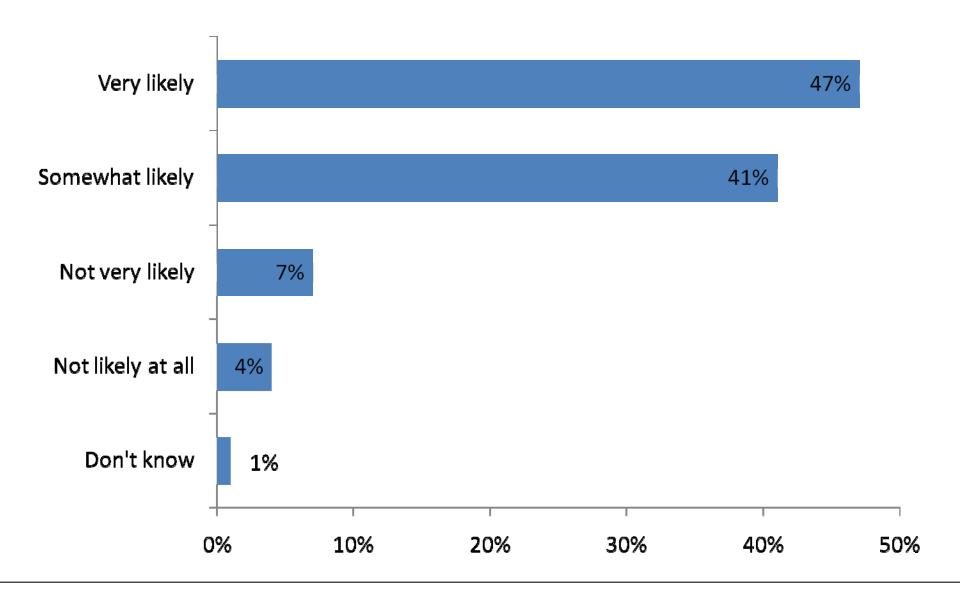


Getting Involved Locally to Raise Concerns About Fracking

Nearly nine out of ten (88%) of those aware of fracking, would be likely to get involved locally if an energy project was close enough to their home that it might impact the quality of their drinking water. One in ten would not get involved (11%).

Democrats are the most likely to say they would get involved (92%)
 compared to 89% of Independents and 82% of Republicans.

Getting Involved Locally to Raise Concerns About Fracking



Q5: Imagine a situation where a natural gas drilling project was proposed close enough to your home that there might be an impact on the quality of your drinking water. How likely would you be to get involved at the community level to raise concerns about such a fracking project? Base = 444 aware of fracking.

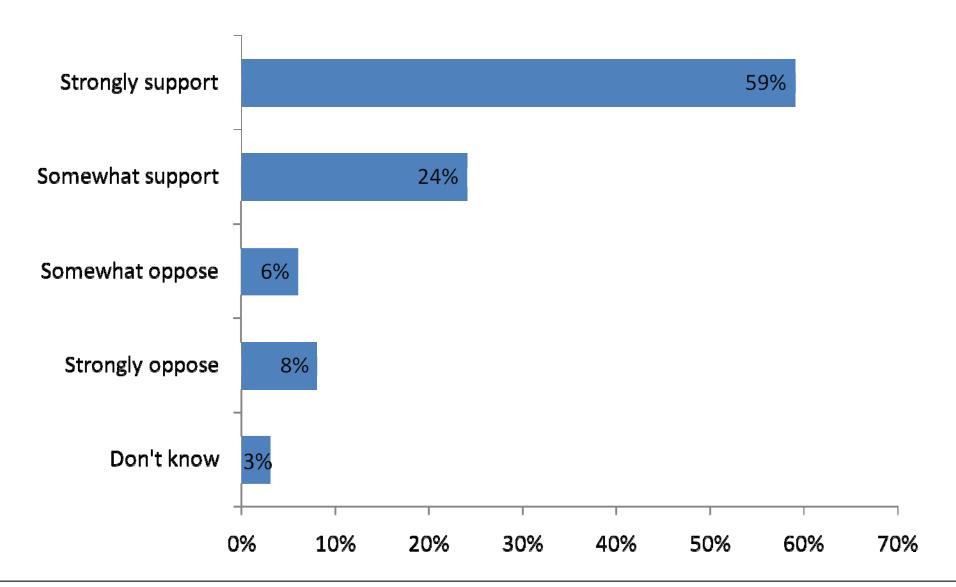


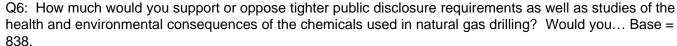
Favoring Tighter Public Disclosure of the Chemicals in Fracking

More than eight out of 10 (83%) New York residents would favor tighter disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling. Fourteen percent would oppose this.

