

# Natural Gas & Local Governments

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# Outline

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- What is Marcellus Shale?
- Experience in Other States
  - Texas
  - Wyoming
- Possibilities here in Pennsylvania
- Implications for Local Governments

# A Few Background Concepts

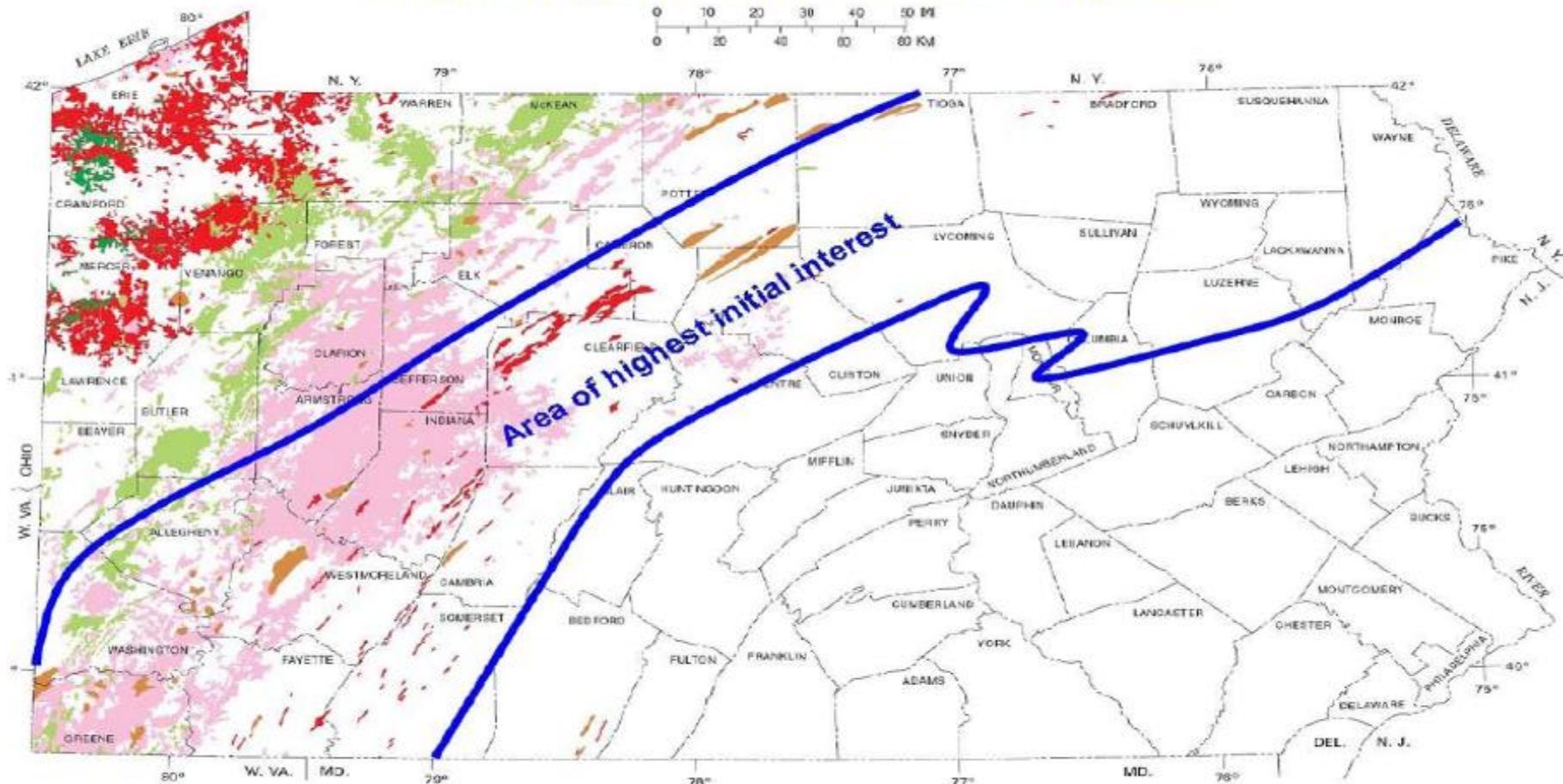
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- Scale of this may be **BIG**
- Resource-based economic development; when its gone, its gone
- Local impact- multiplier effects if keep dollars local
- How ensure “winners” pay fair share of increased taxes & costs?



