



MARCELLUS SHALE



Blueprint for Sustainable Community Development



Investing in the Future

Advanced Planning



Comprehensive Planning

Law of natural consequences

*If you Fail to Plan
and you should
Plan to Fail*



One of the First Gas Drilling Rigs in Lycoming County— October 2007



Getting Ready

● Community Natural Gas Task Force—Kick-off Feb 2008

“identify key issues, research facts and information, and review and propose public policy regarding the positive, economic impact of gas exploration of the Marcellus Shale in Lycoming County”



**Task Force visits
Barnett Play
In Texas**

Getting Ready

- **Open the Penn College Training Center for Gas Site Operations**



- **Amend County Zoning Ordinance**
 - 20 Month Collaborative Effort
 - Community—County—Industry
 - “Fair & Balanced”
 - Covers 18 Municipalities
 - Adopted February 2011

- **Develop Gas Services Energy Park**



Getting Ready



- **Rail Capacity & Needs**

Rail cars (short haul) with MS supplies:

80 cars (2008)—1,600 (2009)—6,200 (2011)

- **TIGER II Grant--\$11M**

- **Enplanements at WRA--23% increase in 2010**
- **2nd Airline being pursued**
- **New Terminal on pathway for design / construction**



**Getting Educated
&
Learning the Language**



Range Resource's Lone Walnut Drill Pad



PVR's Lone Walnut Compressor Station

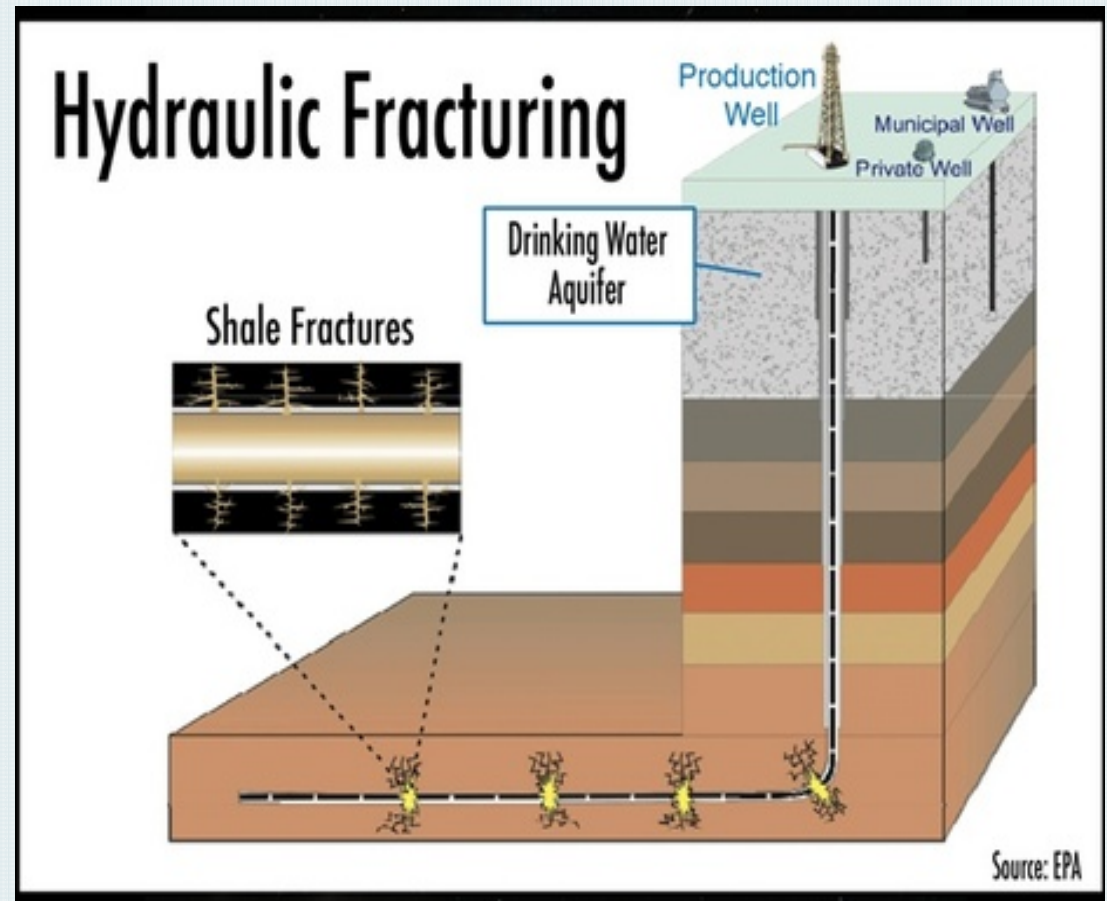




**30 Inch
Diameter
Gas
Gathering
Lines
rising up
Bobst
Mountain**

“Unconventional Wells”

- Drilled into Unconventional Formations like Marcellus or Utica Shale
- Vertical & Horizontal Drilling
- Stimulated by Fracking



Impact Fee Language

Wells Subject to Impact Fee

- **Spud** Wells
 - ☑ Spud: *actual start of drilling of unconventional wells*
 - ☑ Unconventional Wells (100%)
 - ☑ Vertical Wells (20%)
- **Capped** Wells
- **Re-stimulated** Wells