 Politically speaking, tighter disclosure is desired by everyone regardless of party affiliation: Republicans (83%), Democrats (82%) and Independents (85%).

Favoring Tighter Public Disclosure of the Chemicals in Fracking







Speaking Directly to Government About Energy and Water

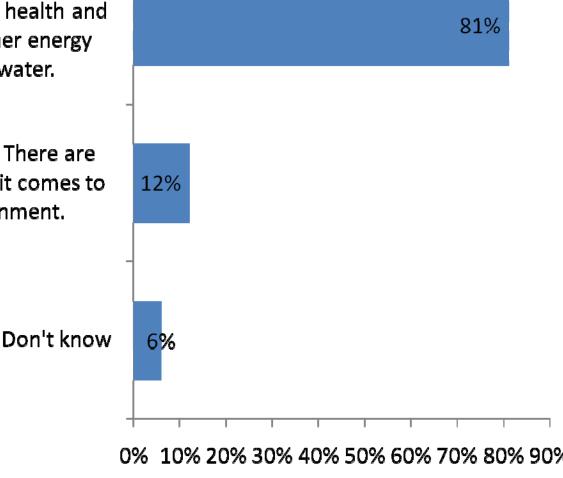
If given the chance to speak with a member of Congress, government or state legislator, 81% of New Yorkers would tell them that they come down on the side of energy generation that takes the environment and public health into consideration. Only 12% would tell their government official that energy generation comes first even at the cost of public health or depletion of resources.

 Politically speaking, Democrats (92%) are far more likely than Independents (75%) or Republicans (67%) to come down on the side of public's health and the environment.

Speaking Directly to Government About Energy and Water

When it comes to energy production I come down on the side of the public's health and the environment. I favor cleaner energy sources that use the least water.

Energy production comes first. There are always risks and tradeoffs when it comes to public health and the environment.



0% 10% 20% 30% 40% 50% 60% 70% 80% 90%



Where America Should Focus Future Energy Production

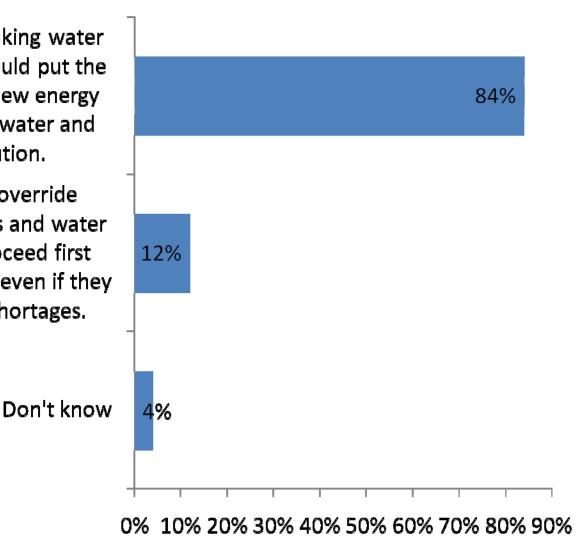
New Yorkers make a clear choice in favor of developing new energy sources that require the least water and have minimal water pollution (84%) over developing energy sources that pollute water or create shortages (12%).

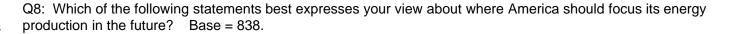
 Politically speaking, Democrats (87%) and Independents (83%) are a little more in favor of energy that conserves or doesn't pollute water than are Republicans (79%).

Where America Should Focus Future Energy Production

Water shortages and clean drinking water are real concerns. America should put the emphasis on first developing new energy sources that require the least water and have minimal water pollution.

