Week of 3.26.10

"Gasland"

Will the boom in natural gas drilling contaminate America's water supply?

The Weekly Q

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In the debate over energy resources, natural gas is often considered a "lesser-of-evils". While it does release some greenhouse gases, natural gas burns cleaner than coal and oil, and is in plentiful supply—parts of the U.S. sit above some of the largest natural gas reserves on Earth. But a new boom in natural gas drilling, a process called "fracking", raises concerns about health and environmental risks.

This week, NOW talks with filmmaker Josh Fox about "Gasland", his Sundance award-winning documentary on the surprising consequences of natural gas drilling. Fox's film—inspired when the gas company came to his hometown—alleges chronic illness, animal-killing toxic waste, disastrous explosions, and regulatory missteps.

Related Link

Gasland Film Website: Watch the Trailer

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Viewer Comments

Commenter: Denver Pinedale, Wy
Fracking is not a last resort in all areas it is used as a primary opperation to get the oil and gas out of the ground in most areas. They do it on new wells and old wells not only those that are slowing down on production. There is also alot of areas where there is

huge fields of natural gas and oil well drilling that have not been harmed at all take for instance the biggest gas and oil field in the nation located in sublette county.

Commenter: josh bruntler
These comments are extremely ammusing. If the U.S. was solely populated by people like yourselves we would be living in the dark, still trying to figure out how to stay warm. God forbid all the traffic that comes by your house, that is called PEOPLE WORKING. Or the greed created by job creation, that would be called AMBITION. I know it is a lot easier for you all to pay ten guys to watch one fill in pot holes and call it job creation, but at the end of the day we need to create a products/services somewhere in this country in order to keep paying for your health care bill and socioeconomic research. There is a risk involved with anything, should we put a moratorium on automobiles and highways so we can sit back and study in order to find a way for the world to be perfect? It's not going to happen idiots, get used to it. The truth is the industry has done more research/studies in order to better their practices than you people could even imagine, because unlike yourselves they are hooked up with an industry that makes PROFITS, and dont have to call over to Congress for grant money to support their retarded theories.

Commenter: Josh G
WOW!! This is so one sided. I wish that everyone on here that is panicing could see all the regulations that the gas companies have to comply with. I also wish that someone with some knowlege about geology was on the show to explain what goes on underground during a Frac. The danger to surface drinking water is beyond insignificant. You can feel the frac at surface?? No. Not at all. Fracing is a last ditch effort?? Again. No.
People are scared of what they don't understand. The energy companies are given a bad name in the media and most of the information or portrayals are wrong or from fifty years ago. Please do not watch this and panic. It is not accurate or show anywhere near the whole picture.

Commenter: Faith in Edwardsville PA
You know. I do not support the natural gas drilling. What would we do for clean water to drink, wash our clothes in, and take showers? We wont be able to do anything. But thank you for showing us that this topic is highly important.

Everyone needs water to survive. There is a meeting here in Pennsylvania tomorrow at the Kingston Township building. So if anyone that comments on this, you know. And then Earth Day the 22nd is a protest down in Wilkes Barre Pa, on the Square.

This is highly important for everyone. And we all need to do something about it.

Commenter: Fay Muir
This is BOOM abd BUST economics - some dollars for a few years. What do we gain by getting dollars for gas and despoiling our air, water, natural viewsheds and wildlife forever.

Commenter: Cracker Jack
If you liked this, you should watch "Troubled Waters" be a PBS affiliate, AETN, the Arkansas Educational Television Network. The gas segment is near the end.

Commenter: Thomas Cole
This is a response to Mr. Gail Bloomer, Ph.D. A quick search of that name came up that he is a representative of a gas/oil company. He did make some good points about the drilling being the main cause of the contamination.

Arkansas' Public Television station, AETN, did an excellent documentary of the health of the water in the state and it is a must see. It addresses the water issues concerning natural gas near the end of the show, but the whole show kept me interested.

I was in the middle of the gas exploration in 2006 in Arkansas and many people leased their land for $25/acre b/c the gas companies had come to the state in the 1970's, signed a 5 year lease, then determined it unfeasable to drill and left/stopped payment after a year. I was suprised to learn that the author of the documentary had recieved over $4k/acre for the lease (I don't remember what he got). The most I have heard of in Arkansas is $750/acre, and that's from people holding out for 2 years while other nearby properties leased at $300

They're out to make money...and we like gas...so whatever.

Commenter: Peggy G.
If they are using chemicals which are dangeruous they shouldn't use them at all because it sounds scary to know something is in the earth which wasn't created but is man's chemicals, you should not destroy what he created. It sounds like someone knows this chemicals are bad but no one is doing anything about this drilling. It sounds like no one wants renewable energy because there is more money in those fossil fuels. It sounds like I don't want near any drilling and hope my neighbors feel likewise. They kill animals, humans, fish? Why doesn't someone ask Rendell to stop the drilling in PA?

Commenter: Michelle
To Just Tex,

It would be more productive if you told us the inaccuracies that you found with the report rather than ranting and being sacastic.

I don't know anything about fracking but I do know there is a tendency for oil, gas and chemical companies to go into areas where people are not well-educated, poor, and/or don't ask questions. The companies then exploit the resources with the permission of the community. But the community doesn't realize the long-term health and economic effects of their decision.

That is my tendency to believe a story like Gasland, because is unforetunately very common. So Just Tex, why is it wrong? And please no ranting peppered with sarcasm, just the facts please!

Commenter: Michelle
To Mr Gail Bloomer Ph.d (previous commenter),

I don't know anything about Fracking, first time I've ever heard of it. You are well qualified to talk about this issue, as it is your area of expertise.

As I understood from your comments, you don't think the story was accurate, and furthermore, you thought it was an attempt to further an agenda by the filmmaker and his sponsors. Ok, but how do you then explain the following?:

1. The guy who could like a fire with his faucet. And apparently other people in the neighborhood could do it as well.

2. The woman who had cats and a horse and all were losing their hair. The horse was also losing weight.

3. The people who were getting really sick, and lived in the same neighborhood.

4. That cocktail of chemicals that the filmmaker talked about. Did he make it up?

I haven't seen the entire movie yet, I have a feeling there are many more disheartening cases and evidence of a much bigger problem. If these cases are not the norm, why isn't more being done to help these people and to regulate at least the bad companies, because clearly they can't regulate themselves?

And most importantly, I will assume you have a family, would you feel 100% confident in the water that came out of your tap if you and your family lived in one of these communities? Would you be so quick to blame the problems that you may experience on highways, fertilizer farms and other industries?

Commenter: Richard
Another area where we need regulation. We're facing hard times and quick fixes like this will only make things worst---faster.

Commenter: Giacomo
1. The real resource is water, not gas. each well has useful lifetime of 15 years and jobs are not created on site, they are imported. the tradeoff is unlimited water forever versus 15 years of gas drilling.....

2. even if you control the fracking fliuds that are extracted after the process back on the surface, innumerable quantities remain in the ground. Liquids migrate through cohesion,

adhesion and the likes...you can't control it....it's an economically negative proposition to drill: the cost of the gas that you extract does not reflect its real cost.

Commenter: TomL in PA

Maybe Mr. Gail Bloomer should volunteer to go on 'NOW on PBS' ASAP to *PROVE* all his selectively-worded points on his "truths of fraking."

Think about this: That part of 2005 US Energy Policy Act that EXEMPTS gas drilling and fraking from the regulations and oversights of the national Safe Drinking Water Act, the Clean Air Act, and various regulations on waste disposal is often called the "Halliburton Loophole".

If the process is so clean, force the oil & gas industry to follow the same regulations based on the existing laws that apply to everyone else!

As far as drilling and fraking, it makes much more sense that if you:
A) punch a hole in the ground (and even through or near small aquifers and/or the surrounding groundwater saturation level), you create a draining point, then,
B) you drill the hole deeper to frak the rock stratas BELOW that drain by injecting millions of gallons of then "chemically-enhanced" local water under enormous pressures, and then,
C) pump that newly-contaminated water back out to "clean(?)" it up and put back into our water cycle (but it's impossible to get all that tainted stuff out, or cleaned entirely)... that CAN'T be GOOD.

It becomes a point of contamination.

Even an occasional drilling/fraking "mistake" still may cause problems that have far-reaching (and long-term) bad impacts. If not now, then later.

Then, SURPRISE! It's deemed "non-point source" water contamination, without anyone being responsible for mitigation, clean-up or compensation.

"Why, who knows FOR SURE where that stuff comes from? and "Can you PROVE that stuff wasn't there before?"

I've lived with this same situation in the soft coal region of central Pennsylvania all my life. Even if fraking may work properly (???) 99% of the time -- which it DOESN'T -- it's just not worth risking our fresh water to drill, drill, drill EVERYWHERE at the high levels that are being projected. Just 1% of 200,000 wells equals 2,000 points of contamination.

Is that acceptable? Especially if it's your town, your home, your kids? I know it's not for me.

