

FORMAT FOR PROGRAM DEVELOPMENT

Facility: Statewide - State Parks Date: 5/13/11 NRS: Eric Rensel

Title: ***To Drill or Not To Drill***

*(See similar: "To Zone or Not to Zone" - Project WILD, or
"To Dam Or Not To Dam" - Aquatic Project WILD)*

Program Theme: Learning the basics of Marcellus Shale Gas drilling - impacts and benefits. Create an informed citizenry.

Target Group: Visitors to State Parks, workshops, and other audiences as scheduled.

Behavioral Objectives: The Visitor Will Be Able To:
1.) generally describe the drilling, fracking, and finishing processes of Marcellus Shale gas drilling,
2.) understand the impacts of this specific drilling technique, 3.) understand the benefits (environmentally and economically) of extracting natural gas from this formation, and 4.) identify social and ecological considerations regarding drilling that are in conflict with each other, 5.) describe the importance of land-use planning to guide sustainable drilling,
6.) debate in an informed manner the pros and cons of this drilling.

Type of Program: Lecture, video, visitor role playing.

Equipment and Materials: Laptop with gas drilling [video](#) loaded and other short pro & con segments, video projector, screen. Two flip charts and stands. Tables and chairs for debating teams if available in setting. Role cards.

Promotion: Program schedule, park daily program board, other methods as determined.

Evaluation Procedure: Did the participants participate and demonstrate the stated behavioral objectives?

Title: To Drill or Not to Drill

NRS: Eric Rensel

Date: 5/13/11

Location: Statewide

Welcome. My name is _____. Tonight we are going to have a debate. You will debate whether a local community should drill or not drill, based on information you will learn during this program. I am expecting to see some great debating skills this evening ;). But before the great debate, let's learn a little more about the drilling process - so we can foster an "informed" debate.

How many of you have heard about Marcellus Shale Gas drilling?

This drilling technique differs from the traditional vertical drilling; it goes horizontal. The idea is to drill down until slightly above the targeted Marcellus shale, and then curve the drilling until it is horizontal, running *through* the shale, exposing much more of the gas-bearing layer for collection. To explain how it works, let's watch a short video (six and a half minutes) animation showing the process.

//Show the Marcellus Gas Drilling video.//

The Marcellus shale gas play is a huge economic opportunity. How it is done, however, may be the most important long-term consideration. Let's examine the impacts, both positive and negative, of this type of drilling. From what you all know about the activity in general, let's brainstorm some of these potential impacts. [Solicit input from audience. Guide responses where needed. List all positive impacts on one flip chart, and all negatives on another flip chart. May include, but not limited to the impacts listed below.]

Positive:

- Clean burning
- Lease money good in these tough economic times
- Royalty money in the future
- Free gas (potentially) to landowners
- Brings paying workers to area (motels & restaurants)
- Provides jobs (potentially & growing)
- Lessens dependence on other energy sources
- Revive railroad use - hauling sand
- Sale of local water
- Spurs overall economy

Negative:

- Impacts to roads due to heavy truck traffic - roads being destroyed
- Impacts to water/streams - heavy withdrawals, pollution events, sediments, etc.
- Burden to local infrastructure - police, fire, schools, etc. (more crime, drugs, etc.)
- Forest fragmentation/destruction
- Noise of drilling, trucks, etc.
- Smell, dust, air pollution, truck exhaust, etc.
- Danger of meeting truck traffic on rural roads
- Forced pooling/ eminent domain potential
- Large companies (not local) getting rich by taking our resources
- Decrease of property values

Understanding these impacts should allow us to make informed decisions about drilling. As the drilling increases in the state, many will be faced with the question, "to drill or not to drill?"

Let's have an exercise in what this might look like by role-playing a town council meeting. I will need volunteers to assume roles like _____ (read a few example roles aloud), and some to be the town council.

Background for Debate

Hypothetical situation: The community leaders have been approached by a Marcellus Shale Gas drilling company about leasing the community-owned lands surrounding the drinking water supply (watershed) for drilling. Some citizens are concerned that the drilling will have detrimental affects on their lands, while others welcome the much-needed lease money for community improvements. This has led to some heated arguments and the town council has decided to hold a public meeting to hear from their constituents and base their decision on what they hear.