Basis of Fee Application

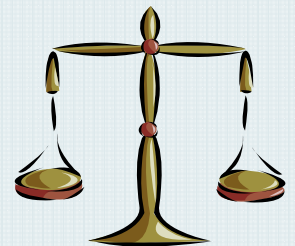
- Annual fee based on preceding year's gas price
- Levied on wells for 15 years (beginning in 2012)
- Adjusted annually for inflation (CPI)

Zoning

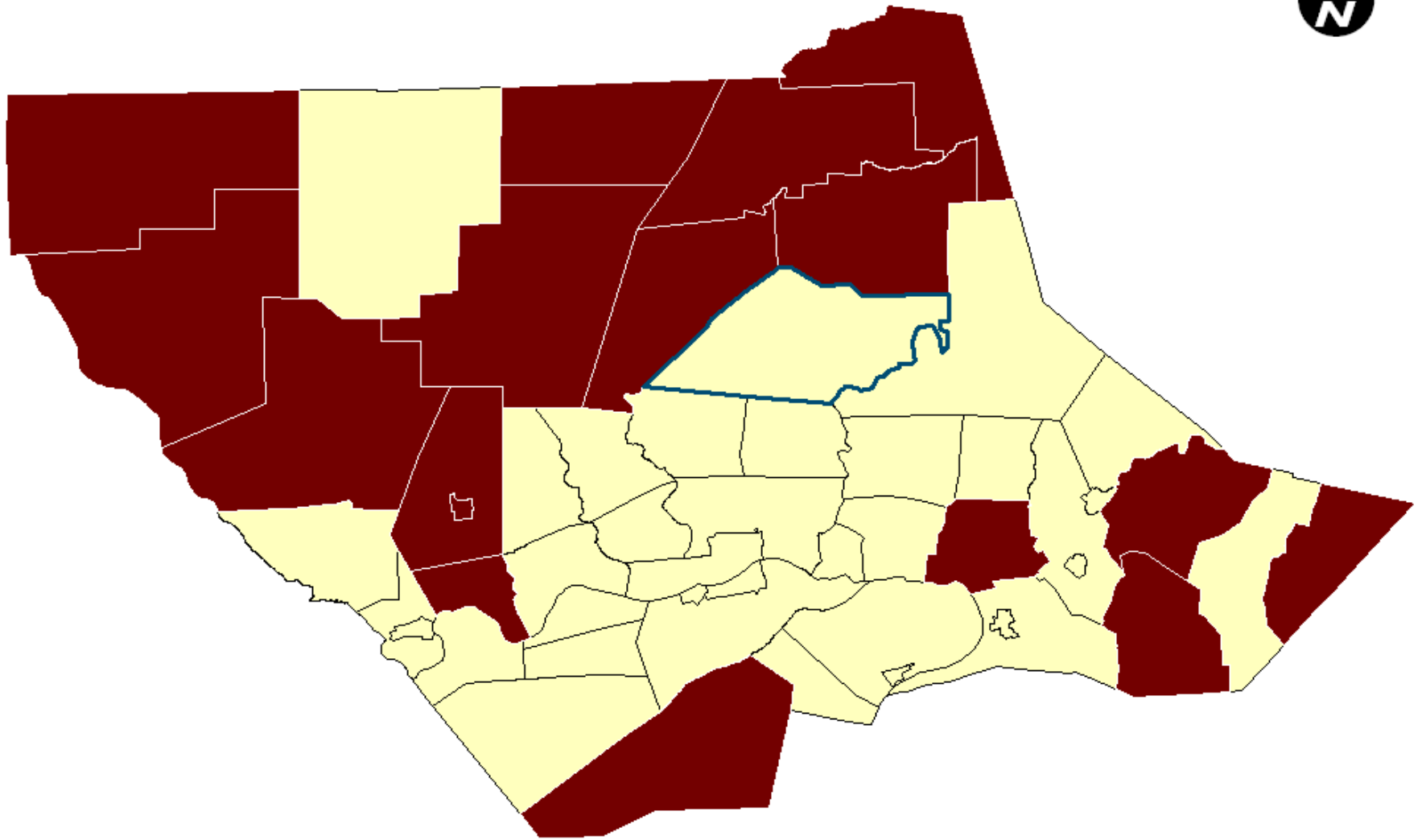


Land Use Planning—Ordinances

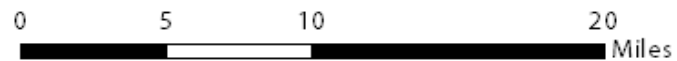
- **Lycoming County Zoning Ordinance Updated Collaboratively With Community & Industry – Feb 2011**
- **Prepared Additional Update To County Ordinance To Align With Act 13 Provisions—now Held In Abeyance**
- **Lycoming County Can Respond Rapidly To Adopt Needed Changes Pending Supreme Court Ruling**