Think about this: just one company alone, Chesapeake Energy Corp. from Oklahoma has 1.6 million acres in the Marcellus shale. Hmm, I wonder how many wells they might bring to PA over the next decade or so?

Other countries and continents are in bad shape economically and health-wise for lack of potable water.

And our odd interpretation of GREED by the same ol' players in the misuse of our natural resources as "energy freedom" can lead to the same problem here.

If we don't see it, we often don't consider it a problem. If these extraction mistakes don't immediately affect us personally, many might not see it as a a big issue -- that's human nature. And industry and profiteers know that -- and take advantage of it for their HUGE gains and to our HUGE detriment.

I'm a capitalist, but I'm a realist first. This isn't "energy freedom" in any way, shape, or form.
We are trading our future in supplying energy to the GLOBAL markets through GLOBAL energy entities.

I hope we wise up as a civilization.

Hopefully, we *CAN* fix 'stupid.'

Commenter: Margaret Foster
Gasland should be seen by as many people as possible. Is a DVD available for purchase? Alternatively, how can we arrange a showing in our region?

Our community of Port Jefferson in Long Island, NY, shows a series of documentary films in the fall and in the spring. Planning for the fall 2010 series will begin soon. Please make a film available.

Our water supply is too precious to risk. If we need more gas, we need to find a better way to extract the gas and a better way to monitor and evaluate the process.

I recently came across an article that supports information presented in the NOW program about pollution in Dimock PA. According to the article by Tom Pelton in the Winter 2010 issue of the Magazine of the Chespeake Bay Foundation, one citizen in Dimock asked the gas comp[any to supply drinking water after her well exploded and her water was contaminated with methane. For about a year, the Texas-based company refused. It was only after a local paper published a story about this that the company dropped off some bottle water at her home.

Commenter: Jim
This video shows one side of the truth but next time u go to turn ur heater hot water or stove on and u complain about the gas well punch ur self because those big bad evil wells help all ur hipocritic selves use alot of the things in ur house work. Not only that but it helps put food my table and many other peoples table.

Commenter: Aaron
Hello, I greatly admire this program. This story was appalling to me, and I knew nothing about "fracking" until I saw this edition of NOW. Unbelievable that the activities of human beings on this planet have screwed it up and poisoned it so badly! Mining or natural gas drilling, which creates pools of toxic waste water, which then leaks into ground water, poisoning animals and creating flammable tap water...An abomination! This was one of NOW's best and most topical editions...a vivid interview, with startling footage. Very effective and affecting.

Commenter: Oobie Doobie
This report was a bunch of crap: one-sided, without anyone with an opposing viewpoint given the opportunity to refute the "facts" presented by Mr. Fox.

Unfair and unbalanced.

Commenter: No I don't
money is the root of all evil.

Commenter: Michelle
Any plans to repeat this for those of us who missed it? Or better yet, any plans to air Gasland on PBS?

Commenter: howe
A comment by Prof. Bloomer has some really great talking points, but it almost sounds like a liberal voting for health care reform without worrying about unintended consequences. There are several million people concerned about the conqequence of hydraulic fracturing. There may be some plausible reasons for why people are getting sick, water tasting nasty, and animals losing their hair, spicket water catching fire etc. maybe it should be thoroughly investigated. An immediate investigation by city and federal officials to insure the safety of the public should be done sooner rather than later. The gas companies should also be involved in this endeavor at least financially to separate truth from myth. It is a pathetic situation when something like this has to be a talking points argument to determine who may be the best at playing a game of grammatical chess.

Commenter: howe
I have always worried about what fracturing really does underground, since changes to the Earth's mantle cannot be assumed to be without reaction.

Commenter: John
Thank you for this excellent story! We all need to remember that it is the job of the government to protect the common citizens from criminal behavior on the part of

megacorps. Clearly, the US government has failed to do their job in this case. The previous administration exempted these companies from the Clean Water Act. Now it is time for the current administration to clean up this mess.

Also, all of the companies involved in drilling for gas must be held accountable for the damage they have done.

Contaminated water is NOT acceptable. If energy companies can't do it right then let's nationalize the energy industry.

Commenter: Laura Arney
Try going a week without drinking the water out of your faucet or showering/bathing without using water from your faucet. Where would you get water? What would it cost? How would your life change? In essence, you are making a trade by saying fuel for heat and electricity is preferable to clean water... We may be inspired to conserve if that is the issue. Water for life is preferable.

Commenter: KTaylor
Another con, perpetrated on those who are suffering economically at the hand of those who run this same con (and Many others), using manipulated statistics and counting on their influence on government agencies to overlook and cover-up.

As clean water gets more scarce and the conflict over water rights that has gone on since biblical times becomes more evident, who is to say what evil entity might foul our water for their own profit? This would certainly not be the first time someone poisoned the well.

Commenter: James Herman
Thousands of acres of land in New York state are leased
to gas exploration and extraction. New York state's
Marcellus shale contains huge amounts of natural gas.

To understand the scale one must compare existing shale gas areas New York state has shale most like the Barnett shale in Texas. So check out this comparison. (all the info is available from the cited sources)

Texas Commission on Environmental Quality:

Barnett Shale is a hydrocarbon-producing geological formation consisting of sedimentary rocks and stretching from the city of Dallas west and south, covering 5,000 square miles and 21 counties.
http://www.tceq.state.tx.us/implementation/barnettshale/bshale-main

Hazen and Sawyer's Final Impact Assessment Report for New York City:

The Marcellus shale is one of the largest potential sources of developable energy in the U.S. and covers an area of 95,000 square miles; the New York State portion is approximately18,700 square miles

New York state has over 3.7 times the square miles of
land that can be exploited for natural gas in the Marcellus shale alone. This is considering that
only the Marcellus shale is taken into account in reality there are several strata that contain extractable natural gas. With this huge reserve of natural gas available it would make sense to have a
cumulative scientific study of the entire process from cradle to grave carried out by an agency which does not have a profit motive to extract the natural
gas.

Commenter: president@bceq.org
If you live in The Bronx or lower Westchester, please try to join us this Sunday, April 11th at Riverdale Ethical Culture Society (10471)11AM to hear a talk by JPC President Anne-Marie Garti on Hydrofracking in the Marcellus Shale.

Commenter: Beo Lim
The greatest danger of gas drilling is drinking water contamination. Thank you for pointing out that this is not only a problem for the local residents where gas drilling is occurring but it is a serious problem for the many more residents of urban areas like New York City and Philadelphia whose source of water is from upstate NY and north-east Pennsylvania.

In addition to the health issues of the local residents and animals from contaminated water I like to point out another "side effect" of the gas drilling activities. Gas drilling requires heavy equipments and the transportation of millions of gallons of water and drilling fluid. The trucks carrying these equipments and water are so heavy they wreak many of the roads. An example is Spring Lake Road, off Route 187 in Wyalusing, PA - a paved road that that been torn up and is now one of the worst "gravel" road I have ever experienced.

Gas companies are currently exempt from the regulations of the Clean Waters Act. Let us hope Congress will remove this exemption soon. Gas drilling companies should comply with the Clean Waters Act just like you and me.

Commenter: James Hughes
You people are wrong....
The problem you talk about can be avoided...Is being address....a point you forgot to mentioned..

Get a life.look at the big picture...

You tree huggers will destroy this country

Commenter: John Harrison
You don't know what you are talking about! you SHOULD find the facts before you AIR!!

Commenter: Lynne
Proponents of fracking repeatedly accuse those who oppose gas extraction of "not including the all facts" or "not being scientific" or "being subsidized by sponsors" (Like there's a lot of money to be made by NOT drilling?) or "misrepresenting."

And yet...to a person (reading through the pro-drilling comments posted here), it's clear that the pro-drilling arguments self-censor -- and are undoubtedly on the pay (perhaps as leased landowners, perhaps as employees, perhaps as shareholders) of the gas companies.

Why do pro-drilling apologists repeatedly ignore the realities communities across the country are actually experiencing? If problems with gas extraction are mentioned at all, they are referred to as unusual cases "errors" or "irregularities" that have nothing to do with fracking -- and have quick & easy fixes that are overseen by qualified personnel. They never seem to talk to the people living in Dimock,PA.

And, more egregiously, the proponents of gas extraction deliberately overlook the externalities of this industry. Costs (fiscal & environmental) that have nothing to do with the actual act of fracking (injecting a high-pressured slurry of water & chemicals into a drilling well), but are necessary nonetheless to extract the gas, like air pollution from the fossil fuels needed to run compressors & trucks, 24/7 industrial noise, landscape destruction, pipelines, aquifer depletion (each well requires millions of gallons), the lack of proper treatment plants capable of cleaning up contaminated water, radioactive waste water, evaporating open pits of poison water, understaffed govt' agencies tasked with overseeing tens of thousands of drilling sites, etc. Opponents to gas drilling painfully list these (and other) objections over and over again -- but, as important any one of them are, those hazards aren't "fracking" per se...so they don't count.

What will it take to get past pro-drilling denial? Is it denial, or just plain dollars and cents?