Assign roles to participants (or let them choose their role) and permit them time to prepare their argument. Inform the rest of the audience that they are local concerned citizens, reporters for the local newspapers, etc. DCNR staff will serve as moderator, guiding the debate, limiting presentation time, etc. At the conclusion of the debate, the town council will be asked to make a decision to drill or not to drill.

Facilitate meeting & debate.

Ask the council to render a decision for our hypothetical situation.

A round of applause for our great debaters. {Applause.} While this was a hypothetical situation, it is easily a very real situation. These roles and situation are not loosely based, but are rather the exact situation facing many northcentral Pennsylvania towns, cities, and communities right now.

[Summarize the points of the program, highlighting the positive and negative impacts.]

Continue to inform yourselves about all the aspects and impacts of Marcellus Shale Gas drilling. Weigh these matters carefully. Make good, informed decisions. Let's not repeat the past resource extraction practices that left us with Acid Mine Drainage, scalped forests, and so on, but instead develop a sound and sustainable resource use for a brighter future.

Thank you for coming and learning more about this issue. [And standard closing verbiage.]

30 +- Role Cards - To Drill or Not to Drill

B. G. Bucks - owner of gas company

I hire the drilling rigs and manage the operation to the best economic benefit. My company can provide many local jobs, even though most of the skilled positions are taken by those with experience - from Texas, Colorado, etc.

Geter Done - rig worker from Texas

There is lots of work here in Pennsylvania, and that means lots of overtime for me and my crew. Some of the guys have brought their families along. The kids seem to like the local schools, although as we hop from place to place they do too. Kinda rough on them.

I. Needajob - local unemployed

I have been laid off for a while now, and with all the drilling going on in the area, I hope to get on with them. But their entry-level jobs "Worms" are 12 hours on, seven days a week. I am doing okay on unemployment right now ...

D. "Lumpy" Roads - local township supervisor

The township stands to make quite a bit of money if we lease to the gas industry. Money that can be used to buy needed equipment and materials. Some of the roads are taking a beating lately from water tanker trucks and are needing fixed.

Ted Austin- township emergency planner

I don't have any experience with "what happens if this or that happens" at a drilling site. How am I supposed to plan for a blowout or fracking water spill? But they need the paperwork signed now, they say. Sigh, "Where do I sign?"

Lotso Money - local motel owner

Wow! My motel is booked for the next three years, and that's even after I raised the rates. I'm rollin' in it. These guys are a little rough, but with their rent I should be able to afford to fix things up after the boom. Other owners sold their motel/hotel outright to the gas companies and got out of the business.

Beaucoup Money - local restaurant owner (sister of Lotso)

I have a whole new batch of regulars since the gas drilling started. They eat a lot and tip pretty well too. I'm glad the drilling is happening. I cook with natural gas - nice to get it local.

I.M. Concerned - local water authority

We have been selling water to the drilling companies by the tanker truckload, but now we are in a bit of a drought, and the reservoir is beginning to drop. I told them we can't sell them any more water - that the community needs that water. They are not happy. I wonder where they are getting their water now. Drilling on the watershed has me concerned. What would happen if there was a spill?

Sal V. Linus - local trout fisherman

I want to know what these drillers are doing with all the frack water they get out of their wells. There aren't enough treatment plants to handle the demand, so where is the polluted water going? I'll be watching them.

Hank Jackson - local nature activist

They say that frack water is 99% water and sand. So, how much is 1% of 5 million gallons? What to do what to do. What kind of legacy will we leave for our children? "This land is your land, this land is gas land ..."

Sam Trails - local snowmobile rider

This past winter they plowed all the backroads where we usually ride our snowmobiles. We found out that gas industry trumps winter recreation. I almost had a head-on with a tanker truck - and it was moving faster than I was. Although, we may be able to ride on the new gas line rights-of-way in the future.

D. B. Drill - local landowner with mineral rights

Hey, I don't know what all the fuss is about. If you don't want them drilling on your land then don't lease to them. But for me, I could use the money and royalties. I know that a few others had some problems, but everything went fine for me.

W. T. Heck - local landowner without mineral rights

Can you say "nightmare"? I don't own my mineral rights, and so I don't have any rights. There is a drilling rig 200 feet from my house. The noise - the smell - the trucks. My property value just dropped through the floor. My wife and kids are sick, but the drillers say it isn't their fault.

