Municipal Impacts of Oil & Gas Development

APA Pennsylvania Chapter
Bucknell University
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“Unconventional Gas Well Impact Fee Act of 2012”

“Unconventional Well” as defined in the Act: *a shale formation below the Elk Sandstone & is extracted by hydraulic fracturing.*

Amends the Oil and Gas Act of 1984 and provides for:

- local impact fees
- fee distribution by PUC
- regulating well permits
- environmental standards
- limits on local ordinances
A Foundation Principle of Zoning in PA

Zoning ordinances should reflect the policy goals of the statement of community objectives required in section 606,

and give consideration to the character of the municipality, the needs of its citizens and the suitabilities and special nature of particular parts of the municipality.

603(a)
603(f)

“..forestry activities…shall be a permitted use by right in all zoning districts in every municipality”*

603(l)

“Zoning ordinances shall permit no-impact-home-based businesses in all residential zones of the municipality as a use permitted by right..”**

*Act 68 of 2000    **Act 43 of 2002
603(i)

“Zoning ordinances shall provide for the reasonable development of minerals in each municipality”

603(g)

(1) “Zoning ordinances shall protect prime agricultural land…”

(2) “Zoning ordinances shall provide for protection of natural and historic features and resources .”

*Act 68 of 2000
Modifying the Principle: **Act 13**

**General Rule:** all local ordinances regulating oil and gas operations shall allow for the reasonable development of oil and gas resources.

**What, Where, How Rules:**
- **Gas Wells, Pipelines:** all districts; Permitted Use
- **Impoundment Areas:** all districts; Permitted Use
- **Compressor Stations:** Ag & Ind; Permitted Use
  - all others- Conditional Use
- **Processing Plants:** Industrial; Permitted Use
  - Ag-Conditional Use
603(b)

Zoning ordinances
to the extent that those regulations of mineral extraction by local ordinances and enactments have heretofore been superseded and pre-empted by the

Surface Mining Conservation and Reclamation Act
Oil and Gas Act
Noncoal Conservation and Reclamation Act
Bituminous Mine Subsidence and Land Conservation Act
Nutrient Management Act

may permit, prohibit, regulate, restrict and determine:

Act 68 of 2000
• Conditional Uses made mandatory

(Zoning ordinances: may contain provisions for conditional uses...)

• Shifting regulatory categories

A use that doesn’t qualify as a Permitted Use could become a Conditional Use

(wells within a residential district that cannot be placed so the wellhead at least 500 feet from any existing building [Permitted Use] may be permitted as a Conditional Use)  (3304 (b)(5.1)
Questions about what, where, how

- Where is “multi-municipal planning” within the framework of Act 13? Can land uses be shared among participating municipalities?

- How (or does) The Storm Water Management Act apply to Oil and Gas Operations?

- “Express standards and criteria” for Conditional Uses—what’s possible?

- What can municipalities expect from the PUC?
Oil and Gas Operations:

(4) construction, installation, use, maintenance and repair of all equipment directly associated with activities specified (wells, pipelines, compressor stations, processing plants) to the extent that:

(i) The equipment is necessarily located

\textbf{at or immediately adjacent to}

a well site, impoundment area, oil and gas pipeline, natural gas compressor station or natural gas processing plant.

\textit{(separate use; an accessory use?)}
Zoning ordinances should reflect the policy goals of the statement of community objectives required in section 606, and give consideration to the character of the municipality, the needs of its citizens and the suitabilities and special nature of particular parts of the municipality.

How?
Impact Fees and their use

Show Me
The Money:
Impact Fees
Windham is getting $362,000 from the state under the new impact fee deal.
The supervisors are going to bank most of the money because there are 50 miles of roads in the township.
We love Act 13.

*Reported by Shirley Yannich, AICP, PMPEI Instructor and Warrington Township Supervisor*
Show Me The Money

**Impact Fee:** $362,000

*Windham Township has 922 residents*

*Annual operating budget of $130,000*

*There are 26 wells in the Township*

*8 of them are “spudded” and eligible for impact fee funds.*

*(Impact fee = $392/resident)*
The impact fee is established as a “sliding scale” with a duration of 15 years for each well. The scale is based on the price of gas.

<table>
<thead>
<tr>
<th>Year of Production</th>
<th>(Low)</th>
<th>AVERAGE GAS PRICE</th>
<th>(high)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; $2.25</td>
<td>&gt; $5.99</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>$40,000</td>
<td>$60,000</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>$30,000</td>
<td>$55,000</td>
<td></td>
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<tr>
<td>Year 3</td>
<td>$25,000</td>
<td>$50,000</td>
<td></td>
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<tr>
<td>Years 4-10</td>
<td>$10,000</td>
<td>$20,000</td>
<td></td>
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<tr>
<td>Years 11-15</td>
<td>$5,000</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>TOTAL PER WELL</td>
<td>$190,000</td>
<td>$355,000</td>
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</tbody>
</table>
Impact fees

SPUD WELL

• A “spud well” means the actual start of drilling of an unconventional well.