Maybe you can convince Congress that fracking is safe (since it's, as a body, on the pay of the oil & gas industry in the form of campaign contributions and other goodies to ensure re-election), if you limit your definition of "fracking" to carefully presented textbook examples of how the injection procedure is done in isolation of everything else associated with it.

But you aren't convincing people who's water, soil, air, property values and landscapes are at risk of being sacrificed to the global energy markets, because common sense, not a college degree in geo-engineering, is all it takes to figure out what's really going on here.

Commenter: River Carries You
Each and every business person and legislator who participated lying to, deceiving and poisoning our people should be forced to drink the water these families have, cook and eat food grown in water these families have, and shower with water these families have. And watch as their children and grand children drink and eat... Too.
Then as these people and animals die be prosecuted for their murders. Only then will people and businesses be accountable and responsible.
And who were those people READING off scripts given to them from the oil/gas companies, they need to drink it too... We are talking famine. Can plants thrive in this toxic soup?

Commenter: Mike
You guys didn't mention that Debra Winger was the executive producer of the film and is herself a neighbor of Mr Fox and a long time activist against fossil fuels. Nor did you mention that she enlisted the help of her friend and Sundance founder Robert Redford (also a long standing natural gas opponent) in marketing the film.

Link: http://www.lohud.com/article/20100329/NEWS/303290021/0/NEWS05/Debra-Winger-s-latest-role-Activist

Commenter: William Weaver
I feel that there is no choice but to expand the use of gas, and therefore, continue exploration. However, there has to be a better way to do the drilling. If there isn't a better way to drill at this time, then there should be a moratorium on drilling until a safer, more environmentally friendly process is developed.

Commenter: Pete F.
OK, so I guess PBS might call this GASLAND documentary cutting edge "journalism". But it wasn't even close to any know journalist standards. Edward R. Morrow and Walter Cronkite would both have called Gasland bias editorial commentary. It did attempt at one point to show actual subject matter analysis, but it failed there too, by only examining one side of the issue. PBS your standards have dropped below the level of any creatable journalistic litmus test. I would hope this PBS producer received a formal 'letter of reprimand' for a very unprofessional program meant to deceive rather than to educate. As Joe Friday would say... PBS just give me the facts. Education of the public does not include telling them what to think, but rather to provide valid information and allowing them to decide for themselves. This PBS program was yelling "if you don't believe my personal viewpoint you're an idiot". I'm sure lots of PBS sheep will follow you blindly... It's the Glenn Beck syndrome in reverse... Shame on you PBS.

Commenter: Anne Eskridge
I hope seeing this program is not too late for our family. The company is due to bring in a very heavy piece of equipment to do a "sounding" to determine if there is enough gas to

drill. Our property in rural Greene County, Alabamais, has a family camp house anad is a 640 acre tree farm that is also used for hunting.
We felt confident that the process was safe and that Alabama's EPA would closely monitor the process. We did get a lawyer, but all he did was to get us more money for permission to drill.
I hope it is not to late to stop the drilling or maybe we'll be lucky and the "sounding" will determine that there is not enough gas to drill. But they know there is gas there and if it isn't on our land, it will likely be close by. We don't know where our well water comes from, if there are differnt aquifers in the area our or if our land and water would be effected if they did drill nearby.
It is really scary.

Commenter: Dan Chance
Sometimes we have to face uncomfortable facts in order to save our lives. Obesity, diabetes, alcoholism are among them. Individuals have been facing up to their responsibility for their own lives for a long time now. We as a society have a terrible addiction to petroleum, that was acquired about the same time that smoking was believed to be benign. Doctors advertised for cigarettes while Marlboro men died of lung cancer. Buying oil overseas has cost this country trillions of our national treasure and eventually we will probably be tagged for the health care costs that will be incurred by people who lived near the wells that supplied us. But now the problem is coming nearer to home as we attempt to cut our bills to foreign countries for the oil we THINK we must have. There is NO SAFE WAY TO GET NATURAL GAS FROM DEEP SHALES! We must not trade a lifetime (shorter, to be sure)of expensive illness for a few years of lower cost fuel. The fuel problem can be solved with solar, wind and biofuels. We got a late start and we must push through this problem with determination in spite or hardship but we must not add to the problem by making huge segments of our people deathly ill in the process.

Commenter: Rebecca Sears
Horrifying. I've known about this from a Pennsylvania friend who's home is uninhabitable now. I've spent many wonderful times in this beautiful area of our country. Gone forever now.
Thank you for airing this program.

Commenter: Sherry McClellan
Thank you for being a credible, reliable source of the truth. Please continue to provide these stories; especially for the ones who can least afford to be helped and who are exploited the most, at first...but, they are the bell-weathers for those who are fated to follow them over the precipice; which will be all of us, ultimately.

Commenter: chip
I live up here and will challenge mr bloomers that is since he has his head up his as I can see and that flat out liar tex which i have heard the lowest form of a white man comes out of that disgusting state texass that if you want the truth go to DamascusCitazens.org and

you will find the truth I have personally told penn state tom murphy he is a liar and the dep is not for protection but the gas production since all of the gas will be sold overseas and as far as those phoney job offers thats all for out of state people already employed by theis company many of which are criminals child molesters, rapists, and you name it! I am a veteran and I fought for this country not scumbag oil companies that rape our land and destroy our country in the name of profit!! The phoney NOWPA/SCPOA both have liars like marianne s. and noel swindler who lie consistantly and pathologicaly to forego thier needs. which is to collect money and leave us with a land that will look like Hiroshima after the blast! who is going to buy my land when Im told I cant live on it anymore when the water is no good? then buy us out you filthy murderers! enough to get away from marshellus shale!

Commenter: Chris Swan

I am interested in Jim Cramer's take on this? I enjoy Mad Money, the TV Show and am a Picken's Plan supporter. However, I am also a devotee to NOW, The Journal, Frontline and most other NPR and PBS shows.

Last week Jim Cramer had the interviewed Maurice Hinchey, NY Congressman that has called for congressional hearings on the EPA's oversight of Natural Gas Drilling. I hope the hearings and other future programs will get to the bottom of this problem, so that we can make an informed decision as a society.

I think the response below from Gail Bloomer is also quite insightful. These wells are very deep (6,000 feet) much deeper than most water supply wells. Josh Fox was definitely correct when he said that the only way to clean up contaminated water supplies is to not pollute them in the first place. I have worked with environmental engineering firms for 16 years and this is by far the most economically viable approach.

Water comes first and then power and energy. You simply can not live without clean water. However, if they can drill for natural gas safely, then I am all for it. This NOW program certainly made it sound like there are significant questions concerning this. Burning Natural Gas is much better for the environment than coal or oil, and as much as I support renewable energy it is not going to happen overnight, and certain applications are like running automobiles and trucks is very challenging.

I think most Americans have awakened to the fact that as with big banks, we can not expect them to police themselves, and we can't expect oil and gas producer to police themselves.

Thanks for producing this program. Where is the Frontline investigation?

Chris Swan

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Chris Swan

Commenter: Ian

We need to find ways of economically extracting gas from these shale fields in such a way that the environment is not compromised. This has been done for off-shore oil and gas extraction in the North Sea for several decades. With appropriate controls and a legal duty of care imposed on the companies involved, it should be possible to extract the gas safely for the benefit of us all in the USA.
We need this fuel to become less dependent on volatile areas of the world that currently supply the US with oil.
Natural gas fueled power stations can be built quickly and have a very high efficiency if a combined cycle of generation is used (gas turbines, heat recovery steam generators and steam turbines). The emissions from such power stations is far less damaging to the environment than coal-burning stations.
It is totally unrealistic to replace current coal burning power stations with wind turbines and/or solar photovoltaic panels. Do the math! These technologies will be marginal suppliers of electricity for decades and we need to resolve these problems urgently.
We need definitive policies to save energy in industrial and municipal facilities. One kiloWatt saved is five times less expensive to achieve than a "sustainable" kiloWatt.
Even with efficiency savings, it will be necessary to construct hundreds of new small-scale nuclear power stations (about 1 to 2 GW each) and combined cycle gas-fired

power stations to meet current and future electrical energy needs.
What is needed is a sensible, economic and executable energy policy for the USA.