Energy supply needs should override concerns about water shortages and water pollution. America should proceed first with developing energy sources even if they may pollute water or create shortages.





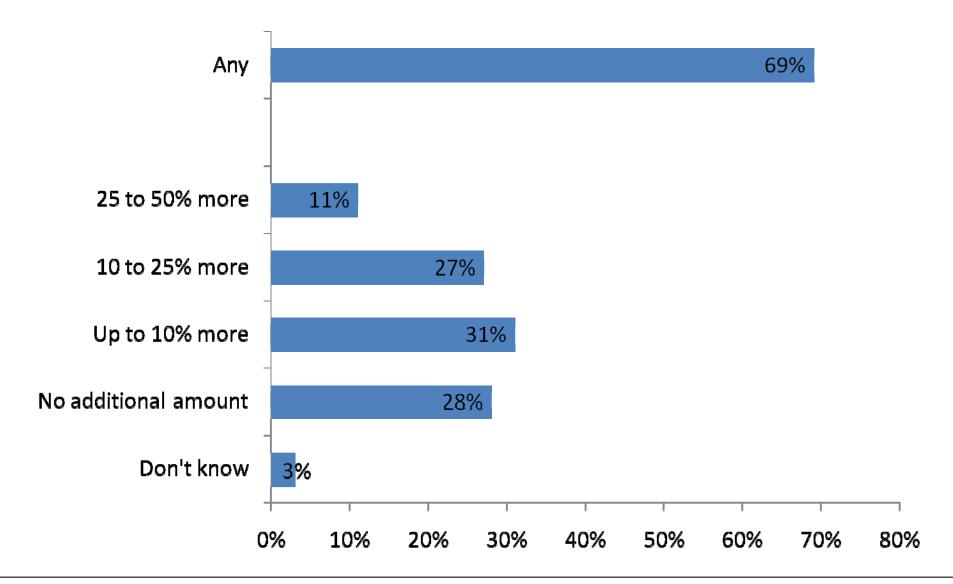


Paying More for Renewable Energy Sources

Most New Yorkers (69%) are willing to pay more for their energy if the additional cost pays for the development of renewable energy sources that protect the air and water better than other choices. Twenty-eight percent would not pay anything additional.

 Politically speaking, Democrats (78%) are more in favor of paying more for energy that protects the air and water than are Independents (66%) or Republicans (59%).

Paying More for Renewable Energy Sources



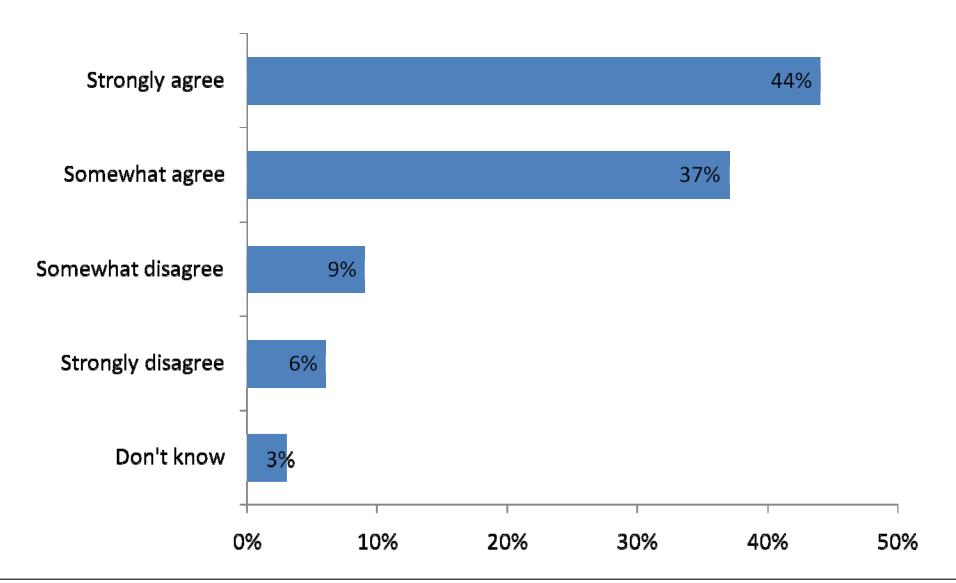


Smart Energy Choices are the Key to Creating New Jobs

Eight out of 10 New Yorkers agree that the key to creating new jobs and a healthy and safe future, is making smarter energy choices. Sixteen percent disagree.