Municipalities Zoned by Lycoming County



County Zoning

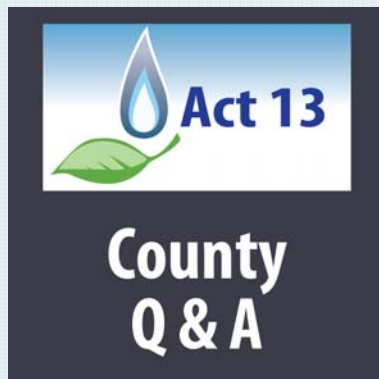


Making Sense of Act 13



Community Leaders Outreach

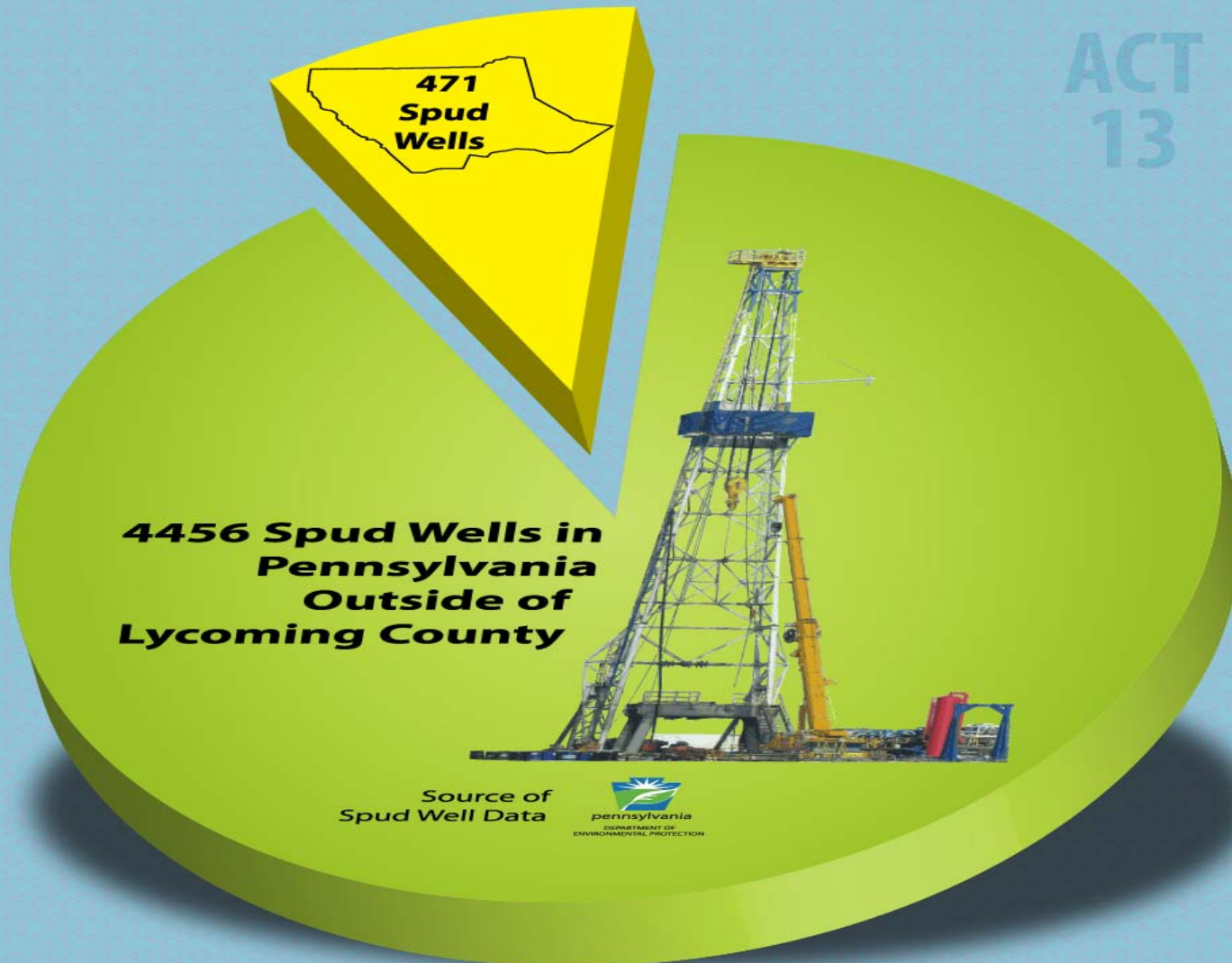
- 2 April 2012 Event In Williamsport
- Over 110 leaders invited
- Act 13 Defined & Explained
- Impact Fee Provisions Outlined
- \$10M anticipated—1st Checks
- Questions Captured & Posted