Commenter: David Thomas
Finally glad to see someone reveal just what this type of mining can lead to. I am a 3rd generation owner of a family cottage in Somerset, PA; an area now being explored for just this type of mining. Sadly the area is still feeling the impact of a bad economy and unemployment is still high so you can imagine the impact when mining companies like Chief Oil come in waving money around it can get attention. Unfortunately many people fail to look at the long term impact mining such as this will produce. Once the gas is gone in 15-20 years companies like Chief will pack up and move on to the next victim and leave areas like Somerset a mess that will take generations to clean up if it can be cleaned up at all. I can only hope that the PA DEP will wake up and stop this type of mining altogether before we destroy the entire watershed.
Thank you for the opportunity to comment
D Thomas
Somerset, PA

Commenter: Art
This was a most interesting topic, more people need to know about this problem

Commenter: Mark
Even renewables have hidden environmental costs. See the following:

http://www.pbs.org/newshour/bb/asia/july-dec09/china_12-14.html

Also be aware that economic affordability is important too. You can have clean or you can have cheap. I doubt you can have both

Commenter: Bill Lehr
Ah, when one combines greed with arrogance and a total ignorance of the laws of nature, it's not surprising
that man thinks he can rape the environment at no cost. I seem to remember a river in Cleveland Ohio that was so polluted that it caught fire.
I wonder whether the natural gas recovery industry has ever considered the use of liquid nitrogen as a fracturing fluid? It is obviously a nontoxic,high pressure way to break open occluded gas with a liquid at 270 degrees below zero that, by physical expansion will open up formations. Since the atmosphere is composed of some 80% nitrogen, it can hardly be considered a health threat.
Using naturally occurring compounds would be a reasonable means of respecting natural law and avoiding a challenge of Newton's third law; for every action there is an opposite and equal reaction.
Moral of the story...Don't mess with nature!

Commenter: Karen Randall
I live in Rifle Co in Garfield County and my husband and I have a business, a pilot escort service that moves oversize equipment mostly for the gas companies. I was born and raised here. I could see what the uranium boom did for here. Nothing good. Now when I pilot far up in the mountains, I have smelled the chemicals into the air. I have seen how much water is used for fracing. The water around here has always been terrible to drink. I live in town and when I turn my water on it turns brown at times. We do not drink the water, we get bottled water. I do not know if this is because of gas drilling or not.
You are right, it is a dilima, this is our bread and butter, but it is not worth ruining the land and water. If this is shut down which I doubt because the gas companies have a lot of money and because of economics here, work seems to be picking up. They can buy politicians and they certainly have.
The bible says those ruining the earth will certainly come to ruin. So I believe that only a higher power can solve all the problems here on the earth and not man. I do appreciate you trying to get the word out and was impressed with your news clip. Very Good

Commenter: Dave Walczak
This is the best interview and constructive argument for protecting our drinking water I have seen to date. Josh Fox's calm and informed delivery makes his perspectives of drilling dangers extremely hard to refute. Planners and law makers throughout NYS would benefit seeing this to balance out the perceived economic boom.

Commenter: Ron Hawkins
I lived for seventy years at Oilfield,Illinois.Oil wells at 2200-2400 feet deep have been river fraced since 1958.Their isn't any problem with oil in drinking water.596 chemicals in a frac job is nuts.Mr. Fox facts are not quite right.He should come to Illinois and them right.

Ron

Commenter: Drew Barlow
Sadly, we can talk and protest till the cows come home, but greedy politicians will bow to those who fill their pockets. Would we condemn those who, for example, shot the drivers who delivered poison gas to the Nazi concentration camps? Those who blew up the trains that transported the Jews? I guarantee if these people had to pay their truck drivers ten times as much because people were shooting at them, the profit margin would decrease markedly.

Commenter: Sheila Dugan
Josh has done a marvelous job of depicting the entire situation. The people in the Marcellus shale area who sign leases are in dire economic straits and then, along comes the landman and he makes them an offer they can't refuse. Fortunately, there are many wonderful people like Josh and his family who know that no amount of money can buy anything like what we have here. It is a paradise. Our land is precious. Our water is even more precious.

One of the reasons that Pennsylvania is such a target,of course, is that there is no tax on the oil and gas industry. The irony of it all is depicted by the KEEP PENNSYLVANIA BEAUTIFUL signs all over the state.

Commenter: Jack Joyce
I am ready to fight against this pernicious fraud. I am a means person in the standoff between end and means. The end people cannot be faulted about their goal but are to be condemned for lying about their methods of achieving the goal. This devious behavior traduces the very core of republican democracy which is based on truthful public discourse and honest voting.
Yes we would like to have cleaner and cheaper fuel for our internal combustion engines but certainly not at the cost of contaminating aquafirs and ground water.

Commenter: Barry R. Pelts
It amazes me that these gas producers are operating outside of regulation other than the most blatant discharge of WOW fluids into a running stream and no agency in Arkansas is willing to take them on. Not ADEQ, nor EPA. They have been exempted from regulation by the Energy Act of 2005 and they are running ahead of the law and legislation. It's a rush to seize land and punch holes in the earth and our aquifers are being contaminated at an alarming rate. Only now that oilfield pollution threatens Lake Maumelle, city water supply of La Petite Roche, is attention being focused on the absolute lack of regard for the waters of the state.

Commenter: S. Lenhart
Thank you, so much, for this very informative piece. I wish every person in America would watch it. Very, very scary situation & to think it's already been going on for 10 years. I will surely try to find a way to tell others of this ghastly & destructive process. THANK YOU!

Commenter: See Additionally
Columbia University made a similar research pamphlet study of the Hancock and Marcellus Shale.

Please see this at
http://www.urbandesignlab.columbia.edu/sitefiles/file/HancockAndTheMarcellusShale.pdf

Commenter: David Plemel
I live in Wyoming and I have seen the surface devestation from drilling. There are proposals to use my area for CO2 sequestration. This is high pressure pumping of CO2 into the same underground that gas drilling has fractured for methane recovery. There are no facts that fracturing has had adverse results to the underground water. There have been reports of contaminated well water and burning water. What do you think the reports would be with presurized CO2 moving through the geology formations well water

comes from. I am strongly aposed to fracturing the geology to extract any natural recources. We only find out the results aftere the damage is done.

Commenter: Kitty
Hydraulic fracturing needs "frac" sand and Chippewa Falls, Wi and Chippewa County is being hit with mining of this frac sand. Processing it requires water to clean it, drying which requires plenty of fuel, and the result is a large amount of silica containing "dust" being emitted into the surrounding air. Environmental concerns abound! Quarries in the county and region will feed the processsing plant which is located in the City Limits of Chippewa Falls. What a diaster. City officials have "sold" the city to a Canadian Sand and Proppant, Inc. company which is completely devoid of any previous experience. Sand scouting and engineering is going on daily to find more. The entire NW area of Wisconsin is under seige for this special kind of frac sand. The worst part of all this is that the strip mining process will be taking HILLS from the area. It will be no different than Mountain Top Removal strategies in Appalachia!!! Down with Hydraulic Fracturing and Down with Hilltop Removal in Wisconsin. This country must be responsible for rethinking its approach to consumption and energy use and get busy to find alternative fuels, use their energies to ban this type of environmental destruction, and realize that there is more the hydraulic fracturing destruction business in areas where gas/oil exploration is going on. Other parts of the USA are also being exploited!!!

Commenter: Andrew
Thank you for exposing the good in Americans and how we are come together in the face of problems like this. Your story was sobering, and at the same time heartening. I look forward to seeing your portrayal of the "backbone" of America, people with a sense of humor and resolve.

Commenter: Sally in Upstate NY
Thank you for this excellent show on this important topic and the risks to our water!

Commenter: Martha Fay
What can we do to stop this? If those already injured by the process file a class action suit? Can some group file a class action suit on behalf of everyone who needs water to survive? This is outrageous that our government is allowing this. In effect, they are waging war on the water system in this country. I think the big gas companies owners and all of the Congress and Senate should be made to drink the contaminated water.

If we wait for our government to act, we are screwed.

Commenter: D Bassett
Regarding energy independence, it's important to note that 50% of all Marcellus Shale natural gas is slated for EXPORT. This is about profit generation for the gas companies and their shareholders, not about protecting the U.S. from foreign energy dependency.

Regarding job creation, most of the good jobs are imported from Texas, Oklahoma - the home states of the natural gas companies. Only the semi-skilled jobs, the lower-paying positions, go to locals.

Commenter: Allison
Thank you-once again-all on NOW's staff for highlighting the...possible..side effects associated with Fracking. I try hard to stay informed but you and Mr. Fox blindsided me. I felt myself start to scream in horror as each animal, human and water faucet's malady were exhibited. POSSIBLE side effects, hmm? What the BE-Jesus else would, could, ever cause such eerily repetetive maladies happening across the nation to heretofore healthy individuals? Whoa wait...! Wasn't some WV Repub whining about the EPA to the President at that retreat a while back? Yeah~whining over regs and scared of losing jobs! IN-credible. It makes no DIFF-erence HOW much rope they get-its never enough. I will find those who sit on the appropriate committees overseeing fracking AND the EPA and; as I love to do, ignite some shorts with the facts and figures I get together! I'll personally fry all their pants-but good!LOVE YOU NOW ....and always.

Commenter: Just Tex
Bravo! Congratulations are certainly called for!!

This story on GASLAND is a very impressive communique!!

It is indeed rare for NOW, or anyone else, to so artfully compile such an audacious masterpiece of slight of hand and disinformation. Perhaps deserving mention at the next meetings of the Michael Moore Center for Docu-Drama, and at the Leni Riefenstahl Institute of Fine Film Making.