 Politically speaking, Democrats (87%) and Independents (84%) are more likely to agree than Republicans (72%).

Smart Energy Choices are the Key to Creating New Jobs



Q10: To what degree do you agree or disagree with the following statement? Smarter energy choices are the key to creating new jobs and a future that is healthy and safe because fossil fuels create toxic wastes that are a threat to our health and safety. Do you... Base = 838.

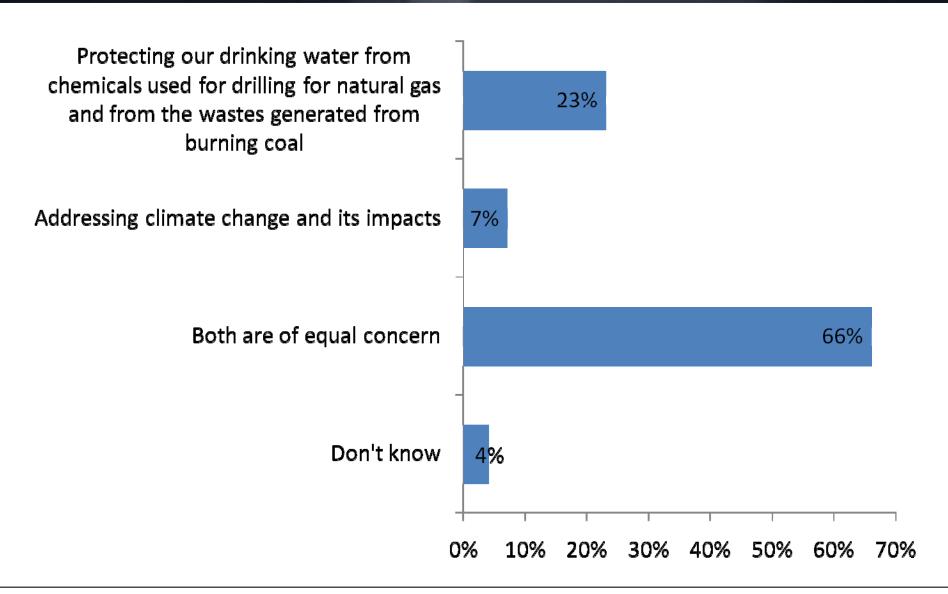


Most Urgent Concern Today

New Yorkers have a hard time choosing between climate change (7%) and protecting our drinking water (23%) as the most urgent concern today. Most (66%) believe both are of equal concern.

 Politically speaking, Democrats (71%) and Independents (74%) are more likely to say they are of equal concern than Republicans (54%).