# Where is the Interest?

**Map of Pennsylvania Oil and Gas Fields**  
Showing area of highest interest for Marcellus Shale exploration



EXPLANATION				
				
Shallow oil field	Deep oil field	Shallow gas field	Deep gas field	Gas storage area

# Marcellus Shale – Route 54 near Washingtonville, PA

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# Larger Well Sites Needed for Bigger 'Fracs'

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# Well Site



# Heavy Equipment Intense



# Can be Multiple Wells per Pad

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# Compressor Station



# Overall Economic Impact

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- Estimated \$500 billion in recoverable natural gas in Pennsylvania - *NOT uniformly distributed across the Commonwealth*
- Total Earnings across ALL Industries (2006)
  - Pennsylvania - \$339 billion
  - Somerset County - \$1.178 billion

# 1. Barnett Shale in Texas

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- ❑ Geology is similar to Marcellus
- ❑ Development started in 2001
- ❑ Employment & income impacts can be documented
- ❑ But predominantly urban area
- ❑ Perryman Group “Drilling for Dollars”  
*[www.bseec.org/images/summaryreport.pdf](http://www.bseec.org/images/summaryreport.pdf)*

# Economic Impact of Barnett

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- \$8.2 billion in annual output  
8.1% of total regional output

83,823 jobs (8.9% of total employment)

Barnett Shale provides some stability to Fort Worth area's economy

## 2. Sublette County, Wyoming

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Largest gas-producing county in Wyoming  
(44% of state's gas in 2006)

Energy extraction for 100+ years  
1998 surge with drilling in Jonah Field.

- Very rural area (population was 5,920 in 2000)
- Impacts can be documented

[www.sublette-se.org](http://www.sublette-se.org)

[www.ecosystemrg.com](http://www.ecosystemrg.com)

# Experience in Sublette County

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- Direct & significant influence on population, affecting nearly all sectors of the community
  - Housing construction
  - Public services
  - Cultural changes
  
- Much oil & gas employment is transient workforce – *difficult to estimate numbers*
  
- During development, 83 of 156 local employees per well (53%) were residing in camps or motels

# Experience in Sublette County

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- ❑ Highest paying jobs are gas field jobs – *"significant opportunities for wage advancement, with a nearly unlimited opportunity to gain overtime wages"*
- ❑ Seasonal fluctuations in employment & unemployment have effectively stopped
- ❑ High cost of living & saturated motel and rental housing makes recruiting new employees difficult

# Experience in Sublette County

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- Availability & affordability of housing affects non-resident workers who would consider relocating

Local government requires large capital projects to address infrastructure impacts of new population

Higher crime rate – biggest increases in DUI, drug possession, larceny (violent crimes NOT increase)

Number of school students has increased dramatically

# 3. Possibilities in Pennsylvania?

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LOTS of dollars flowing into the local economy. How to keep `em here?

- Jobs?

- Locals HAVE the skills?

- Or LEARN the skills?

- Or get newcomers to move into county?

- Business activities?

- Impacts on other sectors – tourism?

# Economic Impacts?

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- Real estate market
  - Land available for sale?
  - Homes sold to industry transplants
  - Rental homes -trailers
  
- New business ventures
  - Frac services
  - Water hauling
  - Brine water remediation
  - Pipeline construction
  - New start-ups

# Economic Impacts?

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- ❑ Local contractors for site work
- ❑ Local fuel, stone, and site prep materials
- ❑ Equipment rentals
- ❑ Area surveyors, attorneys, abstractors, and other professional services
- ❑ Office and warehouse space
- ❑ Hundreds of landmen, drillers, and misc crews staying in area hotels for 2+ years
- ❑ Meals, services, and other retail purchases

# Impacts on Local Governments?

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- ❑ *Little* local revenue impact
  - ❑ Natural gas is NOT subject to local taxes in PA
  - ❑ Earned Income Tax paid where people live
  - ❑ Corporate income tax goes to state
- ❑ Service impacts may be large
- ❑ If governments lease land – should view revenues as ‘Capital,’ not ‘Income’

# Local Government: Issues

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- ❑ Roads & Bonding
- ❑ Water
- ❑ Infrastructure
- ❑ Housing needs
- ❑ Schools
- ❑ Cultural change (conflicts?)
- ❑ Economic development
- ❑ Environmental impacts
- ❑ And....?

# Local Government: Response

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- Plan Comprehensively – *use all your tools!*
- Regulation-
  - Of wells & pipelines –  
***Preempted by Oil & Gas Act***
  - Of housing, population & economic change -  
***Allowed***
- Road bonding? Weight limits?
- Capital budgeting
- Natural gas task force?

# Statewide Upcoming Programs

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“Natural Gas Drilling & Local Governments: Planning for Change”  
Video Teleconference workshop  
November 18, multiple locations

Statewide Natural Gas Conference  
December 10 & 11, State College

# Resources

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- [www.naturalgas.psu.edu](http://www.naturalgas.psu.edu)
- Listserv of daily newspaper clippings & upcoming events  
emailto naturalgaspa-l-subscribe-request@lists.psu.edu

Landowner Guide

Local Government Primer (*November*)

Natural Resource Primer (*late fall*)