4,927 “Spud Wells” in PA*

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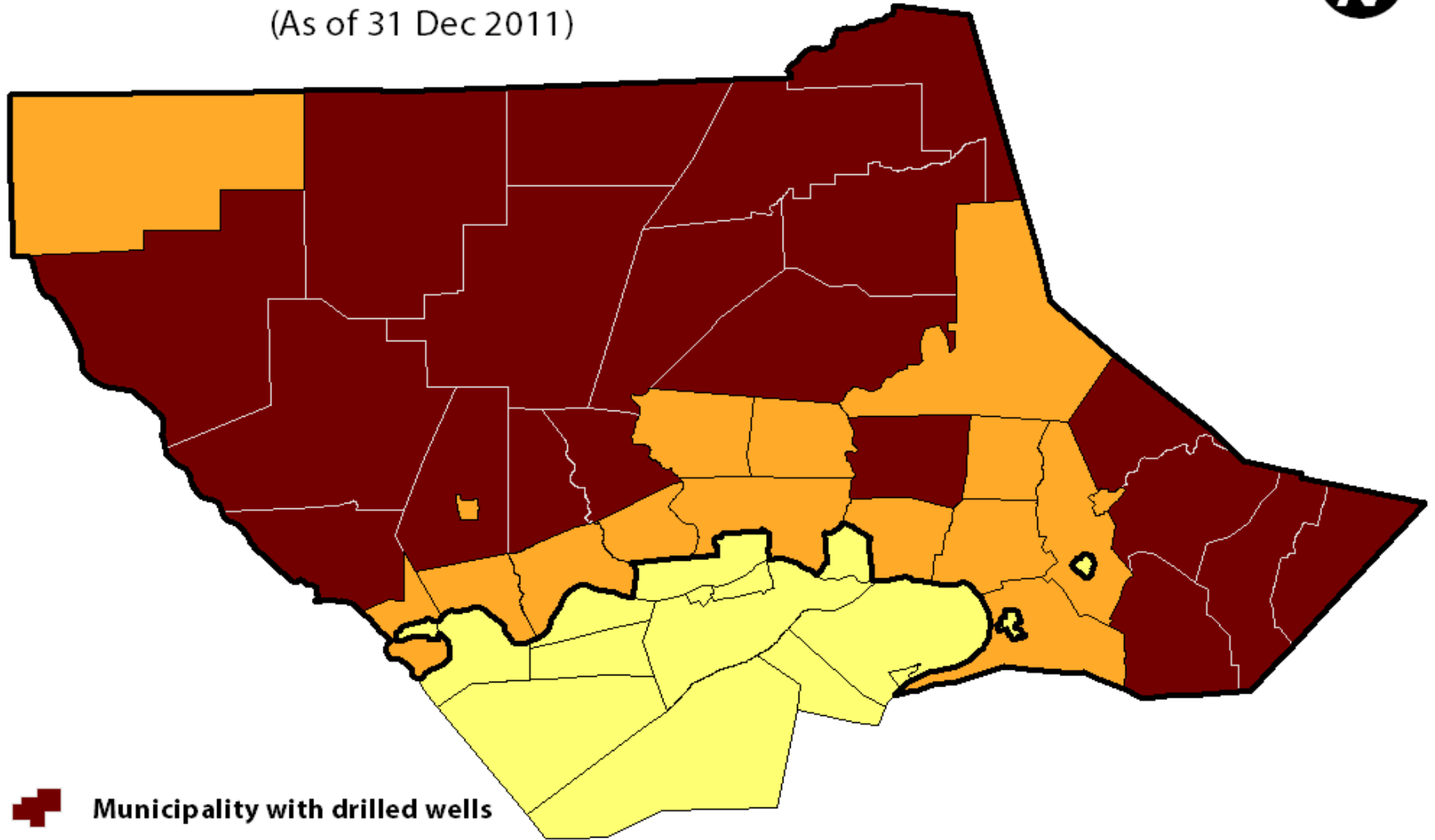
ACT
13






* On 12-31-2011

Where are they drilling?

(As of 31 Dec 2011)

