ABOUT THE FILM

When filmmaker Josh Fox received an unexpected offer of $100,000 for the natural gas drilling rights to his property in the Delaware River Basin, on the border of New York and Pennsylvania, he resisted the urge to accept. Instead, he set off on a cross-country journey to investigate the environmental risks of agreeing to the deal. Gasland is Fox’s urgent, cautionary and sometimes darkly comic look at the implications and impact of the massive drilling campaign that is currently sweeping the country and promising landowners a quick payoff with possible long-term costs.

ABOUT THE FILMMAKER

JOSH FOX, WRITER/DIRECTOR

Josh Fox is the founder and artistic director of the International WOW Company. He has written/directed/produced two feature films and over twenty works for the stage, which have premiered in New York, Asia and Europe. His narrative feature film debut Memorial Day (2008) premiered at CineVegas Film Festival and showed at the IFC Center in New York. His recent work for the stage includes Surrender, an interactive war epic, and Auto Da Fe, which premiered in New York and will tour to Japan in 2011. All of Josh’s work is produced and created with the award winning International WOW Company, a theater and film group with membership of over 100 artists spanning 30 countries on 4 continents. Josh earned his BA from Columbia University.

THINKING AHEAD


Q: Do you think it is important for people to understand where their drinking water comes from? Why or why not? Do you know where your drinking water comes from?

Q: How do you feel about the quality of New York City tap water? How would you rate it on a scale of 1-5? Why?
THE FILM IN CONTEXT

WHAT THE FRACK?

The largest domestic natural gas drilling boom in history has swept across the United States. The drilling technology of hydraulic fracturing or “fracking” has unlocked a “Saudia Arabia of natural gas” just beneath us. But what is fracking? Is it safe?

Hydraulic fracturing or “fracking” is a process that extracts fossil fuels (like oil and natural gas) from deep below the Earth’s surface. This is done by creating cracks in the layers of dense underground rocks where large fuel deposits are located. Before fracking technology existed, these deposits were difficult to reach. Here’s how it works:

- **Step 1:** A well is drilled. Natural gas wells generally reach about a mile underground but can go as deep three miles into the Earth.
- **Step 2:** Millions of gallons of “fracking fluid”—a mixture of water, sand and chemicals—are pumped into the well so fast and with pressure so high that they fracture the rock where the natural gas deposits are hidden.
- **Step 3:** Once the rock is broken, the water pressure is reduced and the fluids are extracted from the well. When it is removed from the ground, the natural gas is “wet”—mixed with water, sand and chemicals—and has to be separated from the fluid.
- **Step 4:** Excess water, chemicals and impurities are removed from the “wet” natural gas to make it ready for commercial use. This process produces large amounts of wastewater that contains highly toxic chemicals. Wastewater is typically treated at water treatment facilities, but the management of wastewater is a highly controversial issue.

Adapted from the official website for Gasland (www.gaslandthemovie.com); Hydraulic Fracturing 101, earthworksaction.org; Marcellus Shale–Appalachian Basin Natural Gas Play, geology.com; and Marcellus Drilling News, Marcellusdrilling.com

THE NATURAL GAS DRILLING DEBATE: KNOW THE FACTS

Following a report released in 2009, New York City’s Department of Environmental Protection called for an end to drilling in the New York City Watershed (where all of New York City’s drinking water comes from) because their research showed that gas drilling poses “unacceptable risks” to the environment as well as to the unfiltered water that nine million New Yorkers drink. But in September 2010, the Obama administration announced that it has voted to continue “limited exploratory drilling” to investigate the drilling options and opportunities in this region. How do you feel about natural gas and the controversial process of fracking?

**PROS:**

- By using the fracking method, it is now possible to collect huge amounts of natural gas from dense rock formations, such as shale, that could not be accessed using traditional drilling methods.
- Fracking can allow us access to fuel sources within the United States instead of importing fuel from other countries.
- All the natural gas drilling taking place has created thousands of new jobs across the country and provided millions of dollars of much-needed income to over 30 states.
- Natural gas burns more cleanly than oil and coal and produces less carbon dioxide and greenhouse gasses than other fossil fuels.