• Impact fees levied against all “spudded wells”

• Each bore hole on a well pad is counted separately

• Spudding is not the same as production. Fee is suspended if well is capped or doesn’t reach production of 90,000 cubic feet per day
Impact fee Uses

- Purposes impact fee funds can be used for is restricted by Act 13
- Counties and Municipalities report annually on how funds have been used
## Impact fees DISTRIBUTION

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>County Conservation Districts, Fish &amp; Boat Commission, PUC; DEP, PEMA; Office of Fire Commissioner, PennDOT; Marcellus Legacy Fund</td>
</tr>
<tr>
<td>36%</td>
<td><strong>Host County</strong> (pro-rated # spud wells in county to statewide)</td>
</tr>
<tr>
<td>37%</td>
<td><strong>Host Municipality</strong> (pro-rated # spud wells in municipality to statewide)</td>
</tr>
<tr>
<td>27%</td>
<td><strong>Municipalities in Host County</strong> (½ to non-host contiguous or within 5 miles of spud well; ½ to all municipalities in county based on population and road mileage)</td>
</tr>
<tr>
<td>Impact fee Uses</td>
<td></td>
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<tr>
<td>----------------</td>
<td></td>
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<tr>
<td><strong>Uses</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>• Roadways, bridges, public infrastructure</td>
<td></td>
</tr>
<tr>
<td>• Water, storm water, sewer</td>
<td></td>
</tr>
<tr>
<td>• Emergency preparedness; public safety</td>
<td></td>
</tr>
<tr>
<td>• Environmental &amp; recreation programs (inc. conservation districts, open space, agricultural preservation)</td>
<td></td>
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<tr>
<td>• Preservation &amp; reclamation of water supplies</td>
<td></td>
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<td>• Tax reductions</td>
<td></td>
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<tr>
<td>• Safe &amp; affordable housing</td>
<td></td>
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<tr>
<td>• Records management, GIS, information technology</td>
<td></td>
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<tr>
<td>• Delivery of social services</td>
<td></td>
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<tr>
<td>• Judicial services</td>
<td></td>
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<tr>
<td>• Deposit into capital reserve for permitted projects</td>
<td></td>
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<tr>
<td>• Career &amp; technology training for oil &amp; gas industry</td>
<td></td>
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<tr>
<td>• Local/regional planning initiatives under the MPC</td>
<td></td>
</tr>
</tbody>
</table>
Local Government Policy Choices

Short term v. Long Term
Repair the past v. Prepare for the future
Plan-based v. Ad Hoc
Fairness

How can Planners help?
Municipal Impacts of Oil & Gas Development

Is There Planning After Act 13?
<table>
<thead>
<tr>
<th>USE</th>
<th>DISTRICT</th>
<th>HOW</th>
<th>DISTANCE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas well</td>
<td>ALL</td>
<td>PU</td>
<td>500’ to existing building</td>
</tr>
<tr>
<td>Impoundment</td>
<td>ALL</td>
<td>PU</td>
<td>300’ to existing building</td>
</tr>
</tbody>
</table>
| Compressor Station         | AG & IND ALL OTHERS | PU CU | 750’ to nearest existing building  
200’ from nearest lot line  
<60dbA at nearest lot line |
| Processing Plant           | IND AG           | PU CU | 750’ to nearest existing building  
200’ from nearest lot line  
<60dbA at nearest property line |
| Existing water well        |                  |     | No gas well within:  
500’ & written consent of owner  
1,000’ & written consent of supplier |
| Water supply intake        |                  |     | No gas well within 300’  
Edge of disturbed area setback 100’ |
| Wetlands [1 ac+]           |                  |     | No gas well within 300’  
Edge of disturbed area setback 100’ |
| “Blue-lined “stream”       |                  |     | 300’ bore hole; 100’ edge of well                   |
Planning and Act 13

• Given the limitations of Act 13, and the nature of natural gas development, is there any need for planning?

• If there is, what can planning do; what can it add? What should be on the agenda?

• If there isn’t, why are we here?
A Planning Agenda

• Focus on the rest of the community
• Revisit comprehensive plans
• Assess and prioritize assets
• Re-organize/re-orient planning commissions
• Network and interact
• Grab opportunities; think regionally
• Move quickly- there’s much that can be lost
Focus on the rest of the community

• Zoning of NGD has gotten most of the attention but that shouldn’t be the only focus.

• There’s more to the community than wells, pipelines, compressor stations and processing plants. (Relatively speaking, there will be fewer of the last two.)

• Much of the rest of the community will be untouched but still must be maintained, improved, and invested in: residential neighborhoods; commercial areas; amenities for current and future residents, community facilities.