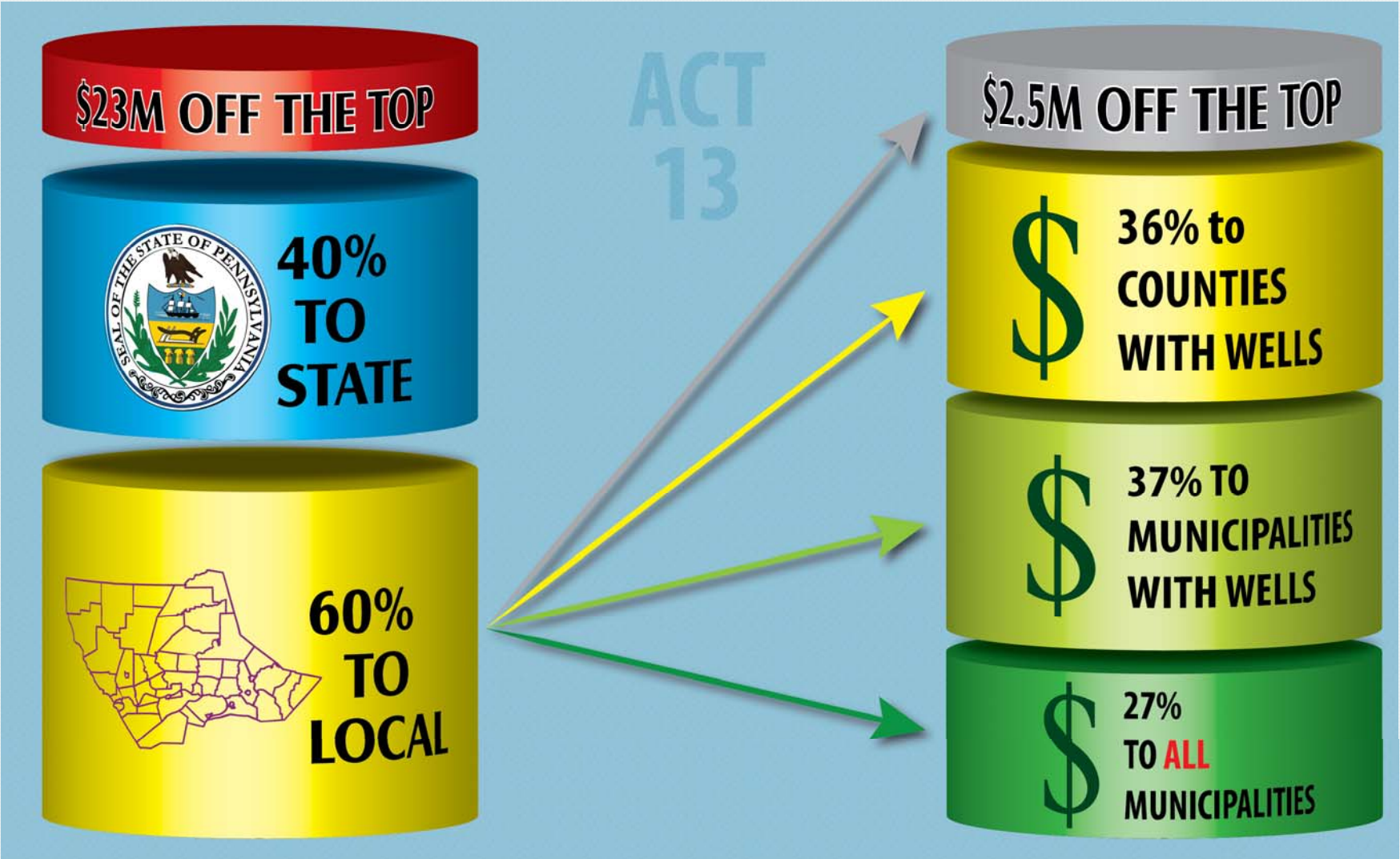


-  Municipality with drilled wells
-  Contiguous Municipality
-  Non-Contiguous Municipality

0 5 10 20 Miles



Impact Fee Distribution



County Impact Fee Allocation

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■ Lycoming County Estimated Allocation (36%)

Year	Estimated County Allocation
1	\$3,776,240
2	\$3,200,000
3	\$2,800,000

■ Key Components of County's Allocation

- Allocation based on proportion of spud wells physically located within Lycoming County
- Year 2 and 3 are conservative estimates

Municipal Impact Fee Allocation

■ Estimated Municipal Allocation in Lycoming County

	Year 1 *	Year 2	Year 3
<i>Well-Host Municipal Allocation</i>	\$3,881,136	\$3,300,000	\$2,900,000
<i>Eligible Municipalities and All Municipalities Allocation</i>	\$2,832,180	\$2,400,000	\$2,200,000
Municipal Total	\$6,713,316	\$5,700,000	\$5,100,000

■ Key Components of Municipal Allocation

- ☑ All municipalities receive an allocation
- ☑ Well host municipalities receive an additional allocation
- ☑ Estimates for years 2 & 3 are conservative

*Calculations based on DEP well count

Unprecedented Opportunity

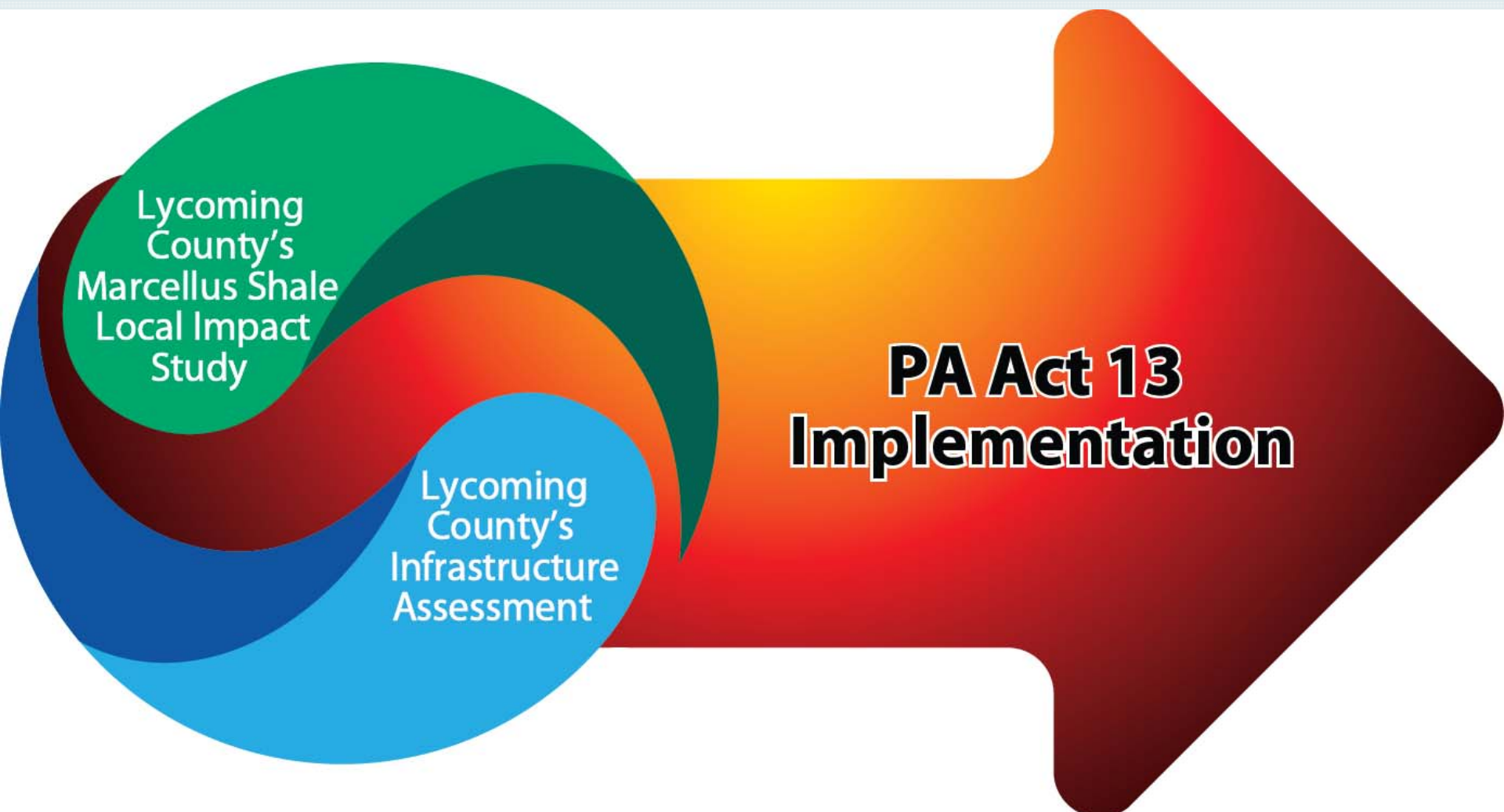
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- Collaboration and Leveraging all funding sources:
 - ☑ State
 - ☑ County
 - ☑ Municipal
 - ☑ Developers
 - ☑ Private Partners
 - ☑ Federal Sources
- Municipalities may select to use their funding to support key **infrastructure** projects
- County may be able to assist with such projects