**CONS:**

- Each time a well is fracked, up to 300 tons of chemicals may be used. Currently, the natural gas industry does not have to reveal what these chemicals are, but studies have shown that fracking fluid includes toxic chemicals that can pose serious environmental and public health risks. According to some estimates, only 30-50% of the millions of gallons of fracking fluid injected into the well during the drilling process are recovered from the ground, which pollutes the nearby land and water.
- Areas such as the Marcellus Shale drilling region contain the reservoirs and natural sources of drinking water for all of the major urban and rural communities in the area, including New York City. A 2009 report from the NYC Department of Environmental protection warns that “nearly every activity” associated with natural gas drilling could potentially harm the city’s drinking water supply.
- Wastewater produced by the fracking process contains large amounts of dangerous chemicals that can be released into the air during the treatment process. When the airborne vapor comes into contact with exhaust from trucks and generators at the well site, a toxic gas called “ground level ozone” is produced. Ozone plumes can travel up to 250 miles.
- Even though it burns cleaner than coal and oil, natural gas still releases a large amount of carbon dioxide, which is believed to be a major contributor to global warming.
- Since the natural gas boom began, funding for and research into alternative sources of sustainable energy such as solar and wind power have been drastically cut, limiting the prospects of the United States ending its dependence on fossil fuels.

Adapted from the official website for Gasland (www.gaslandthemovie.com); Obama Admin Rejects Timeout for Natural Gas Drilling in N.Y., Pa., by Mike Soraghan, Greenwire; Recent access to new supplies upends plans for wind, nuclear and coal, by Jonathan Paehly, The Associated Press; and Impact Assessment of Natural Gas Production in the NYC Water Supply Watershed, the New York City Department of Environmental Protection (DEP).
HOW TO BE A CRITICAL VIEWER

Being a critical viewer is different than simply watching a movie. Critical viewing is about being able to examine the information that a movie, commercial, music video or TV show is giving you and ask meaningful questions about the information that you receive. Media makers create work for many reasons: to inform, persuade, entertain, shock, sell, etc. A critical viewer asks, “What goal is the media maker trying to achieve, and what impact do they want to have on me?”

A critical viewer is someone who:

• Listens carefully to what is being said in the movie
• Pays attention to the details used by the filmmaker to convey the message of the film
• Asks meaningful questions

Being a critical viewer will help you understand:

• The themes and issues that the filmmaker is addressing
• The reasons why the filmmaker chose to make the movie
• The message of the movie

In this study guide you will find background information, activities, and questions that will help you practice being a critical viewer.
Now that you’ve watched the film and worked through the Study Guide, take some time to reflect on the following questions. These worksheets are an important step in practicing your critical viewing skills. Write down your answers and compare with your friends and classmates.

Every film has a **MESSAGE** that the filmmaker wants to communicate. There are a few key questions you can ask yourself to help figure out a film’s message.

What do you think the film is about?

What is the filmmaker trying to say about the subject? What evidence is used?

Why do you think the filmmaker made this film?

**PRODUCTION** describes the process of making a film and includes writing the script, choosing different types of shots while filming, editing the final footage, and choosing music. The choices made during production affect how we experience the movie.

How is the story of the film told? Does it remind you of other films you have seen? If so, which ones and how? If not, how was it unique?

How does the way the film is made change the way you understand the topic? (Think about the structure of the film, the music, etc.)
CRITIQUE: WHAT DO YOU THINK?

When you CRITIQUE a film as a critical viewer you are doing more than saying whether you like it or not, you are forming your own opinions about the quality of the film, clearly explaining your thoughts, and using evidence from the film to support these opinions.

What did you find interesting about the film? Why?

Why is the film interesting to other viewers (even if it wasn't interesting to you)?

Why do you think the filmmaker took the time to make this film?

What would you have done differently if you were the director?