The quality of this carefully worded propaganda is so high, it's not unreasonable to assume that Joseph Goebbels himself could have awarded NOW's dissertation on GASLAND for a Rudolf Hess trophy, at the very least!

It would take an impressive production, filled with thousands of actual fact filled words, to properly disassemble and parse every false portrayal and mischaracterization presented by NOW, on behalf of the GASLAND screed.

So many words in fact, that it's likely the average person's eyes would glaze over and their ears might ring with tinnitus, before the safe reality and long history of careful deep subsurface hydraulic fracturing in tough geologic hydrocarbon bearing rock formations, could be accurately portrayed, to effect public perception with knowledge, rather than have them accept Mr. Fox's compact but crafty prevarications.

So again, congratulations for presenting another far less than accurate, fully one sided argument, to America and to the world.

This masterwork demonstrates your clear and obvious dedication to your craft of Yellow Journalism. And is, and likely will remain, among the more important quintessential

models to study and possibly emulate, by future generations of professional Agitprops. And, even for the more common but equally vociferous and boorish amateur propagandist.

Commenter: **Gary Hogan**

The Industry of Oil and Gas has a history of non environmental protections and lobby to protect themselves and their profits from acessing these Natural Resources at the peril of other natural resources such as water and clean air. Why else woulf they ask Mr Chaney and Bush to get them exception to these federal laws ? This Industry promotes themselves as true Americanswrapping themselves in an American flag. Saying they are working to make us independent of middle east oil. Any one see an effort to fuel american cars with NG ? Or even retool Texas power plants to use cheaper dirt coal fuel for electricity ? NO This industry is just like what is gone wrong with America and AMerican companies they are in it for the pure greed of themselves at the sake of everything else. OR they would be making it their mission to DO IT RIGHT Stop walking all over peoplesa rights and leaving an environmental nightmare in their wake. Anyone who can read this can find the trueth for themselves. Google the History of this industry Gas is not Clean burning fuel . Maybe Cleaner burning BUT in it's wake we are destroying nature land , public federal land , water and air poluuting it all and not because they can not do it better but because they really do not care because that costs their bottom profit line and water is their concern only becasue they need millions of gallong for every well to get the gas.
Most Americans who live in urban settings are going to ruin their quality of life as will many who have rural land without mineral interest will suffer for the greed of this Industry

Commenter: **Mr. Gail Bloomer, Ph.D.**

Your coverage of "Gasland" and interview with Mr. Josh Fox was disappointing in it's distortion of facts and anecdotal examples of malpractices on the part of a few oil and gas companies. "Fracking" of hydrocarbon reservoirs has been an accepted practice for more than a century. The technique does not represent a company's desperate attempt to extract oil or gas, only a technique to optimize the benefits of the initial capital expenditure. There are so many distortions of the truth in this documentary it is difficult to know where to start. Mr. Fox represents the swarms of lawyers, politicians, PR people, personalities, economists and many other non-qualified people hi-jacking scientific studies with very few facts and a large vacuum of knowledge of the subjects on which they speak.The method of fracking commonly used today does not include the use of any strange, toxic chemicals. It uses the same water that is compatible with the reservoir water plus a simple surfactant (viscosity breaker or detergent). The fluids that contain the toxic chemicals are found in the drilling fluids prior to the fracking, and they are kept in EPA approved liner pits (leaks occur rarely and they are simply cleaned up with vacuium trucks for proper disposal). Today it is rare to find a well that is not fracked. Having done a geologic thesis in the subject reservoir formations in the Mohawk Valley and southward, I can call to mind the many farmers that had methane in their well waters long before drilling started in the area. They even used it to fuel local generators for their lights and milking machines. The water supply for the New York and Philadelphia metroplex is from the surface watershed found in the Catskill and Delaware Basins, not

from subsurface wells. No contamination need be feared from drilling, perhaps from highways, fertilizer from farms, and other industrial activity, but those watersheds are well protected by New York's DEP. Arkansas was mentioned as an area of fracing pollution and I can find no reference to that at all. Oklahoma, like many oil- and gas-rich areas have had hydrocarbons in their aquifers since th earliest settlers. No doubt, there are rare times when an aquifer is contaminated due to poor drilling and completion practices, and those operators should be required to fix the problem, and it can be fixed. As the co-founder of one of the earliest, if not the first, envrionmental consulting companies in the United States, I find Mr. Fox's film suggestive of an agenda in which he or his sponsors are complicit. That is not unusual nor illegal, but the mis-use of facts is not what I would expect of PBS or Sundance. If that is what you like, I can make up all sorts of things and sprinkle them with anecdotal facts to weave a believable story involving the big bad wolf stalking the average citizen.

Commenter: Joie

Most of my concern about the gas operations is not actually the drilling but the manic pace that is occurring. This, I believe is bringing on huge problems. Apart from the actual drilling and fracking there are other situations that need to be addressed. One is economic. With the sudden onslaught of large populations of men relocating to the drilling area, there are situations arising where costs increase such as rents. What does this do to the local people that need affordable housing? Sometimes the sudden money coming to town can bring greed or corruption. Another area is the sudden increase of traffic and truck noise. What this mean to me is that I cannot sit on my porch in town. I also cannot sit on my back patio without the smell of diesel. The noise with the engine brakes is disturbing especially at night. In other words, it wakes me at night. And the damage to the roads by the heavy trucks and equipment is a whole other issue. All said and done my once quiet jogs on back roads and the valley are now ruined with the trucks pacing back and forth at their incredible and frantic pace. I have recently moved from the city only to move to the city. This sudden activity I find disheartening and threatening to my once quiet and peaceful life.

Commenter: Miguel Rodenta

The program failed to comment on subsidence. If the fracking can be felt above ground, surely the voids created will eventually collapse.

Commenter: Robert Gatz

I just finished viewing the episode on "Gasland" and was totally shocked. I'll be honest and state that I had championed the cause for natural gas as a fuel to diminish our need for foreign oil.

What disgusted me about the story is that the previous administration exempted the companies involved in drilling for gas from the Clean Water Act. It doesn't take a mental giant to see the harm that has been done to many community's water table. The typical big corporate "There is no proof" mentality is just greed run rampant.

As of now, March 27, 2010, I will no longer be an advocate. The only clean energy is renewable energy. Wind, Sun and Water nothing else. Let's put health and welfare before profit.

Commenter: Susan Mims
What in the world makes any of us think that deliberately fracturing any layer of this planet would be okay and without side effects. We know that our water supply is naturally filtered above and below ground. Old fashioned mining left behind toxic polluted areas that are wasteland. Water totally left toxic, and now we are going all over the US under the guise that only .05 to .5 percent of the "product" used in fracturing is toxic and does not pose a risk. They do not tell you that we are in reference to millions of gallons of "product" and those percentages are very large amounts. How can this practice be going on in so many states for so long that we are just now finding out about the possible side effects? When you look at the states involved, we are in danger of making most of North America uninhabitable. Water is the source of all of our life - vegetative and animal. I cannot believe that no one would have thought that this process did not need to be regulated by the EPA.

Commenter: jeff
I watched this program and came away pretty pissed off but not surprised. The history of our nation is filled with stories like this, remember Love Canal in Erie New York. What is so troubling to me is how short sited we as a nation are. Here's a fact, we can't live without good clean drinkable water, period.
We can live without energy. I know that sounds extreme but people need to think long and hard about this kind of drilling for gas and the toxic waste it produces.

I can't even believe that New York would even consider letting this kind of drilling to happen anywhere near the drinking water of millions of people, and for what a few jobs and a few years of natural gas?

Now needs to reword that weekly question. While I am against the kind of drilling show in this film, I am not against drilling if it can be done safely and makes good sound economic sense in the long term.

Commenter: Brent Hull
Is lighting your faucet to check for fireballs an alternative to using a radon test kit?

Commenter: bob gabbard
Thanks for the revelation of what lots of folks already knew.. I lived in Mesa County and watched the development of gas wells in Garfield and Mesa as well as eastern Utah.. I have always suspected that Wasting disease for elk and deer, and some species of trout were in some way linked to the natural water system. When voicing my opinion I was totally ignored. Josh Fox stated it correctly you cannot expect poisons to not have an adverse affect on living organisms. So we are reprieved for a few years on fossil fuels but at a cost similar to Russian roulette.

Commenter: Florence Carnahan
NYC is protecting its watershed from drilling. Small communities in central NY state are attempting to do the same but without the clout a major urban area has. What the major cities have to think about is that the rural areas where most of the drilling will probably take place are the "breadbasket" for their fresh produce, baked goods, pasture raised meats, special cheeses, maple syrup and honey, fresh flowers, etc. are raised. It is also the place where hunters and fishermen flock, where tourists come to get away from the city. It has been that way for generations. Why would anyone want to contaminate the places that provide them with repast and respite? What we need in the Marcellus Shale area is the support of the people who enjoy the fruits of our labor and our countryside.

Commenter: Frank Easterling
There is a company in Stuart, FL by the name of Ecosphere which has developed a patented, proven technology which solves most, if not all, of the problems presented in the documentary. Feel free to research this company (symbol: ESPH.OB).

