



The Jury from SEPTEMBER/OCTOBER 2012
Volume 24, Issue 5

EXPERT

The Art and Science of Litigation Advocacy

A publication of the American Society of Trial Consultants Foundation



Hydrofracking & the Environment: Juror Attitudes, Beliefs, and Priorities

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HYDRAULIC FRACKING IS A TECHNIQUE for recovering natural gas from difficult underground geological formations that would otherwise not be sufficiently productive to be economical. By injecting fluids (water and chemicals) under high pressure into the gas well, fractures in the rock develop. After the injection procedure is complete, a successful hydraulic fracturing procedure (also commonly referred to as “hydraulic fracturing”, “hydro-fracking”, “fracking” or “fracing”) results in higher rates of gas flow into the bore hole, and a more productive well.

It is unquestionably a very successful procedure for increasing well production, and one that has become heavily utilized in recent years. Wells that had been closed after their production fell off have been revitalized, and wells (such as those in the Marcellus Shale formation in the northern Appalachian mountains and the Barnett Shale formation in North-Central Texas) have been wildly productive. However, since this technique has been employed, public concern over environmental impact on ground water has skyrocketed in the gas field areas. Some local water supplies have developed a terrible taste. Others carry chemical concentrations in ground water that had not been previously noted. In this paper we

generally describe typical positions taken by both Plaintiffs and Defendants, but we will not attempt to weigh the scientific evidence that is typically presented in the toxic tort actions. Instead, we will focus attention on jurors, and the related concerns that litigants are going to face from jurors before the first word is spoken.

Americans are consistently concerned about the environment, especially the environment of their own ‘backyard’. This concern is seen in surveys done at national, state, and local levels. As is typical in surveys, the closer the issue is to the respondent’s individual life circumstances, the more concern they express. In response to the increase in litigation activity relating to the impact of natural gas drilling methods on the environment, this paper will provide an overview of American concerns regarding:

- the environment and the economy;
- the environment in general;
- groundwater pollution;
- toxic waste/contamination of water supplies;
- the increasing skepticism of scientific ‘findings’;
- attitudes toward the oil and gas industry;

These topics are followed by a look at hydraulic fracturing and

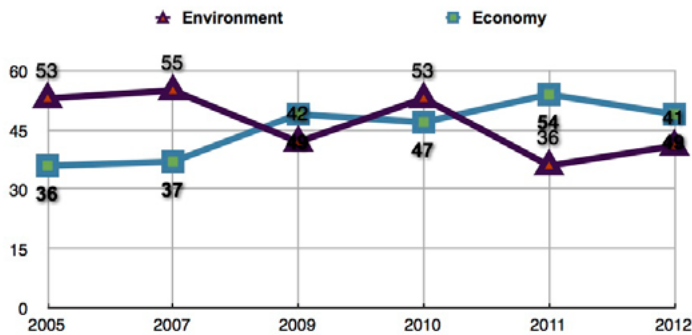
the American perception of the impact of fracking on the safety of drinking water and in groundwater contamination, all with an eye toward implications for litigation.

Framing the Battle: The Environment or The Economy?

Americans are concerned about the environment although the level of concern has varied over time. Gallup conducts an annual environment status poll and concluded in [March 2012](#) that

“Americans continue to prioritize economic growth over environmental protection, by a 49% to 41% margin, as they have since 2009. This eight-percentage point gap in favor of economic growth is smaller than last year’s record 18-point gap. Prior to the recession and financial crisis, in 2007, most Americans across subgroups prioritized the environment (55%) over economic growth (37%). Today’s margin in favor of economic growth reflects a 26-point shift toward economic growth compared with 2007.”

“With which of these statements about the environment and the economy do you most agree: protection of the environment should be given priority, even at the risk of curbing economic growth or economic growth should be given priority even if the environment suffers to some extent?”

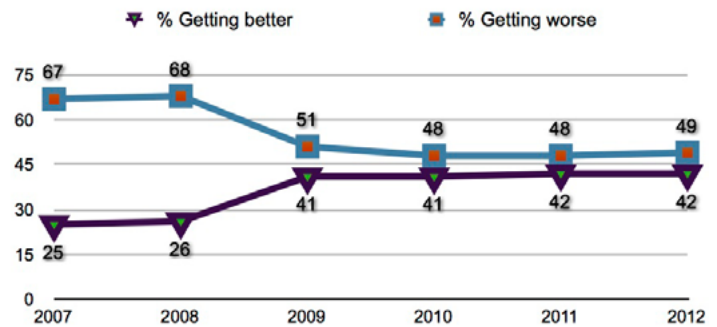


[Gallup Poll](#) conducted by telephone interviews conducted March 8-11, 2012, with a random sample of 1,024 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia.