Lando Solo - local resident with mineral rights, but a holdout

While my neighbors decided to drill, I chose not to do so. But now I am being told that there may be such a thing as "forced pooling". That they can drill under my property and take my gas even if I say no. Eminent domain is supposed to be for the public good, not for some driller's pocket.

Jane Wordsmith- lobbyist for the gas industry

I consider myself a public relations person who is spreading the good economic news to those who represent the local people. Marcellus Shale Gas drilling is the biggest thing to happen in the sticks of Pennsylvania in a long time.

Berry Trustworthy - local politician lobbied by gas industry

I was elected to look out for the welfare of the people, and that is what I am doing. Look at all the jobs that are coming. This will help the local economy. And just because I accepted their lobby money doesn't mean that it affects my position on drilling.

Donut Care - resident of NYC who uses gas

Marcellus shale gas? Oh yeah, they won't let them drill for Marcellus Gas here in New York state. Those wells in Pennsylvania are out in the woods where nobody lives, right? Yeah, I don't care - as long as the heat and stove works.

NIMBY Cooker - resident of Pittsburg, user of gas

Yes, I use natural gas. But they shouldn't allow drilling in the residential areas close to people's

homes. They should drill out where only a few rural folks live.

Litmy Waters - resident of Dimock, PA

Yep, they drilled around us. And then the water went bad. We don't drink it anymore, although the cattle still drink it - can't afford to buy water for them. They say as long as we keep the windows open that there shouldn't be an explosion risk. And yes, I can light my water on fire with a lighter.

I. M. Outtahere - local landowner sellout

When I first heard about the Marcellus Shale gas play, I started buying up lands to lease. But once the drillers get through with it, the land isn't worth much. I am selling to the drilling companies instead of leasing and getting out of the area.

E. Phemeral - head of local tourist promotion agency

A few years ago there was a big tourist push to market the outdoor recreation experiences to be enjoyed on our state lands and local area. Now that seems to have taken a back seat to the drilling. The back roads are destroyed (being fixed now by the drillers), our water is being threatened, and the truck traffic is unbelievable. Just try driving these roads where they are drilling.

M. Cowserdien - local beef farmer

My cows drank water that escaped from a nearby frack water lagoon. Now they won't let me sell these beef cattle because they might be contaminated with something. One cow went down yesterday, and another isn't looking too well today. Who is responsible?

Newengin Money - local fire chief (cousin to Lotso)

Money from marcellus gas drilling is going to come to our fire company so we will be better equipped in case there is a fire at one of the well sites. Big money - we can get a top-of-the-line fire engine.

Makon Bestoffit - local District Forester

Forestland has been leased. This is part of the specified use of our natural resources. Our lease agreements are 78 pages long and really manage well the drilling activities that are taking place on the forests.

Chekin Waters - local WCO for Fish & Boat Commission (no relation to Litmy Waters)

My job duties have changed dramatically since the drilling started. Now I am checking drilling sites for compliances instead of checking fishermen.

B. Slosh - local tanker truck driver

Work was tapering out around here. I was sure glad when the drilling companies needed truckload after truckload of water hauled in, and hauled out. The in haulers take the fresh water to the drill pads, the out haulers take the used frack waters out. It is just a matter of getting it and getting rid of it.

W. Kanwidu - County Planner

Zoning and planning have little real affect in guiding the drilling. We do the best we can to protect the county's interests in clean water and sustainable land use, but it is a real challenge. Townships don't want the zoning because they feel it limits their future uses.

N. Powers - Environmental Protection worker

Since the oil and gas industry is exempt from the safe drinking water act, it is difficult to regulate violations - there is no violation if they are exempt from the law. And the number of wells is increasing rapidly; it is difficult to get to them all on a timely basis. I hope the boss hires some more people soon.

Town Council Members

Faced with the decision of leasing lands surrounding the local drinking water reservoir for Marcellus Shale gas drilling. Organized this meeting/debate to garner public input.

Optional Roles:

Arthur Livingston - foreign investor of large American gas corporation

Drill baby drill \$\$\$\$\$. We pollute your waters and take your money by selling your own gas back to you, the owners. Ha.

And so on! Feel free to allow the audience to create/become additional roles relevant to the topic.