Most Urgent Concern Today



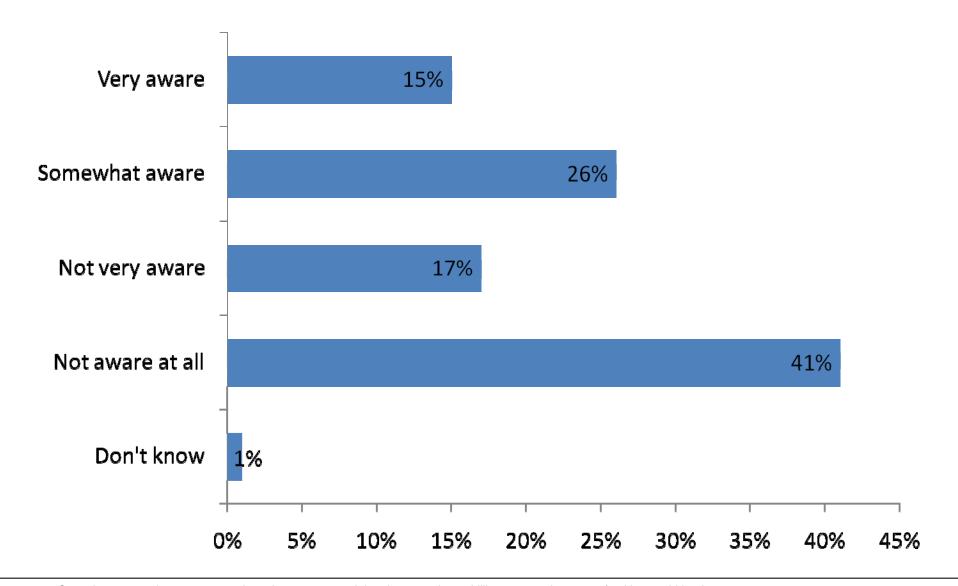


Awareness of Fracking on New York City's Water Supply

Less than half of New Yorkers (41%) say they are aware that fracking could lead to contamination of the water supply in the Catskill/Delaware River watershed that provides drinking water for New York City. Fifty-nine percent say they are not aware.

- Men are more aware of this issue than are women (49% vs. 34%).
- Only 35% of those who live in New York City or on Long Island and are most likely to be affected – know about this issue. Awareness of this issue is higher in the Hudson Valley region of the state (53%).
- Politically speaking, Democrats (39%), Independents (45%) and Republicans (43%) are all equally aware.

Awareness of Fracking on New York City's Water Supply



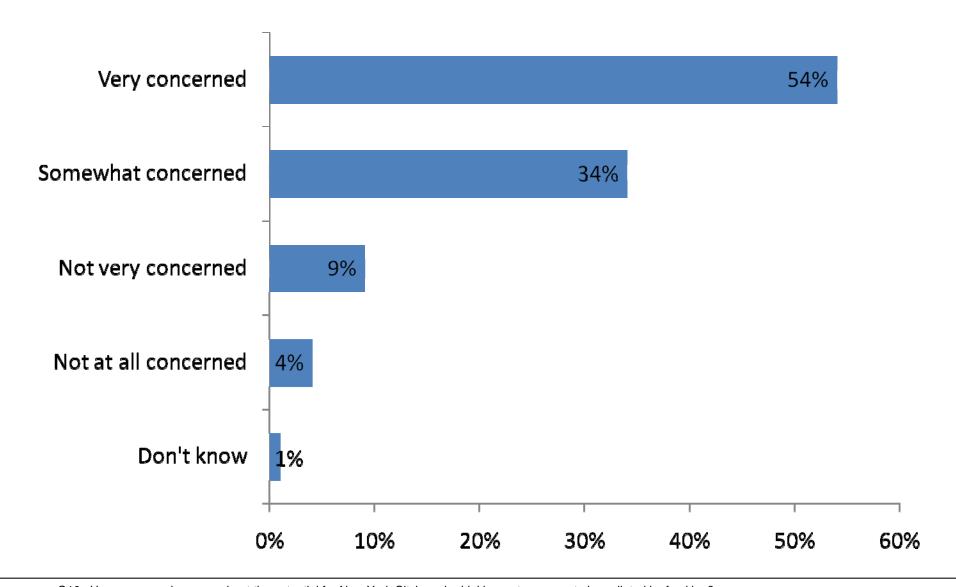


Concern Over the Possible Pollution of New York City Water by Fracking

Those aware of the possibility of fracking polluting the source of New York City's drinking water, are very concerned about the issue. Eighty seven percent say they are very or somewhat concerned while only 12% are not concerned.

- 93% of those who live in New York City or on Long Island and are most likely to be affected – are concerned.
- Politically speaking, Democrats (97%) and Independents (90%) are somewhat more concerned than Republicans (72%).