While still concerned, Americans are also less worried about future environmental conditions. In 2006, the highest numbers ever recorded in Gallup polls on this issue (67%) said the quality of the environment was getting worse. At that time, Gallup opined that the growing credibility of concerns related to global warming, biological terrorism, and the need for sustainable energy were all likely to add to the demand for a safer water supply. Since then, public concern has moderated.

“Americans’ perceptions that the quality of the environment is getting better have stabilized in recent years after improving shortly after President Obama took office. While slightly more Americans still say the environment is worsening rather than improving, the current 49% to 42% split is much narrower than what Gallup measured throughout George W. Bush’s presidency.”

“Right now, do you think the quality of the environment as a whole is getting better or getting worse?”



[Gallup Poll](#) via telephone interviews conducted March 8-11, 2012, with a random sample of 1,024 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia.

Gallup also identifies a relationship between perceptions of [environmental quality based on political affiliation](#).

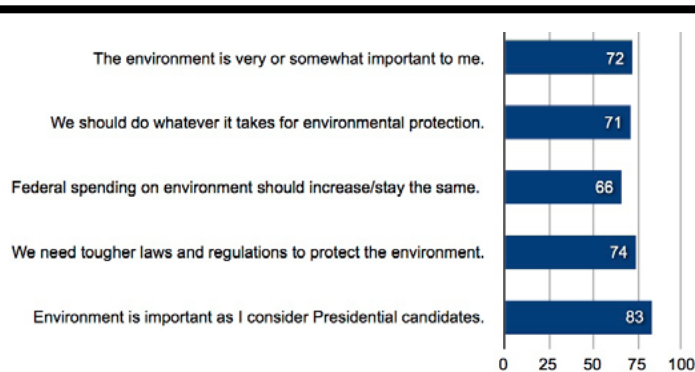
“Among party groups, Republicans’ rating of environmental quality as “excellent” or “good” is the highest, at 60%. Democrats’ ratings have steadily increased since 2010, and now 41% rate the environment positively. Independents’ ratings increased in the first two years of the Obama presidency but have since declined, currently giving them the least positive rating of the three groups.”

What we cannot know is whether the improved ratings are related to actual improvements in the quality of the environment, or a general sense the Obama administration is more environmentally friendly than was the George W. Bush administration, or weariness about environmental concerns in the face of a fragile economy.

Who Can You Trust?

There is a feeling in the country of increased suspicion and lack of trust in government. We’ve seen that lack of trust extended by mock jurors (and real jurors) to corporations, schools, and our federal, state and local governments. It also extends to beliefs and values related to the environment.

Polls have been completed on how much Americans approve of the way our government (the Congress), American businesses, and the energy industry are reacting to environmental concerns. Americans seem to have overall negative reactions to how the environment is being cared for and they see environmental issues as needing serious attention. They no longer know whom they can trust to ensure it happens.



How important is the environment?

Economist/YouGov survey of 1000 Americans conducted online from August 18-20, 2012.

The country should do whatever it takes to protect the environment.

Economist/YouGov survey conducted online with 1000 Americans on March 6, 2012.

Federal spending on the environment should increase or stay the same.

Pew Research Center survey of 3,029 Americans by telephone from February 22-March 14, 2011.

There needs to be stricter laws and regulations to protect the environment.

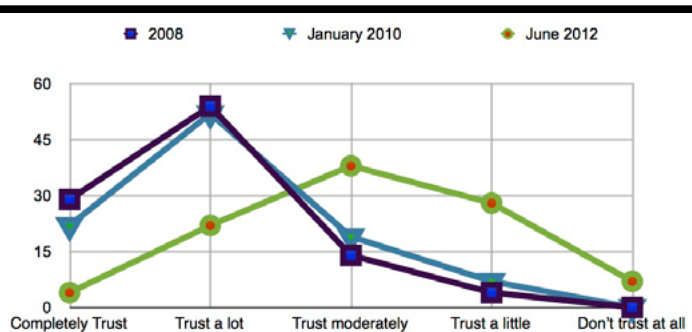
Pew Research Center April 4-15, 2012 survey of 3,008 Americans via landlines (1,805) and cell phones (1,203). [Completely agree: 36%; mostly agree: 18%].

The environment is an important issue as I consider Presidential candidates.

Pew Research Center survey of 2,008 Americans via telephone on April 4-15, 2012. [Very important: 51% and somewhat important: 32%].