Commenter: Dave W.
I think a class action lawsuit should be pursued immediately against the gas companies

Commenter: Laura Neiman
Stop Natural Gas Driling!

Commenter: Roxanna Marinak
Thanks so much for bring to the forefront such controversial subjects that main stream television ignores

Commenter: Gerry delong
My daughter who lives in Louisiana and teaches science

was approached by the gas company to lease her ground under her house and she refused but everyone around her was taken in by a chance to profit.i am looking on your site to see if the documentary film can be rented..Your program is a don;t miss for me.. Thank you..Gerry Delong

Commenter: Bonnie Hoag
Thank you for this important expose.

Could someone also expose the geoengineering techniques which are coming into play, especially now at the close of the Monterey, CA conference which intends to set "guidelines for field testing" techniques like Solar Radiation Management... which well, frankly, is just f-in' insane.

Please contact me at the Bonnefire Coalition
bonne-fire@yahoo.com or Rosalind Peterson at info@californiaskywatch.com.

Are we unfolding... or unraveling?

Bonnie Hoag 518-854-7764 (NY state)

Commenter: William Zaffer
I saw a physicists talk at Arizona State Friday at the Sustainability Department and talked about pollution and said nuclear was of all fossil fuels the better avenue but solar, wind, and geothermal is now possible to convert to clean energy. Oil, coal, and nature gas were the worse as far as pollution. Just in the air now we all breathe the equivalent of four cigarettes a day.

Commenter: Eve Harmon
Gas drilling in the Catskill mountains is a very bad idea. There are too many risks compared to minimal benefits for a few gas companies and a few land- owners. Local water contamination, heavy truck traffic, misuse of millions of gallons of potable water for drilling, fragmentation of forests, leading to loss of biodiversity, road damage due to heavy water-laden trucks, which local townships must pay for by taxation, air pollution from both the machinery used to drill and the evaporation from storage tanks of fracking fluids...the list goes on, and all to drill for fossil fuels which we shouldn't be burning anyway, besides which the US has more than enough natural gas already and there is no market for it anymore. This is a terrible idea; to trash a forested, natural environment where people LIVE, so a few people can make some money. Wrong wrong wrong.

Commenter: Marie Drew
Excellent show, one of the best, first time I became aware of this. And as a resident of PA, I recently received something from the gas people about drilling. Thank you for making me aware.

Commenter: don
A pretty disturbing and concerning video piece and commentary about the potential danger of natural gas fracing technology.

However after spending several hours searching the web and reading various articles and sources, it is by no means certain that natural gas fracing technology is anywhere near as as dangerous as the NOW article/commentary implies. As one one YouTube video showed, Congress looked at this and pointed out that with over 1 million fraced wells done in the US to-date, not one single documented incidence of pollution has been substantiated. The three expert witness admitted such in the congressional testimony video on YouTube.

As another video showed in illustrating the process, most water acquifiers are at about the 500 foot level underground, whereas the natural gas drilling normally occurs at

depths of 6-10K levels, far far below the water acquifiers. And the drilling process seals off the drill through the water level.

Now, not being an expert or scientist on these matters, it makes it impossible to judge which position is correct. But the NOW commentary/documentary was pretty alarmist and should concern most folks.

One would think that NOW shoud have at least presented the other side of arguement and science or expert based facts, so that a viewer could arrive at a little bit more informed opinion (as opposed to just an alarmist concerned opinion).

Commenter: Carol Lawson
Thank you for finally covering the greatest threat to public health this country has ever seen. We wonder about the source of birth defects, autism and yet for a few dollars, people are willing to unleash billions of gallons of toxic waste into our water systems. The greatest threat to our existence was once nuclear annihilation, it's the oil and gas companies and the irreversible pollution of or water. Sure, we can buy water in plastic bottles made by the petroleum industry.

Commenter: Victoria Lesser
Josh is doing an amazing job bringing light to a very dark challenge we face in America and now here in Upstate NY. There is another very important thing to know, these Gas Companies are selling their shares of the leases to foreign companies. The gas that has not even been sucked out of the ground, here in America will be owned by Japan, France, Norway and the UK. So we will lose our health, our water and our way of life and they will make the profits...What's wrong with us, we must wake up...

Commenter: Lynda Wilson
This is VERY concerning! I've sent this out to everyone I know. I hope you do the same.

Commenter: Greg Robles
All and all and insightful outlook on the issues regarding "fracking" to obtain natural gas. However, I'd like to point out the misconception about where or how the U.S. obtains most of its oil. During the interview David alludes to U.S. dependence to Middle East oil while overlooking the top 3 importers of oil and petroleum products to the U.S. The top 3 importers to the U.S. are Canada, Mexico, and Nigeria.

Commenter: Tim Caffrey
What is troubling, both the Democrat and the Republican running for CO governor are past oil/gas employees. What does this say about CO's future and pristine environment.

Commenter: oh hayou
That crook T Boone wrecked our economy by going on a buying binge of oil companies

in the 80's and created an oligarchy with Reagan's blessing. Now he's doing the same thing with the natural gas industry under the guise of "energy independence". Once they get the gas, they'll export it to the highest bidder just like Alaskan Oil. These guys will sell their own mother for $$$. Let's move to clean energy via solar, wind (not T Boone's windmills) and other renewables NOW!

Commenter: Alda Wade
It was guite interesting to watch the story on Gas well drilling in the state of Pa. There is drilling a few miles ,maybe 10 miles from where I live in md.A friend took me near the site to watch the flames
coming from the pipe in the earth.My friend talked to some of the workers,,seems there is quite a lot of gas in this area.This needs to be made more public,,people don't realize what is going on.

Commenter: David Kauber
A fine introduction to an essential topic of our time:

THE WAR BETWEEN THE ENVIRONMENT

AND

THE ECONOMY

It doesn't have to be a war, it could be a renaissance in consciousness and healthy living, but with industrial control of our media which is mostly hypnotizing most people into sleepy ignorance, we, the living organisms of this planet, are being led into the abyss.
David Kauber, Aurora, NY

Commenter: Jerry Weber
Until the oil and gas industry is required to adhere to the same environmental laws I am as a citizen, and the industry is held financially responsible for the damages they have already done to the environment, peoples health, and personal property damage, ALL drilling for natural gas using the hydraulic fracting process should be immediately stopped. It is absolutely insane that this industry is exempted from the Clean Water Act and other environmental laws which the rest of the nation must obey. I believe Former President Bush and Dick Cheney should be prosecuted for their part in the legislation which granted these exemptions because this placed all Americans at risk! If a terrorist had contaminated someones drinking water supply they would certainly be arrested, interned in Guantanamo and ultimately put on trial. If I contaminated someones drinking water, I would be liable, so why not the two SOB's who with the industry got legislation passed which exempts the oil and gas industry from responsibility?

After an extensive investigation into the process and knowledge of the risks to the ground water, springs, aquifers and surface waters across the country and, only after a

bullet proof method has been established which assures the fracting fluids pumped back out of the wells can be sequestered and the drilling with fracting can be done without any possiblitiy of ground or aquifer contamination, should the industry again be allowed to operate. And even then, they must be made financially responsible for any contaminations caused by accidents and required to disclose all of the chemicals they use in the process!

The investigations into allegations of health problems, contaminated waters, and air pollution should be conducted by reputable scientists, biologists, chemists, and geologists and should not have any participants which have ever had a financial relationship with the industry. Absolutely no industry funding should be involved with the study and no advertisements by the oil and gas industry should be allowed to discredit the experts who are conducting the studies.

I would also recommend that as a start by the industry to prove their process is not contaminating water that the executives be required to drink, and bath in water taken directly from some of the private wells where people have already suffered health problems and required to live in the areas where thousands of wells have been drilled. And, finally former President Bush and Dick Cheney should also be required to only drink water from these contaminated wells.

Commenter: gene mulligan

How in the world could the Clean Water Act be exempted to allow the Natural Gas Industry to pollute our drinking water? Just another example of our legislators being paid off ignoring the health and welfare of our citizens. It will probably take years for the slow grinding wheels of government to finally realize the damage created, then the industry will be allowed to escape and the government will assume responsiblity with "Superfund" sites. Wake up Washington DC. Let's nip this one before it literally explodes.

Commenter: Reform Autos

4 years ago, when Corn based E-85 was introduced, I inquired as to why E-85, with all of the logistical problems. Why not NAT GAS? Honda had a vehicle a home filling station. I assumed that NAT GAS would be the natural choice for an alternate transportation fuel. I joined the Pickens Plan, and supported NAT GAS. Then, I began, through other members of the PP to become aware of "FRACKING". I began Googling for it, and unlike Josh, had the resources of those PP Members whom lived in FRACK areas, and Up State NY. When I learned that the Clean Water Act, had been diluted under Bush/Cheney - whom I consider to be mentally unbalanced, both of them, with unique pathologies, and ulterior motives, I began to question this claim of domestic green, clean energy. I had supported the Natural Gas Act. Now I will not until the Clean Water Act is restored, and strengthened. As well as passage of the FRAC Act proir to any consideration of a Natural Gas Act. Please support both of these Bills, as Energy looks to be the next business of order for Our Congress. And visit: ReformAutos.org

Commenter: George D.
I do support natural gas drilling, but only if it is done correctly. It's a no brainer.