Impact Studies



Needs & Resources



Lycoming
County's
Marcellus Shale
Local Impact
Study

Lycoming
County's
Infrastructure
Assessment

**PA Act 13
Implementation**

Taking A Countywide Perspective

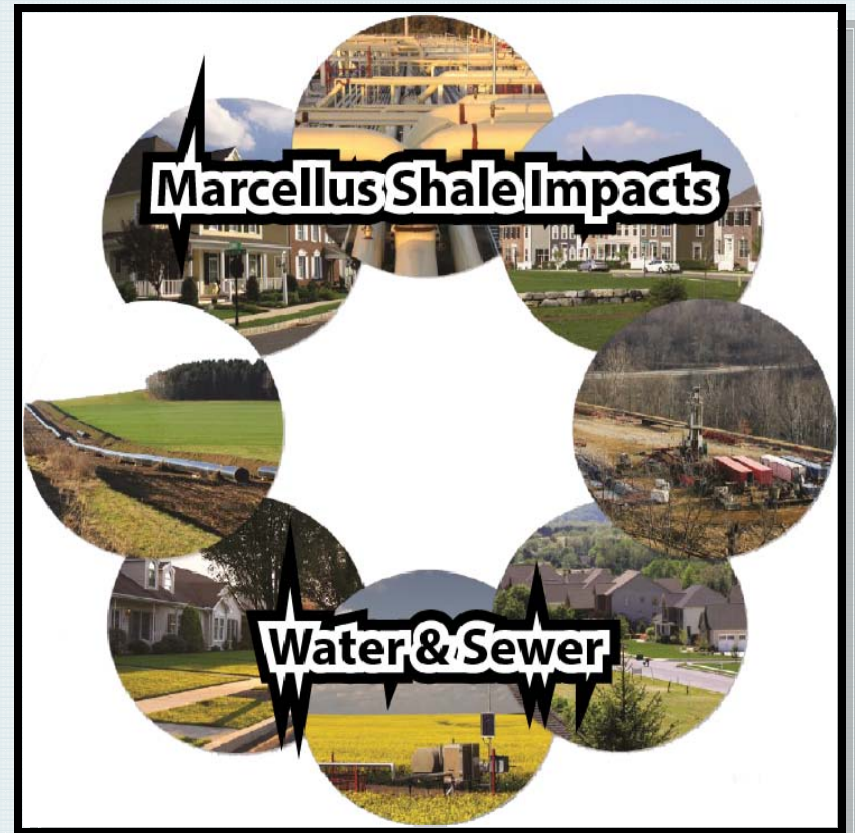
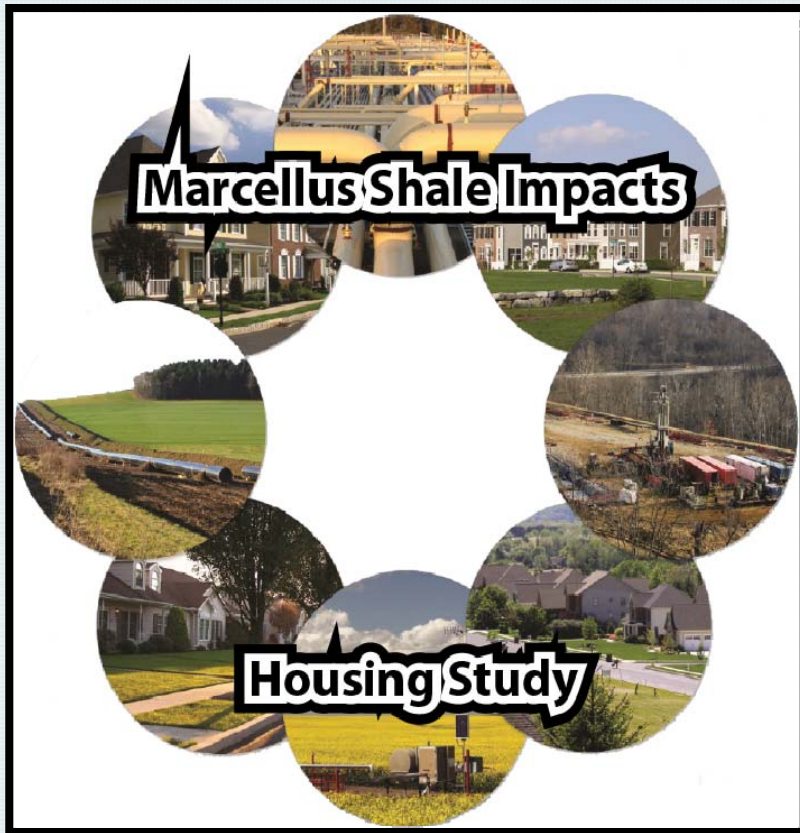
Infrastructure Assessment