We Can't Trust Scientists Any More Either

Just as with other issues in this time of increasing uncertainty—Americans are increasingly wary of scientists' statements about the environment. There is a level of suspicion that even the traditional perspective of scientific neutrality cannot surmount (ABC News Poll, 2006). This lack of trust is seen in the [scientific literature](#) as well as in the [mainstream media](#). Americans don't particularly trust what scientists say about environmental issues with only slightly more than 1/4 (26%) strongly trusting [i.e., completely trusting or trusting a lot] in scientists' statements. While the most public discussions about scientific credibility surround issues such as global warming and endangered species (skepticism about which is higher with those opposed to regulation), this end of the environmental spectrum doesn't have a lock on mistrust. Those who are active in the environmental movement are also skeptical of scientific findings regarding remediation and "safe levels" of environmental pollutants.



2008: Survey conducted by the School of Forestry and Environmental Studies at [Yale University](#).

January, 2010: Survey conducted by the School of Forestry and Environmental Studies at Yale University of a nationally representative group of 1,001 adults.

June 2012, 2012: Survey conducted by Washington Post-Stanford University. Poll was conducted by telephone June 13 to 21, 2012, among a random national sample of 804 adults, including landline and cell phone-only respondents.

Trust seems to be particularly damaged around issues related to how much of a particular harmful particulate, pollutant, or other contaminant is in our water. Studies focusing on "relative risk" (i.e., how much is too much in our water supply?) report that citizens tend to not like the idea of any exposure to cancer causing agents in the water supply (Johnson & Chess, 2003). ([Benzene](#) is one byproduct of fracking that is [known to cause cancer](#) in humans.)

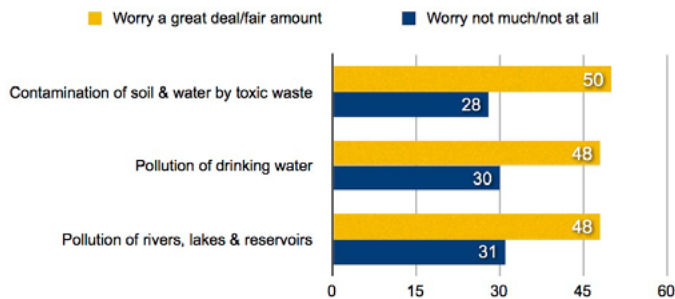
Further, there is a sense that when citizens hold the idea that there are "no safe levels" of exposure—education is unlikely to alter that perspective. This conclusion has definite implications for expert testimony on "relative risk" and even on the idea that showing "before and after" cleanup concentrations of toxic chemicals will have a positive/soothing effect on jurors (Washington Environmental Council, 2009).

Worries About Water Pollution

Just as Americans are less concerned about the environment in general in our downturned economy, they are also decreasingly [concerned about the water supply](#) in particular. Gallup Polls comment that these concerns are now at a historical low. Concerns about the water supply are, however, still at the top of Americans concerns regarding environmental issues polled. The chart immediately below is constructed from the results of the most recent [Gallup Survey](#) and presents only items of interest on this specific topic. Having our water contaminated or polluted is a concern of about half of Americans--and that number is the lowest number since 2000 when environmental concerns were at an all time high.

As Gallup says: "On a relative basis, Americans tend to worry more about environmental threats to the nation's water supplies than those that affect other parts of the environment. The highest levels of worry this year are for contamination of soil and water by toxic waste, pollution of drinking water, and pollution of rivers, lakes, and reservoirs."

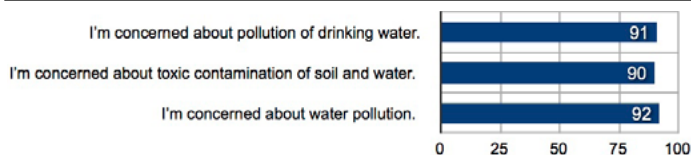
Despite the lowering priorities of Americans when it comes to the environment, the three items presented below are related to daily survival--a significant issue when considering the effects of hydraulic fracking on the water supply.



Telephone survey conducted by Gallup, between March 8-11, 2012, with a random sample of 1,024 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia.

North Carolina: Worry About Water Pollution

A small survey queried North Carolina residents in 2010 regarding their concerns about water pollution. North Carolinians generally are very concerned about the water and soil--with percentages ten points higher than those found in the national survey only months later. [We were unable to locate more recent surveys to see if North Carolinian's concerns have lessened in the fading economy (like other Americans) despite the increase in hydro-fracking in their state.]