Commenter: Margaret Kane
A large USA family that migrated from Poland more that two generations ago who own a family farm in Scanton, PA area were lured by the money they could receive by signing a paper allowing a company to drill for Natural Gas - I wish I had seen this very important documentary sooner ... it maybe too late for they signed the papers... I'm very worried because there is a very large water reserve sitting beside their farm that feeds Scranton.... I don't think Mrs. Howanski would have signed if she had any idea of the risks to her loved family gathering place, where they plan to raise local beef, local chickens and eggs and grow blueberries.

Commenter: R Young
Fracking must be stopped.

Commenter: Vera Scroggins
great interview; Gasland will make a wonderful impact; thanks, Josh Fox; the world needs to know of the negatives around gas drilling.

Commenter: Antvhony D. Tavelli
I would prefer to opporate my dairy farm naturally at a profit! Governmental controls to keep food cheap for the populous and large corperations don't allow for this.Leaving me (small dairy farmer)with no choice,but to opt. for natural gas to save my farm from the auction block.We've been fighting the encrochment of the settelers for years,not unlike the American Indian.

Commenter: Lisa Wright
Thank you, PBS for this ver important program. I returned form Dimock, PA, yesterday, and my heart grieves for the many families who are now receiving water from trucks and in bottles, and who may never be able to drink their well water again.

We cannot proceed this way, or else upstate NY will be similarly affected. The poor rural people cannot be expected to not sign leases when they do not understand what the ramifications of leasing may wel be. The gas industry has the money and the power to do what it wants, and this is not just frightening from the standpoint of public health and safety, but from the standpoint of our very democracy being at risk.

Commenter: Mike Johnston
I think that (responsibly produced) natural gas has a huge role in our green energy future. This sentiment has been voiced by such various people and groups as the Center For American Progress, Al Gore (and his Kleiner Perkins funded Bloom Box), and T Boone Pickens.

There are currently 500,000 natural gas wells in the US and the hydrofracturing process has been used by the oil and gas industry for something like 60 years and yet it is only recently that we have heard any complaints. That is kind of strange.

There happens to be another independent film out there at the moment which looks at the natural gas boom from a different perspective. It follows three average people in the midst of the Haynesville Shale boom in Louisiana and examines how their lives are affected by it. In addition it brings in experts from the fields of energy and the environment (such as Bill McKibben) to give their opinions on the potential of natural gas in our energy future.

The film is called "Haynesville" and is also out right now. It has screened at the Sheffield Documentary Film Festival, as part of the Hopenhagen events at last year's COP-15 climate change summit in Copenhagen and most recently, at the SXSW festival in Austin where is was selected for a "spotlight premiere" showing.

The film is presented from a neutral standpoint and doesn't pre-judge or try to inflame things with hysteria. I think that it does a good job of showing how American energy increases domestic prosperity. It also shows that energy companies will agree to produce domestic energy in a clean, safe manner when the public cares enough to become involved.

Haynesville website: http://www.haynesvillemovie.com/

Maybe it would be interesting to have the Haynesville filmmaker on your show as well...

Commenter: Barbara
As usual the Gas companies are lobbying (AKA paying off), our representatives to get what they want. Actually I'm not sure they are "our" representatives anymore.
But not to hold the gas companies responsible is purely criminal.
They want the gas, they want the mega profits, but they DON'T want to clean up the contamination they create.

If they think it's too expensive, then we don't want to be Fracked !

After seeing one town hall meeting held about this, perhaps the property owners will need to be held accountable also.
If they know the dangers and still go ahead it isn't only their water that is contaminated... it is OUR WATER.
I know this is America and it seems the almighty dollar always comes first.

Commenter: erika macbride
i live both in new york city and sullivan county new york. my drinking water has been regulated by the epa. shouldn't the same rules apply to the fracking companies. this process threatens the drinking water of millions of people.

sullivan and delaware counties' infrastructures are not equipped to handle the 24 hour heavy duty trucking that the fracking process requires. these counties are primarily rural farmland with small country roads.
i am opposed to any drilling until there is absolute proof that our water won't be contaminated. if the gas companies believe that the process is safe, they should be willing to take out an insurance policy to cover any mistakes, clean ups etc. that could happen.
if nyc's drinking water is polluted, the gas companies and not the tax payers, should be responsible for the cost.

Commenter: mvp5000
Hello,
Please watch the movie Gasland. They have a lot of drilling in Texas already. I hope it is not contributing to negative health consequences for you and Kaitlin.. Love

Commenter: Beverly Sterner
Thank you for this important interview, for NOW and for the independent journalism of Josh Fox.

If this earth is to be saved for future generations it is the pioneering and dedicated spirit of people searching for the truth, with the courage and talent to communicate it and the support of people like us, here watching and listening.

Commenter: ace00767
Our sympathies are with the ones that are being effected. This is a very good documentary, but it is happening everywhere in our state and our government is allowing it because of the revenue. They feel that there is no other way. The same thing is happening in my backyard in Silver Hill, WV, 20 miles east outside of New Martinsville. On top of all of that, the roads are being destroyed, bridges are damaged, roadways are blocked which threatens the passage of emergency vehicles, etc, the list is endless.

Commenter: Susan Soderberg
My elderly parents live in the heartland of natural gas drilling (Garfield County, CO) in the West. When I fly in for a visit, I am appalled by the sheer volume of construction, working wells, access roads and landscape attack I can see from the air, for a hundred miles in any direction. Within two miles of their home lie gigantic tanks of toxic chemicals which, when mixed with untold thousands of gallons of fresh water from the Colorado River valley where they sit, forms the liquid slurry forced deep underground to fracture the rock and release gas for collection. Just a few miles into the nearby canyon reveals toxic waste sites where the used effluent is dumped until....what? When? How safe? And some portion of that chemical-laden fracking "water" remains underground. Not if - but when will it contaminate the groundwater?

The West is already fighting over rights to Colorado River water. Soon they will be fighting NOT to have to use that contaminated water, and over who has to pay the

medical and economic consequences.

Does anyone see the same panel of industry idiots as the tobacco giants, once again dutifully preaching their party line in the halls of Congress, as just more liars denying (perhaps only to themselves) that there are health risks here?

What about residential values in an already desperate financial climate? What about explosions and fire (this is tinder-dry country)? Does anyone really care out there? Hello????

Commenter: racetoinfinity
More environmental injustice in the form of ruined health for of non-rich thousands. This has been going on for decades.

The industrial age of carbon is over (and should have been over decades ago.).

Not only is it warming the planet disastrously, it and its by-roducts like benzene are killing life, including humans, on it.

Commenter: al
world water day, monday, march 22,2010.
what a timely edition of pbs-tv, NOW, with David
Brancaccio.
this sundance 2010 award winning documentary is
the result of one man, josh fox, taking his digital
camera around the country: AR, CO, PA, NY. documenting
toxins routinely injected into the earth with water,
polluting both, in order to extract natural gas while
also releasing other global warming gases including methane. the chemistry of the process is technical and,as the program shows,so many toxic chemicals are used. most importantly is that in 2005, the bush adm passed a law,not just a bill, that took natural gas drilling out of the purview of the epa. the natural gas industry has now had at least a 6 year head start
on epa monitoring and documentation. josh fox's film
shows water on fire from the flammable gases coming out of the kitchen faucet, a water tower exploding at
someone's home, animals who are sick and hair falling
out, and young adults in CO who are very sick from
toxins in their water and possibly their land.
NOW program is shown in Boston on Saturday mornings
@2am, after Gwen Ifill's Washington Week in Review, and before Bill Moyers'Journal. all 3 programs are very important news programs for the week. when most
people are exhaused from the week and not privy to key developments on the week's key issues.tune in. af

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Commenter: Alice
In the Upper Delaware River Basin where I live, gas companies are by-passing the permit review process of the Delaware River Basin Commission (a commission mandated to protect the river basin) by drilling test wells. Though not as polluting as fully-developed fracking wells, they have caused enough contamination to kill tress, etc. Drilling these test wells prepares the drill sites for fracking wells. The PA DEP and even some of my local officials (who have all leased land) seem to be fast-tracking gas drilling in my area, most likely for the profits and tax revenues. I believe only by Congress passing the FRAC ACT, the Act that aims to rescind the 2005 exemptions to the Clean Water Act awarded to gas companies, will our nation be spared the greed of a few. The current price of natural gas is cheap at the expense of the people, animals and plants living near drill sites. Soon it will be cheap at the expense of the entire nation because the water in major rivers like the Delaware, which supplies drinking water to Philadelphia, Trenton, Camden, as well as large portions of non-urban PA,NJ, NY and DE, will be too polluted to drink. We can live without gas, but we can not live without water.