Concern Over the Possible Pollution of New York City Water by Fracking



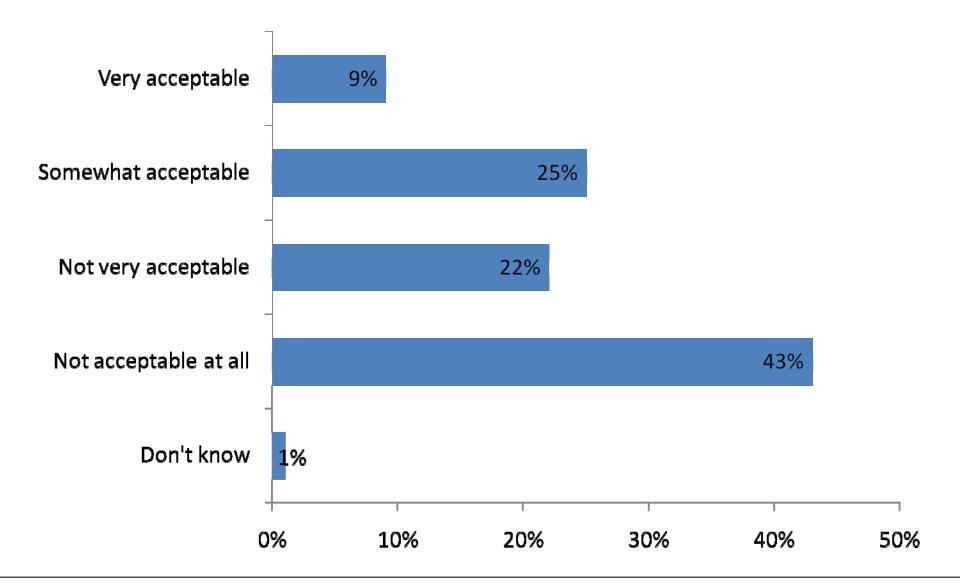


Is Fracking Contamination of Water Acceptable if Heating Bills are Lower?

Those aware of the possibility of fracking polluting a source of New York City's drinking water, say it is unacceptable to potentially threaten the City's water supply in exchange for lower heating bills (65%). Thirty-four percent are willing to make the trade off.

- For Democrats (75%) and Independents (66%), the trade off is less acceptable than it is for Republicans (46%).

Is Fracking Contamination of Water Acceptable if Heating Bills are Lower?





HASTINGS GROUP TOPLINE FRACKING –NEW YORK

3687317

Topline results of telephone interviews conducted with 838 residents of the State of New York, November 26-30, 2010. Base size for New York City residents is 408.

First of all, (sir/ma'am) . . .

The following questions are about a natural gas drilling process sometimes referred to as 'fracking', which requires large amounts of water. 'Fracking' involves blasting millions of gallons of water mixed with chemicals and sand into the ground to release natural gas from rock formations thousands of feet underground. Concerned homeowners and others say the process can poison drinking water supplies but oil and gas industry representatives say there's no proof that 'fracking' chemicals have contaminated drinking water.

D1 Prior to this survey, how aware would you say you were about this issue? Were you . . . (READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
22%	16%	Very aware
28%	22%	Somewhat aware
12%	9%	Not very aware
37%	53%	Not aware at all
-	0	DON'T KNOW/NOT SURE

IF VERY/SOMEWHAT AWARE OF ISSUE, D1 [01-02], CONTINUE. ALL OTHERS SKIP TO D6 $\,$

D2 Still thinking of the natural gas drilling process sometimes referred to as 'fracking', how concerned are you about this issue as it relates to water quality? Would you say . . . (READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

Base = 444 in New York State and 183 in New York City aware of fracking.

NYS	NYC	
54%	59%	Very concerned
32%	31%	Somewhat concerned
11%	8%	Not very concerned
3%	2%	Not concerned at all
-	0	DON'T KNOW/NOT SURE

D3 I have another question about the natural gas drilling process sometimes referred to as 'fracking'. Do you think that state and national officials are doing enough to require proper disclosure of the chemicals used in natural gas drilling? Would you say they are.

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS NYC 6% 2% Doing everything they should Doing some of what they should 24% 19% Not doing as much as they should 49% 49% Or, not doing anything at all 17% 17% DON'T KNOW/NOT SURE 8% 8%

D4 Based on what you know or have heard about the chemicals used in 'fracking', how concerned would you be to have such an energy project close enough to your home that there was even a small chance that it could have an impact on your drinking water? Are you . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
73%	75%	Very concerned
18%	18%	Somewhat concerned
5%	4%	Not very concerned
3%	3%	Not concerned at all
1%	-	DON'T KNOW/NOT SURE

I want you to imagine a situation where a natural gas drilling project was proposed close enough to your home that there might be an impact on the quality of your drinking water.

How likely would it be that you would get involved at the community level to raise concerns about such a 'fracking' project? Would you be . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
47%	48%	Very likely
41%	39%	Somewhat likely
7%	6%	Not very likely
4%	4%	Not likely at all
1%	3%	DON'T KNOW/NOT SURE

[ASK EVERYONE]

Congress and most states do not require energy companies that drill for natural gas to disclose the chemicals used in the process, even though there are concerns about the potential for contamination of drinking water and other bodies of water.