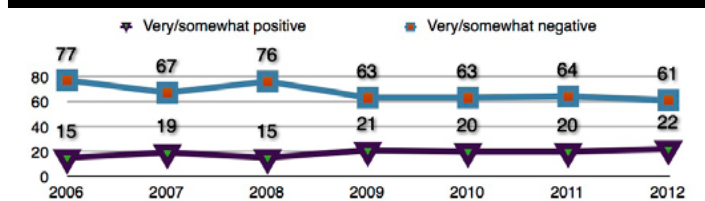


Poll conducted by Eton University and the Eton University Institute for Politics and Public Affairs. Poll done by telephone with 508 North Carolina residents February 22-25, 2010.

Perceptions of Oil and Gas Companies

Perceptions of the oil and gas industry have always been more negative than positive. Surprisingly, the BP Deepwater Horizon spill and the current controversy over hydraulic fracking have not changed industry ratings--perhaps because they were already so low. The oil and gas industry was at the bottom in the annual Gallup survey of confidence in industries done in 2010. In 2011, the federal government took that honor (of the lowest rank) with oil and gas in the pentultimate position.

In 2012, oil and gas industry ratings retook the bottom place in industry rankings. Obviously, jurors will come to the courthouse with both a low level of regard and trust for the oil and gas industry, and tremendous skepticism about government regulators.



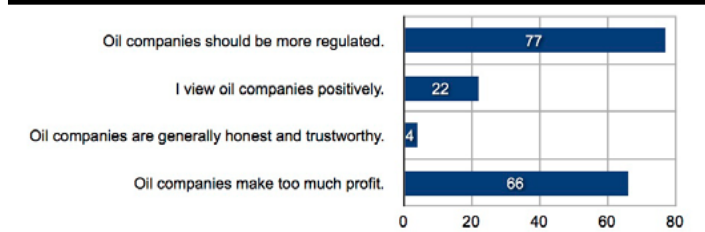
2010: Gallup telephone interviews with a random sample of 508 adults conducted August 5-8, 2010.

2011: Gallup telephone interviews with a random sample of 1,008 adults conducted during August 11-14, 2011.

2012: Gallup telephone interviews conducted Aug. 9-12, 2012, with a random sample of 1,012 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia.

Most Americans believe oil and gas companies should be watched closely. The prevailing view is that the companies should be subject to more regulation, they are unlikely to act in the public best interest and they cannot be trusted to behave honorably. And in addition to all that, their profit margins are too high.

Gallup comments on the negative perceptions of the oil and gas industry: "The cause of the oil and gas industry's bad image is most likely the frequent and sometimes inexplicably large spikes in the price of gas. At the time of this survey, in fact, the price of gas was on the rise. Plus, the oil and gas industry may get dinged by some Americans for its perceived poor environmental record."



Oil companies should be more regulated.

Financial Times/Harris poll conducted online with 1,001 Americans from July 20-29, 2010. Respondents were aware of oil spill in Mexico Gulf. (51% strongly agreed and 26% agreed.)

My view of oil companies is generally positive.

Results for this Gallup poll are based on telephone interviews conducted Aug. 9-12, 2012, with a random sample of 1,012 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia.

Oil companies are generally honest and trustworthy.

Harris Poll of 2,303 Americans conducted online from October 20-27, 2008. This Harris finding mirrors the consistently low Gallup Poll numbers for the industry.

Oil companies make too much profit.

Zogby International poll of 7,815 Americans who were likely voters conducted online May 6-9, 2008.

Hydraulic Fracking: Proponents, Opponents and Controversy

Having generally described the patterns of American concerns about the environment, water pollution, toxic waste contamination of the water supply, skepticism directed at scientists and perspectives on the oil and gas industry, we turn our attention to American attitudes toward hydraulic fracking.

Even before the new [EPA draft findings](#) on the Pavillion, Wyoming ground water were released (December, 2011), there was a [raging controversy](#) over the [safety of hydraulic fracking](#).

[Proponents](#) say it is the best way for America to produce more fuel for future needs. They say it is “incredibly unlikely” (Editorial Staff, 2012) that fracking would contaminate aquifers lying very far above the gas resources. They warn that the hyperbole around the practice of hydro-fracking is dangerously emotional and that the arguments should “stick to the fracking science” (Miller, 2012). They point out that fracking causes [little mess or disruption](#) above the surface of the ground--unlike traditional oil drilling or strip mining practices.

[Opponents](#) say it is dangerous for the environment, will contaminate our groundwater and is likely bad for our health--whether as workers in the industry or water-drinkers around fracking sites. The controversy over fracking and subsequent media coverage has heated significantly thus far in 2012. When a University of Texas at Austin researcher [published a report](#) saying there was “[no direct evidence that fracking itself has contaminated groundwater](#)” he had instant media scrutiny. Unfortunately, the researcher failed to disclose a potential [conflict of interest](#), which cost him dearly in [the court of public opinion](#). As of August, 2012, the University of Texas at Austin has established [a panel of experts](#) to review the report and to determine if its findings are scientifically credible.