Commenter: John Rehm
The final statement by Mr. Fox, is correct. Exploration for Natural Gas can be done better. There are good operators, such as those companies in Oklahoma who protected the Garber-Wellington aquifer with tanks that contained drilling and Frac Fluids. That is what Frac tanks are for.

There are a number of causes of natural gas leaking into water wells, 1. a fracked zone that is too near the surface, or 2. a poor cement job that should have bonded deep casing to the rock formations or 3. steel casing that is constructed at too shallow a depth to deep gas, formation brine and frac fluids out of well water.

There are good drilling companies that explore for oil and gas responsibly and there are other companies that are careless. Mr. Fox has found one of the latter.

John Rehm
3 years of experience in oil/gas geology with Gulf
Oil, 1980-1983 as a petroleum geologist.

Commenter: Catherine Schuyler
As a nation we need to pursue vigorously, the developement of renewables to make us free of fossil fuels and Middle East oil. Replacing oil with another non renewal fuel is not logical and does not
help us move into the future of clean, renewal fuel.

Commenter: M. Carroll
Thank you, Josh Fox, for making this very important film; and thank you, PBS and David Brancaccio, for bringing it to your viewers' attention. This is an intense issue right now for those of us in NY State who are desperate to stop this monster at the border before our water, our lives, and our spirits are poisoned by natural gas hydrofracking.

The lure of easy money has blinded some landowners to the consequences of leasing their land to the gas companies. I hope your film will snap them to their senses. Here in the beautiful Finger Lakes, many landowners who had signed leases--even some who consulted with lawyers first--feel they've been deceived, they deeply regret their decision, and would like nothing more than to rescind their contracts.

The track record of these hydrofracking companies is well documented by now, so for NY State to move forward with granting drilling permits now would be unconscionable. Let's hope the Frack Act becomes the law of the land so that the EPA can protect our water and air from further destruction.

My condolences to the people of Pennsylvania, Colorado, Texas, Wyoming who have already been poisoned by hydrofracking.

Commenter: A1
Yes there are accidents and mostly minor judgment errors in the gas industry as with any industry, but overall the gas drilling and fracing industry is cleaner and safer and healthier than coal or oil production or while burning it for fuel.

Valid lawsuits provide a remedy and relief to victims for the accidents and errors that rarely occur.

Compare apples to apples and the truth can become much clearer.

Commenter: ronald schmidt
Who are the politicians responceable for hydraulic fractureing other than bush and chainy? How will this
country become energy independant if we have to build
water pureification plants? Hydraulic fractureing must be banned.ronald193@verizon.net

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Commenter: Walter Waldman
Technologies for harnessing solar, wind and other clean and abundant forms of energy exist now and are already in use in many places in the world. The sooner we wean investment from fossil energy to these clean forms of energy, the sooner we can begin to enjoy the economic benefits of scale and of improved methodology that comes with experience and, also, the benefits of a cleaner and healthier environment. To continue to invest in the present poisonous energy structure is to waste investment that could have been made to accelerate the maturing of a better energy future.

In addition, it must be recognized that solar energy will be here long after resources of fossil fuel arre exhausted and long after the human race becomes extinct. Consequently, we will be relieved of a desperate need, once again, to find a new energy source. and to invent and develop a technology for harnessing it.

Commenter: bob
The problem is the wells drilled in 1910-1950 years werent plugged right- thus causing the problems now--the gentleman that lit his water is---sewer gas---been ther done that--get all your facts right

Commenter: Thomas Chapman
Great programing. Thanks

Commenter: LJ Milberger
An excellent powerful film. A must see.

Commenter: Linda Blackwell
I live in Oklahoma. I have had concerns, within the last several years about oil drilling. Our state is said to be some of the sickest people. I had a second cousin who worked with the Blank Oil Co., the worked in the office. Not very long before his retirement he became sick, a year or so later he died. He was in his mid-fifties. The place by where he worked was all dead(there was nothing growing, all). Apparantly his wife tried to sue the company, at least for his retirement; It did happen.
My concern, is that there has been some talk about natural gas in our state and in Texas. I had not known they had been drilling for 10 years. Some relatives(which I do not get anything)of mine, received a phone call or letter. They had tracked them down to a spot of land in which to drill, and had to find the descendents. This place is in Northeast Texas. I am not sure of the name, but they said the agent lives in Bowie. They were given some papers to sign and they readily agreed(they were poor); they did not receive much money compared to the man on the your show. They live in Oklahoma, in the N.E. and the land was from a great grandmother, that was forgotten about because the grandmother died at a young age and the grandfather remarried. There is more to tell, but I have said alot already. A may come back with more information. Sincerely Linda.

Commenter: Joy Garland
Those of us in New York State who have been following the issue of hydraulic fractioning or "fracking" owe a great debt of thanks to Josh Fox, David Brancaccio and PBS for alerting viewers to the dangers of this process due to the millions of gallons of fresh water laced with over 200 chemicals needed to get deep within the rocky shale in order to release the natural gas there. Although the Halliburton technology was exempt from the Clean Water Act under the Bush/Cheney White House, we must demand that the Congress pass legislation to renew the legislation to remove its exemption due to the growing realizations of the danger to health, and the pollution of drinking water, air and soil. The short term gain to those who lease their land to the gas companies and taxes brought to state governments does not make up for the long term destruction of our now unfiltered water and the billions it would cost tax payers to develop a filtration system that could not even remove all the cancer causing and endocrine disrupting chemicals that have been discovered by independent scientists because the energy companies refuse to name these carcinogens which they claim would be then available to their

competitors, so remain "trade secrets". The only clean energy is *green" renewable energy which could also provide needed jobs and job training for those unemployed.

Commenter: Diane Siegmund
Good interview. Thank you PSB and Josh. Now, let's get Gasland out to all the local theaters throughout Pennsylvania.

Commenter: Elisa Young
This scares the daylights out of me, watching from 8:43 on...They have been consolidating deep gas drilling rights to frack into the Marcellus Shale (about a third of our state sits over it), and we have active underground coal mining here. Gas, coal and oil reserves are superimposed. Just about anywhere in our state they'd want to do this type of gas drilling, they either already are or are planning to coal mine. What happens to our communities and the men working under ground when the ground starts to shake? On top of that they have opened carbon capture and sequestration experiments here and are injecting massive amounts of ammonia treated carbon into the ground. I've asked around and haven't been able to find another community where all three of these things are happening simultaneously, stacked vertically on top of each other. I don't think they have a clue what they are doing and it scares the daylights out of me. We have 4 coal-fired power plants here and coal waste impoundments that the EPA has said will cost human life if they break like the TVA disaster in Tennessee a short time ago. I don't even want to think about what it will do to the drinking water. We have a lot of cattle farmers here and the integrigty of our resources is critical. What are they thinking???

Commenter: David
I have worked in the Oil & Gas industry for over 25 years. I have planned, performed and wrote the checks for Fracing of gas wells. In my opinion, the only way that fluids from fracing can communicate to surface water zones is for a surface pipe to develop a hole. This is NOT a function of fracing. This is a function of poor pipe corrosion protection or substandard pipe that was installed in the first place. A hole in the surface pipe can let some fluid leak into water reservoirs. But the production pipe that conducts the well fluid and natural gas from the gas reservoir to the surface is physically separate from the surface pipe. There has to be mechanical failure for well or gas fluids to get into the water reservoir. Some investigation does need to be done to determine which well is polluting the surface water. A well (maybe only one) can pollute a local water well. In Oklahoma we have found wells that develop a similar leak as discussed and have "charged" a water system. Tracking down the well is difficult but NOT impossible.

Please contact an independent oil & gas consultant and hire them to conduct an investigation.

Commenter: Bill Davis
I hate your Weekly Q. Yes or No or not Sure are not adequate options. Yes I want SAFE gas drilling. Any new field needs to be surveyed to be sure no contamination will occur

first. These explorers should not be exempt from EPA Clean Water Act. People should be outraged about this exemption passed during the W Reign.

Commenter: Frank J. Lord
How can we take effective action to protect our water supply from industrial processes such as fracking to develop natural gas supplies?
Do we appeal to our congressmen or the EPA?
Are there organizations that we can support to bring this issue before our legislators?

Commenter: Alan C. Braddock
Excellent story on "fracking" and the deceptions of the natural gas industry. Thanks very much.

Commenter: Susan Anderson
Hi Avery,
I just watched this program and it was enlightening - especially since there are proposals to drill for gas upstate. When you get a chance, please watch. Susan xo

Commenter: Barbara
What about traditional drilling?? Is it even considered today?

Commenter: David McFatridge
Thank you for your presentation of GASLAND. I live in the Barnett Shale area and because of the GAS DRILLing and HYDRO FRACKING our ground water is being contaminated! Can someone tell me how do you fix an aquifer after it has been contaminated by FRACK CHEMICALS? http://txsharon.blogspot.com/

Commenter: Mary Jenkins
We can live without gas, but not without potable water! It's a no-brainer.