What kind of audience is the film targeting? (Remember, one film can target many different kinds of audiences!)
RESOURCES GUIDE

FURTHER READING

Silent Spring
By Rachel Carson
Released in 1962, this seminal book offered the first shattering look at widespread ecological degradation and launched the modern environmental movement.

Energy in America: A Tour of Our Fossil Fuel Culture and Beyond
By Ingrid Kelley
Presents a broad, cultural view of America’s energy sector for nonscientists and citizens involved in creating sustainable communities.

An Unreasonable Woman: A True Story of Shrimpers, Politicos, Polluters, and the Fight for Seadrift, Texas
By Diane Wilson
When Diane Wilson, fourth-generation shrimp-boat captain and mother of five, learns that she lives in the most polluted county in the United States, she decides to fight back.

Our Choice: A Plan to Solve the Climate Crisis
By Al Gore
A call to action that answers the questions posed by the film An Inconvenient Truth.

FURTHER WATCHING

Erin Brockovich
An unemployed single mother becomes a legal assistant and almost single-handedly brings down a California power company accused of polluting a city’s water supply.

An Inconvenient Truth
Vice President Al Gore’s acclaimed documentary on the Earth’s climate crisis.

The 11th Hour
A fast-paced, engaging, and thought-provoking environmental documentary that outlines causes of and solutions for global warming. Narrated by Leonardo DiCaprio, this film features diverse interviewees and a great soundtrack.

Michael Clayton
A law firm brings in its “fixer” to remedy the situation after a lawyer has a breakdown while representing a chemical company that he knows is guilty in a multi-billion dollar class action suit.

ONLINE RESOURCES

Gasland:
www.gaslandthemovie.com
Official film website.

Natural Resources Defense Council (NRDC)
www.nrdc.org
Founded in 1970, the NRDC is a non-partisan international environmental advocacy group working to protect the planet’s wildlife and wild places and to ensure a safe and healthy environment for all living things.

River Keeper
www.riverkeeper.org
Riverkeeper’s mission is to protect the ecological integrity of the Hudson River and its tributaries, and to safeguard the drinking water supply of New York City and the lower Hudson Valley.

Citizens Campaign
www.citizenscampaign.org
Works to build widespread citizen understanding and advocacy for policies and actions designed to manage and protect natural resources and public health in New York and Connecticut.

GET INVOLVED

Speak Out: Contact your elected officials and let them know you support the Frac Act. Check out the Gasland website for details: www.gaslandthemovie.com

Volunteer: Find opportunities to lend a hand conserving the waterways in New York State at www.riverkeeper.org

Organize: Start a campaign at your school or in your community to raise awareness about the need to protect New York City’s water supply. Visit the Gasland website for resources and tips on how to get started: www.gaslandthemovie.com
ABOUT TRIBECA YOUTH SCREENING SERIES
This program provides NYC public school students and teachers with access to free, educationally-relevant and challenging films. Each screening is followed by a Q&A, study guides and supplemental educator materials are provided, and teachers are strongly encouraged to utilize films as part of their curriculum. This monthly-series strives to expose New York City students to independent films and help educators and students incorporate film-viewing into their classroom work. For more information about TFI’s youth programs, please visit www.tribecafilminstitute.org/youth or email youth@tribecafilminstitute.org.

ABOUT HBO DOCUMENTARIES
Whether measured by awards, critical acclaim, subscribers, profitability or viewers, Home Box Office, Inc. is America’s most successful premium television network and home to two 24-hour premium television services—HBO® and Cinemax®. Together, both networks reach over 40 million subscribers in the United States via cable and satellite delivery. In the documentary area, HBO Documentary Films is consistently at the forefront of programming, producing and developing some of the most provocative, ground-breaking and award-winning films. HBO Documentary Films focus on contemporary issues, allowing viewers entry to worlds rarely seen. These films have won virtually every major programming award including the Academy Award®, the Emmy® Award, the George Foster Peabody Award, and the Alfred I. DuPont-Columbia University Award.

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The Tribeca Film Institute (TFI) is a year-round nonprofit arts organization that empowers working filmmakers through grants, professional development and resources, while also helping New York City students discover independent film and filmmaking.