Proponents of fracking say there has [never been a documented case](#) where it has contaminated drinking water. Opponents say that is only because fracking involves a series of steps in addition to the actual act of ‘fracking’ and the narrow definition proponents apply (by taking other steps involved out of the equation) is [only clever semantics](#). [Environment America](#) has just released [a new report](#) identifying multiple costs associated with fracking and conclude the practice simply isn’t worth the price we will pay. They point out that too much of the [cost is borne by taxpayers](#) rather than by the oil and gas industry.

When the EPA draft report was released that found that ground water in Pavillion, Wyoming showed water contamination from fracking, there were [overnight rebuttals](#) from those supporting the practice of fracking. It is clear this [debate is far from over](#).

Fracking has been accused of (among other things) causing [earthquakes](#), [tainting water wells](#), causing [respiratory issues like asthma](#), [killing all life in bodies of water](#), killing all vegetation and trees in a West Virginia forest treated with [fracking wastewater](#), causing lung disease in oil and gas workers breathing in the silica dust formed around work sites (OSHA/CDC, 2012) and turning ordinary household tap water into a flammable liquid (see photo right) as depicted in the award-winning 2010 HBO documentary [Gasland](#).

An article published in the journal Risk Management (Chung & Hoffnagle, 2011) lists three primary areas of risk (each with multiple entries of specific concerns): “legal liabilities emanating from negative environmental and health impacts, regulatory risk from new state and federal laws that would impose new costs or restrict hydro-fracking operations, and reputation risk from the growing public and political concern paid to this issue--something exemplified by NYC Mayor Michael Bloomberg’s vocal opposition, alleging that hydro-fracking poses an unacceptable threat to the water supply of nine million New Yorkers.”

Between September 2009 and September 2011, 15-20 lawsuits were filed “by landowners in various states against oil and gas drilling companies alleging groundwater contamination,” most of these cases are still in the early phases. “Nearly all of the plaintiffs in these suits are either landowners who leased oil and gas rights to the defendants or landowners who reside in close proximity to where hydraulic fracturing operations were conducted” (Blanson & Nicholson, 2011).

Despite the concerns about health risks, rigorous evidence of negative health impact remains slim (Mitka, 2012). The tension between our floundering economy and the need for jobs versus the possible health risks associated with fracking is spurring [environmental audits](#) in states considering fracking. Some researchers believe there has been an agenda change as the policy issues surrounding fracking have moved between the state and federal governments--and become increasingly contentious due to rising public concerns over pollution impacts of fracking (Davis & Hoffer, 2012).

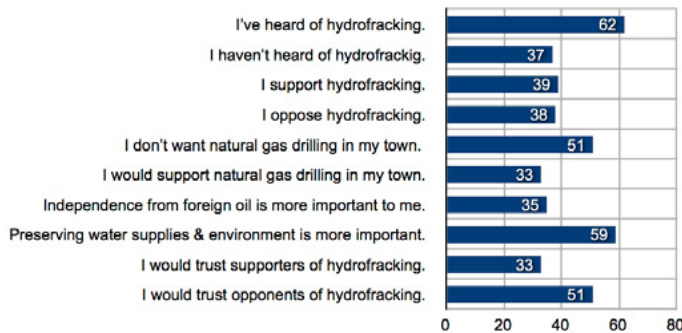
This is the landscape in which the controversy resides. For this paper, we are going to focus not on the science behind hydraulic fracking disputes per se, or on the political debates surrounding hydro-fracking. Instead, we will focus on the evidence of American attitudes toward fracking and how those attitudes might guide a litigation strategy. We rely on recent polls using random samples of Americans from various parts of the country. Obviously, research would need to be done in specific locales to ensure attitudes are similar closer to the time of trial, but generally we find that the range of opinions is present everywhere, with the primary difference being in the frequency of support or criticism of an issue in a given locale. As we saw in the preceding polls on the environment and our water supply--Americans are mercurial. When there are environmental disasters (like the BP DeepWater oil spill or the Japanese tsunami rendering nuclear facilities at risk--we are concerned about the environment. But as time passes--and it doesn’t even take that much time--we again return to other concerns. In this time of recession and economic uncertainty, the public tends to prioritize the economy and jobs over the environment. Until the next environmental disaster occurs and then we will, once again, return briefly to a renewed emphasis on environmental issues.