How much would you support or oppose tighter public disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling? Would you . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

Base = 838 in New York State and 408 in New York City.

NYS	NYC	
59%	62%	Strongly support
24%	21%	Somewhat support
6%	5%	Somewhat oppose
8%	10%	Strongly oppose
3%	2%	DON'T KNOW/NOT SURE

D7 If you could speak directly to your member of Congress, your governor or state lawmaker, which of the two following statements would you be MOST LIKELY to make to them?

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

[ROTATE]

NYS NYC

81% 81%

When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my vote would be for coming down on the side of the public's health and the environment. We should favor cleaner energy sources that use the least water and involve the lowest possible risk to the public and environment (or)

11% When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my view is that energy production priorities have to come first. There is always going to be some risk involved when it comes to energy production. We have to accept that there are going to be tradeoffs when it comes to the public's health and the environment (or)

6% 7% DON'T KNOW/NOT SURE

D8 Which of the following statements BEST expresses your view about where America should focus its energy production in the future?

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

[ROTATE]

NYS NYC

84% 87%

Water shortages and clean drinking water are real concerns. America should put the emphasis on first developing new energy sources that require the least water and have minimal water pollution (or)

12% Energy supply needs should override concerns about water shortages and water pollution. America should proceed first with developing energy sources even if they may pollute water or create water shortages (or)

4% 4% DON'T KNOW/NOT SURE

D9 How much more would you be willing to pay in terms of energy costs for the development of renewable energy sources that protect the air and water better than other alternatives? Would you say . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
11%	13%	25 to 50 % more
27%	21%	10 to 25% more
31%	29%	Up to 10% more
28%	35%	Or, no additional amount
3%	2%	DON'T KNOW/NOT SURE

4

D10 To what degree do you agree or disagree with the following statement? Smarter energy choices are the key to creating new jobs and a future that is healthy and safe because fossil fuels create toxic wastes that are a threat to our health and safety.

Do you . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
44%	46%	Strongly agree
37%	36%	Somewhat agree
9%	10%	Somewhat disagree
6%	5%	Strongly disagree
3%	3%	DON'T KNOW/NOT SURE

D11 Which of the following do you believe is the MOST URGENT concern today?
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

[ROTATE 01-02]

-		-
NYS	NYC	
7%	6%	Addressing climate change and its impacts
23%	26%	Protecting our drinking water from chemicals used in drilling for natural
		gas and from the wastes generated from burning coal
66%	64%	Or, these are both major concerns of roughly equal concern to you
4%	4%	DON'T KNOW/NOT SURE

D15 As you may know, concerns have been expressed that the natural gas drilling process known as 'fracking' could lead to water contamination of the Catskill/Delaware River watershed that provides drinking water for New York City.

Before this survey, how aware were you of reports that 'fracking' could have an impact on a main source of drinking water for New York City? Are you . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
15%	14%	Very aware
26%	24%	Somewhat aware
17%	16%	Not very aware
41%	46%	Not aware at all
-	0	DON'T KNOW/NOT SURE

IF VERY/SOMEWHAT AWARE OF ISSUE, D15 [01-02], CONTINUE. ALL OTHERS SKIP TO DEMOS

D16 How concerned are you about the potential for New York City's main drinking water source to be polluted by 'fracking'? Would you say you are . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

Base = 361 in New York State and 175 in New York City aware of the issue

NYS	NYC	
54%	77%	Very concerned
34%	15%	Somewhat concerned
9%	6%	Not very concerned
4%	3%	Not concerned at all
_	0	DON'T KNOW/NOT SURE

D17 I want to ask one more question about the potential for New York City's main drinking water source to be compromised by 'fracking'.

How acceptable do you think this potential threat to water quality is if it could mean somewhat lower heating bills? Would you say . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

NYS	NYC	
9%	14%	Very acceptable
25%	26%	Somewhat acceptable
22%	14%	Not very acceptable
43%	45%	Not acceptable at all
1%	1%	DON'T KNOW REFUSED