- 2009-2010 Analysis
- Over 150 Projects
- Nearly \$2B needed
- Infrastructure projects in growth area communities
- Database of projects

County Impact Studies

- “Quantitative” assessments
- 12-Month Effort
 - Housing
 - Water & Sewer Infrastructure
 - Transportation Infrastructure
 - Emergency, Health & Public Safety
- Completed before Dec 2012
- A Tool to Guide Act 13 Allocation Decisions by Commissioners

Marcellus Shale Impact Studies



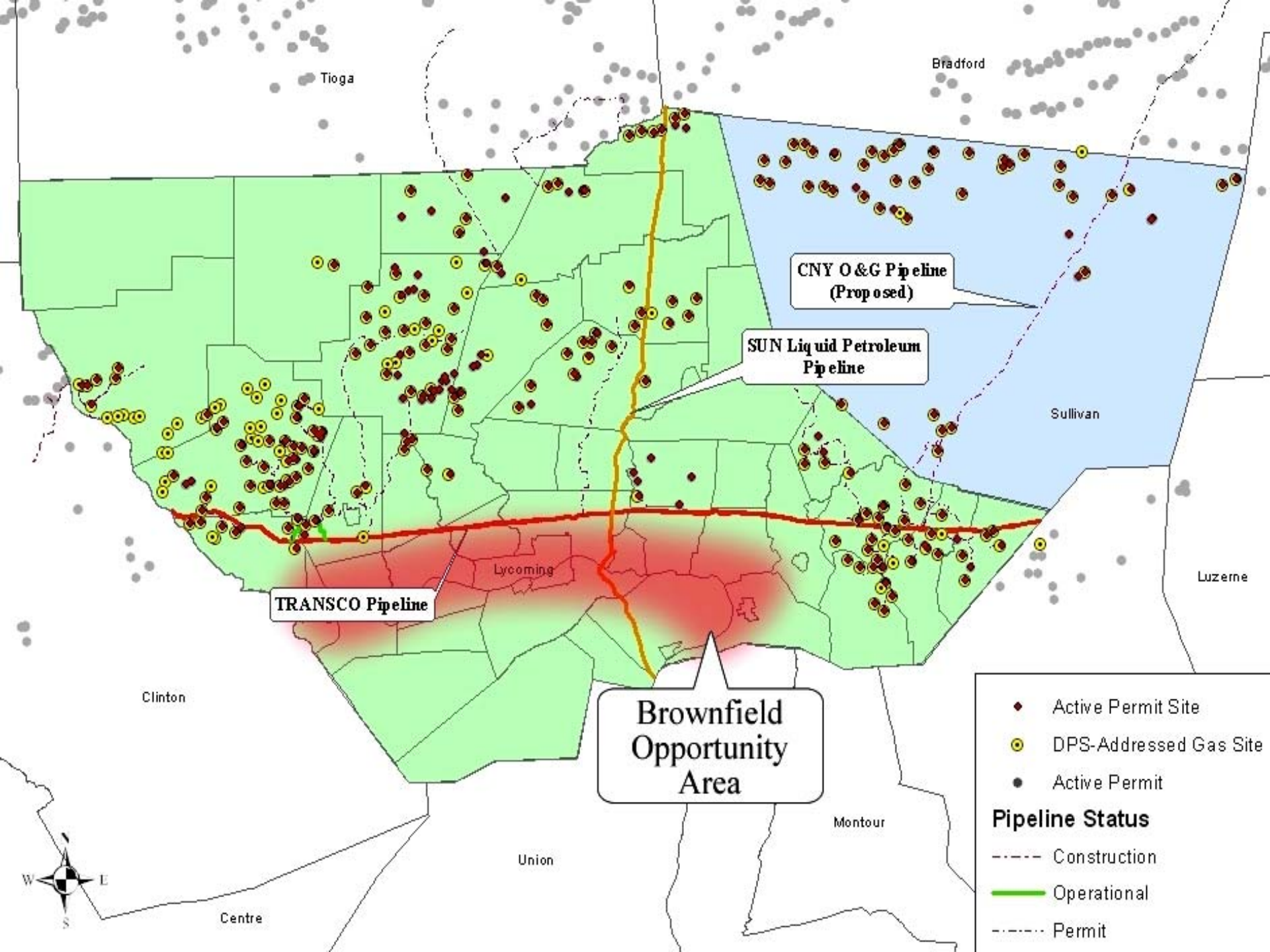
Approved by County Commissioners on 30 Aug 2012