New York: Attitudes Toward and Awareness of Hydraulic Fracking

Polls about hydraulic fracking focus on two distinct facets: 1) questions about whether Americans support or oppose the

practice and how close they want it to their personal homes and 2) questions about concerns for environmental safety, the risk for contamination of ground water, and whether those concerns would spur them to activism. We will look at these two areas separately, beginning with support or opposition to fracking itself.

When it comes to awareness of and opposition to hydraulic fracking, even in [New York](#) (a [hotbed of fracking activism](#), as the southern and western parts of the state includes a great deal of fracking in the Marcellus Shale formation) there is a mix of opinions and a range of understanding. It is not as though residents of New York are completely against fracking--almost half of them have not even heard of it. While they are not anti-fracking in theory, half of them don't want it to come to their town.



Have you heard or read anything about hydro-fracking?

Poll by Quinnipiac University of 1,779 New York registered voters (conducted by phone) from July 17-23, 2012.

Support or opposition to hydro-fracking:

Poll by Siena Research Institute of 671 New York likely voters conducted by telephone August 14-19, 2012.

Oppose or support natural gas drilling in my town:

Poll by NY1/Marist Institute for Public Opinion of 201 upstate New York registered voters conducted by telephone July 28-31, 2011.

Independence from foreign oil versus preserving water supplies and the environment:

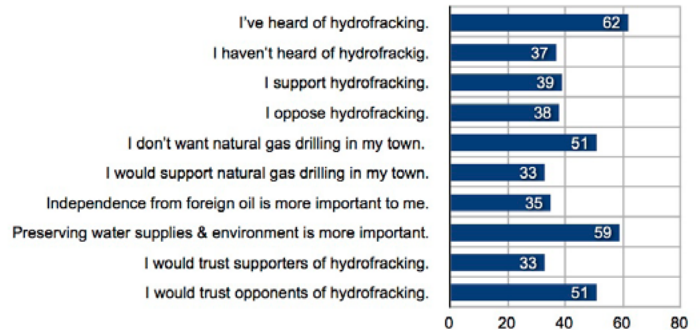
Poll by NY1/Marist Institute for Public Opinion of 517 New York registered voters conducted by telephone July 28-31, 2011. Another question asked was whether preserving the environment (50%) was more important or if creating jobs (44%) was more important.

Who would you trust more: supporters or opponents of hydro-fracking?

Poll of 808 registered NY voters conducted by telephone by the Siena Research Institute from September 15-21, 2011.

New York: Safety Concerns and Attitudes Toward Hydraulic Fracking

The public conversation about fracking in the last several years has progressed from silence, to "the technology that unlocks hidden natural gas reserves", to "a threat to clean water". And people are becoming more worried. Many of the surveys done about the issue have been conducted in states where hydro fracking has been conducted, anti-fracking activity has been high, and press reports of environmental concerns have started to mount.



Do you think hydro-fracking will cause environmental damage or not, or don't you know?

Poll conducted by telephone at Quinnipiac University of 1,779 registered voters in New York during July 17-23, 2012.

Do you favor or oppose fracking in a large portion of the Marcellus Shale?

Poll by Siena Research Institute via telephone with 808 registered NY voters during September 15-21, 2011.

Do you think we should drill in the Marcellus Shale?

Poll conducted via telephone by Quinnipiac University of 1,640 NY registered voters from August 3-8, 2011.

I support a new tax on companies drilling for natural gas in the state's Marcellus Shale.

Poll conducted via telephone by Quinnipiac University of 1,640 NY registered voters from August 3-8, 2011. [Only 29% oppose the idea of a tax.]

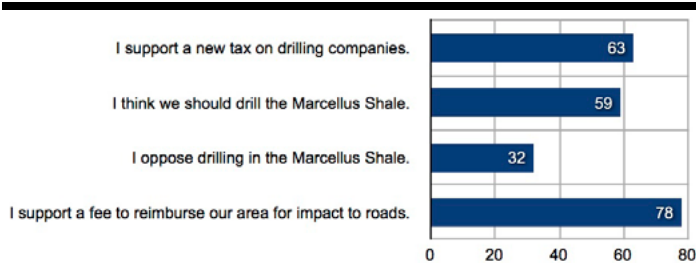
Drilling for natural gas in the Marcellus Shale will create jobs.

Poll conducted via telephone by Quinnipiac University of 1,640 NY registered voters from August 3-8, 2011.

Again, even in New York State (that hotbed of anti-fracking advocacy), one-third of registered voters are not informed about fracking but half believe it will cause damage to the environment. They are split on whether the Marcellus Shale should be drilled for natural gas but if it is drilled, more than half think there should be a new tax on drilling companies. Three-quarters of them believe drilling the Marcellus Shale will create jobs.