• Places far from wellsites will be impacted.
Revisit what the Comprehensive Plan includes:

- **Housing**
- **Economic**
- **Demographic** characteristics and trends
- **Amount-Type-Location-Interrelationships of Land Uses**
- **Natural**
  - **Historic**
  - **Cultural** resources
- **Prospects for future growth**
- **General location & extent of Transportation Community Facilities**
- **NGD**
## Comprehensive Plan Elements & NGD

<table>
<thead>
<tr>
<th>Comprehensive Plan Elements</th>
<th>NGD Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Objectives &amp; Goals</td>
<td></td>
</tr>
<tr>
<td>Community Facilities</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td>Land Use</td>
<td></td>
</tr>
<tr>
<td>Implementation strategies</td>
<td></td>
</tr>
<tr>
<td>Natural/historic resource protection</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>
Identify and Prioritize Assets

• Identify and prioritize community assets

• What’s
  
  *important, critical, vulnerable, irrereplaceable, necessary for a sustainable future*

• Act quickly
  
  *Assets may be overtaken by natural gas development. Timing is critical.*
A Critical Asset: Public Water*

3215. Well location restrictions

(a) General Rule

Unconventional gas wells may not be drilled within 1,000 feet measured horizontally from the vertical well bore to any existing water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor without written consent of the water purveyor.

If consent is not obtained and the distance restriction would deprive the owner of the oil and gas rights...the owner shall be granted a variance from the distance restriction...

*also: vulnerable, irreplaceable, necessary for community sustainability
Act Quickly

The Official Map may be the most valuable tool

It can reserve what’s valuable, vulnerable and irreplaceable.

Plan to have the funds ready to act.
Official Map
January 2002

This is to certify that this is the Official Map of Ferguson Township, Centre County, PA, as adopted by Ordinance # on January 4, 2002.

NOTES: The proposed roads and bikepaths on this map are shown for general location purposes only.

NOTE: Right-of-Way of roads and bikepaths to be determined at the Planning, subdivision or Land Development stage.
### Capital Improvements Budget

<table>
<thead>
<tr>
<th>CAPITAL IMPROVEMENTS</th>
<th>6 YEAR BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECTS</td>
<td>EST. COST*</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Storm Sewers</td>
<td>2,100.</td>
</tr>
<tr>
<td>Sanitary Sewers</td>
<td>2,100.</td>
</tr>
<tr>
<td>Water well site acq.</td>
<td>900.</td>
</tr>
<tr>
<td>Fire Equipment</td>
<td>400.</td>
</tr>
<tr>
<td>Parkland acquisition</td>
<td>250.</td>
</tr>
<tr>
<td>Park development</td>
<td>1,750.</td>
</tr>
<tr>
<td>Major road devel.</td>
<td>3,000.</td>
</tr>
<tr>
<td>Mun. Bldg. renovation</td>
<td>1,500.</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12,000</td>
</tr>
</tbody>
</table>

* Estimated costs in 000’s of dollars. Funding sources TBD: **taxes, borrowing, grants.**
Local Planning Commissions

Natural gas development goes on 24 hours a day, 365 days a year. It goes on for years.

Planning commissions meet once or twice a month.

Planning commissions need to work with the NGD cycle.
NGD Process & Timeframes

- **Leasing**: 6+ months
- **Exploration / Seismic tests**: 4 months
- **Site Preparation & Drilling**: 4-8 weeks
- **Site Reclamation**: 2 weeks
- **Production & Transport**: 5-30 years
- **Maintenance**: 5-30 years
Local Planning Commissions

How can planning commissions keep up with the need?

- Re-organize to get the job done.
- Learn to work with others.
- Learn how to be planners.

Unfortunately, there is a disconnect between where the need is and where the resources are.
55 counties
1,988 municipalities

Marcellus shale deposit.
**Planning Commissions by Region**

- **39%**
- **64%**
- **56%**
- **46%**
- **90%**
- **98%**


**Marcellus shale deposit.**
Reorganize Planning Commissions

Planning must be continuous—can’t be just “once-a-month”

Set up a subcommittee of the planning commission to be in charge of this specific planning issue

Invite residents and others with knowledge and interest to join the subcommittee

Meet with other planning commissions
2 Approvals Needed

- **DEP Permit for well**
  
  (30 day time limit; may be extended)

- **Municipal Zoning Permit**
  
  (30 day time limit “Permitted Use”
  120 day max. for “Conditional Use”)

In a municipality with no zoning
only a DEP permit is needed
Planners and DEP

3211 (b)(1): Well Permits

Permit application with plat showing:
- Political subdivision and county
- Municipalities adjacent to site
- Name of surface landowner
- Name of surface landowners & water purveyors whose water supplies are within 3,000 feet
- Acreage of tract to be drilled
- Etc.

Can Municipal Planners & Officials develop working relationships with DEP?

Is there information or data municipalities can provide DEP?
In making a determination on a well permit, DEP shall consider the impact of the proposed well on public resources, including, but not limited to:

- Publicly owned parks, forests, game lands and wildlife areas
- National or State scenic rivers
- National natural landmarks
- Habitats of rare and endangered flora & fauna
- Historical and archaeological sites listed on the Federal or State list of historic places
- Sources used for public drinking supplies (see sub. B)
There is a lot of planning to do after Act 13.