Brownfield Revitalization



Setting the Stage

- **US EPA Assessment Grant—2007**
- **PA DEP Grant—2009**
- **US EPA Targeted Brownfield Grant—2010**
- **PA DCED Grant—2011**
- **Results**
 - **Over 80 sites identified**
 - **20 Phase I ESAs Performed**
 - **Phase II ESA for Future Residential Project**
 - **Phase II ESA for Municipal Facility**
 - **Additional Characterization for Forthcoming Project**



Montgomery Borough Site



**Abandoned Building in
Montgomery Borough**

**Two New Marcellus Shale Gas
Companies at the Same Site**



Kennedy King Site

Kennedy King – former public housing complex—blighted and vacant

MiSwaco Corporation —
natural gas products--\$50M invested



Kennedy King Site



Brodart Warehouse

1609 Memorial Ave., Williamsport, PA 17701

City of Williamsport | Lycoming County



PROPERTY

Redevelopment of this 3 acre site has strong support from the City of Williamsport, County of Lycoming and DEP as well as a very proactive owner. Site is located in the heart of the Marcellus Shale Natural Gas play. There is potential to partner with a non-profit to integrate moderately-priced, single family homes with the final redevelopment plan. The site contains a half-acre parking lot and 2.5 acres which is almost entirely under roof. Phase II ESA indicates that residential/ mixed use land use is appropriate.



Brodart Site

Brodart Building – Efforts are underway to provide affordable and market rate housing for citizens that now feel the impact of the law of supply and demand.

SITE LOCATION & CHARACTERISTICS

Property Description

Industrial Land & 1-4 story, 211,000 square foot building in poor to moderate condition

Minimum Acreage Available

3 acres

Maximum Acreage Available

3 acres

Divisible

Yes

Lease or Sale

This property is for sale

Owner

Brodart Company

Zoning

Industrial

Transportation

0.5 miles to US Route 15

1 mile to Interstate 180

5 miles to major commercial airport

No rail access



SITE CONTACT INFORMATION

Rick Dill, Brodart Co.

500 Arch St.

Williamsport, PA 17701

Phone: 800-233-8467 ext. 6470

Fax: 570-651-1614

E-mail: Rick.Dill@Brodart.com

Website: www.brodart.com

UTILITIES

Water

Williamsport Municipal Water Authority

Sewer

Williamsport Sanitary Authority

Gas

UGI

Power

PPL

Telecommunications

Level 3

Incentives

Strong owner interest—selling \$1 "as is," in the heart of Marcellus Shale Natural Gas play; strong municipal commitment to supporting redevelopment; potential public funding available for demolition and partnering with non-profit.



Pennsylvania Brownfields

Experience. Opportunity. Innovation.

MS Business in the Brownfields

- Sand Depot
- Gravel yard/Quarry
- Pipe coatings and threading
- Railroad depots & yards
- Mud Plants
- Frac Water Recycling Plant
- Trucking-Water Delivery
- Hotels
- Housing
- Restaurants
- Engineering Firms
- Specialized Lawyers
- Security Companies
- E&S Control Companies
- Seismic Testing
- Surveyors
- Water Quality Testing Firms
- Air Quality Test Firms
- Gas Field Service Companies

Final Thoughts



GAS BOOMING

Anadarko reps: It's just the beginning

By ALYSSA MURPHY
amurphy@sungazette.com

The gas industry is here to stay with longer resource estimates and more jobs.

That's what John Christiansen, director of public affairs at Anadarko, said at an editorial board meeting at the Sun-Gazette on Wednesday.

Christiansen said the United States Geological Survey increased its estimate of the natural gas found in Marcellus Shale by 40 times as much. The new estimate is 84 trillion cubic feet.

Christiansen, who works out of the Anadarko office at 1201 Lake Robbins Drive in The Woodlands, Texas, called the Marcellus Shale an enormous



CRAIG S. McKIBBEN JR./Sun-Gazette

Representatives of Anadarko Petroleum Corp. attend an editorial board meeting Wednesday morning at the Williamsport Sun-Gazette. From left are John Christiansen, director of external communications, and Brian Cain, senior staff public affairs representative.

lot of room to explore."

Christiansen said that the company's presence here already

total of eight people to 50-plus employees in Williamsport. We have 30-plus contractors in

challenge for a while because of an aging workforce, Christiansen said

9/11 ANNIVERSARY

Security intensifies

By EILEEN SULLIVAN
Associated Press

WASHINGTON

Security is intensifying at airports, train stations, nuclear plants and major sporting arenas as the nation prepares for the 10-year anniversary of the 9/11 attacks — a date al-Qaida has cited as a potential opportunity to strike again.

Counterterrorism officials say there is no intelligence pointing to a specific plot, but officials fear that someone with terrorist sympathies might see Sept. 11 as the time to make a violent statement.

The security ramp-up around the country underscores a shift in policing focus since the attacks a decade ago. Officers and emergency responders have been trained in detecting suspicious activity that could uncover a terror plot, aware that the threat has changed in part from an organized large-scale attack using airliners as missiles to the potential for smaller, less sophisticated operations carried out by individuals.

MORE COVERAGE:

NY police monitored Muslims' activities

▶ See B-6

Sustaining the Momentum

- **Estimates for Marcellus Shale Gas Development range from 25-40 years**
- **Utica Shale development on Horizon**
- **Secondary Industries**
 - **Gas Powered Generating Plants**
 - **CNG Vehicle Operations**
- **Think Ahead & Get Ready**