Pennsylvania: Safety Concerns and Attitudes Toward Hydraulic Fracking

Quinnipiac University conducted similar surveys in Pennsylvania to those done in New York. Slightly more Pennsylvanians favor drilling in the Marcellus Shale and they are similar to New York respondents in their support of a tax on drilling companies. They like the idea of a fee to reimburse their local area for impact on their environment and their roads.

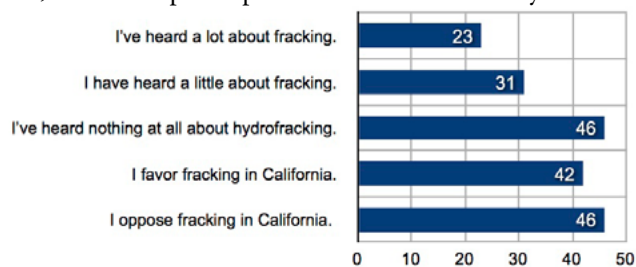


All of the above queries were posed during a Quinnipiac University poll.

The poll was conducted via telephone of 1,258 Pennsylvania registered voters July 25-31, 2011.

California: Safety Concerns and Attitudes Toward Hydraulic Fracking

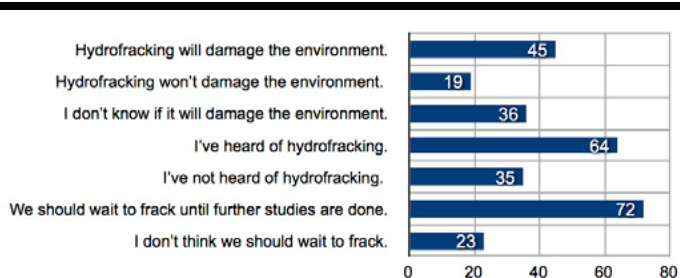
The Public Policy Institute of California conducted telephone surveys of 2500 Californians (2000 via landline and 500 via cell phones). The survey was conducted between July 10th and 24th, 2012 and participants included 1131 likely voters.



There is significantly less familiarity in California with the process of hydro-fracking than we see in other state polls (due to lack of fracking activity in California). However, despite the dearth of knowledge and familiarity, almost half of Californians surveyed who knew either “a lot” or “a little” about hydro-fracking ultimately opposed hydro-fracking in their state.

Ohio: Safety Concerns and Attitudes Toward Hydraulic Fracking

Ohio citizens also have concerns about hydro-fracking’s impact on the environment despite the fact that fully 1/3 have not even heard of hydro-fracking (although the Marcellus Shale extends into Ohio). When given the choice, Ohioans, like others, are more likely to urge caution until we know more about the environmental and health impacts.



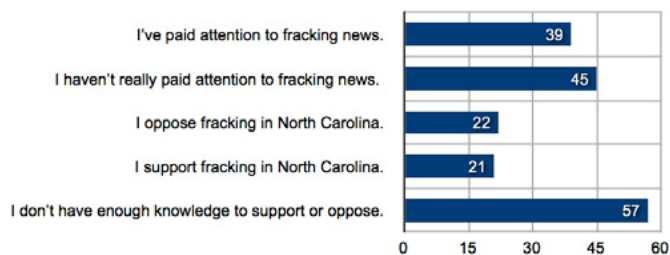
Do you think hydro-fracking will cause environmental damage or not, or don't you know? and Have you heard or read anything about hydro-fracking?

Polls conducted by telephone at Quinnipiac University of 1,069 registered voters in Ohio May 2-7, 2012.

Some people have proposed halting hydro-fracking in Ohio until further studies are done on its impact. Do you think that is a good idea or a bad idea?

Poll conducted by telephone at Quinnipiac University of 1,610 Ohio residents from January 9-16, 2012.

North Carolina: Safety Concerns and Attitudes Toward Hydraulic Fracking



How much attention have you paid to the news about fracking in North Carolina: A great deal, some, not very much or none at all? [A great deal/Some: 16% and 23% respectively. Not very much/None at all: 20% and 25% respectively.]

Survey conducted of 534 North Carolina residents by telephone between March 26 and March 29, 2012.

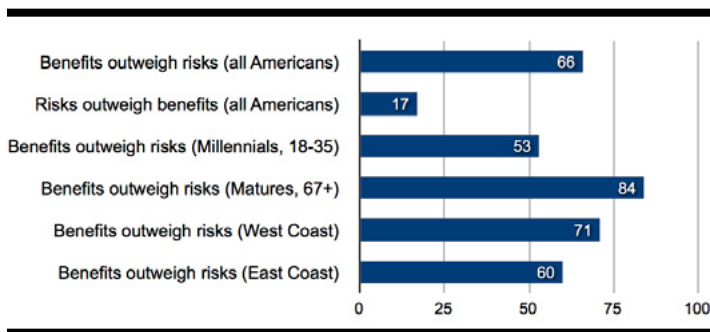
Do you support or oppose the use of fracking to extract natural gas in North Carolina, or do you not know enough about it to say?

Survey conducted of 534 North Carolina residents by telephone between March 26 and March 29, 2012.

We’ve seen earlier that North Carolinians are concerned for their environment but they seem to be open-minded as to whether fracking makes sense for their state. More than half of those polled say they simply do not know enough to decide either for or against hydro-fracking in their state.

National Reactions to Hydraulic Fracking: Awareness and Concerns

In 2012, the Harris Polls looked at what Americans think of the cost-benefit ratio of obtaining natural gas. As a whole, Americans think the benefits outweigh the risks, however, there were some intriguing generational and regional differences that should be explored in specific venues prior to litigation.



The [Pew Research Foundation](#) recently published a report illuminating the divide between the Millennials and their grandparents, the Matures. This poll again illustrates that point-retirees and the youngest jurors see the world quite differently. And geography makes a difference as well. When you look only at national polls, you get a skewed sense of perspective--just as you do when you assume someone feels a certain way because of their gender, generational assignment or socioeconomic status. With an issue as emotionally charged as hydro-fracking--the more you can know who holds what attitude and when--the better off you will be approaching trial in that venue. The national polls provide a baseline for understanding the general levels of public opinion, but not trial strategy.

Additional research on perception of hydraulic fracturing

Finally, there are several research studies (as opposed to polls or surveys) on public views of hydraulic fracturing. These provide us with a more controlled look at how attitudes, beliefs, values and perhaps some individual characteristics are related to perceptions of fracking. They are also, however, less accessible than polls and surveys since the findings are often buried deeply in pages of statistical analysis.

Following are brief summaries of two of the very few public and published (as opposed to industry-sponsored and private) research projects completed on fracking and public attitudes.

There are regional differences in attitudes toward fracking (Forbis & Kear, 2011). These differences boil down to whether the priority in the region is on environmental protection or on economic security. When comparing the Western region and the Northeast region, for example, politicians in the West emphasize economic gains and politicians in the Northeast emphasize protecting the environment. Their constituents (potential jurors) likely have similar sensibilities.

It should be noted that recent nationwide Gallup polls show concerns with the economy edging out environmental concerns. The financial concerns are clear and present, while

the environmental issues are theoretical and abstract to most people. It becomes far less theoretical if the drilling is taking place in the venue where the trial is to be held.

As noted above, economics and environmental concerns are in a reciprocal relationship with one another (one worry goes up as the other goes down). But when both issues are close to home, the dynamics change. When public skepticism about scientific testimony serving private interests is combined with a sense that “my drinking water tastes different than it did 5 years ago, but they say I shouldn’t worry”, the drilling interests have a difficult challenge in the public mind.

There may be some identifiable variables in individuals that point toward opposition to fracking (Berg, 2010). Variables such as whether one is a homeowner or renter, whether one opens the water bill, awareness of source of home drinking water, and even whether you are male or female seem fruitful for exploration. This is based on an initial study done in New York State and would need to be investigated further in venues specific to litigation and closer to the time of trial.

Summary: America is worried and skeptical about solutions

At a time when Americans are worried about the future, financially uncertain, and skeptical of the commitment of government to solve systemic problems in an increasingly overwhelming world, it is fair to say that the public is distressed. No problem becomes more frightening or fundamental than the need to trust the water we drink.

The data reviewed in this paper suggest there is a bias toward believing the opponents of hydraulic fracturing, and this bias is based in self-preservation tendencies coupled with mistrust of corporate and government authorities. If there is a chance drinking water could be tainted, everyone pays close attention.

The public tends to worry about that which has its’ attention. When crises arise, the public becomes concerned. That happens both on a distant level (with oil spills in the Gulf of Mexico) and locally (in the courthouse serving a hydro-fracking region). Adversaries in hydro fracking litigation face the same challenge--to convince jurors that they share juror values and concerns, and they applied the best science available to serve the public interests-- both economic and environmental. What must be of concern to defendants, as well as to government officials who are charged with protecting the public, is that a violation of trust when it comes to the environment affects people on a very deep and personal level. When the water is tainted, jurors fear, life as their community has known it, is over. Reassuring them to trust is a particularly daunting challenge in this era of mistrust and skepticism. 🗣️

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