



## Local Impacts of Marcellus Shale Development

Comments of Ellen Ferretti  
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to the Senate Majority Policy Committee

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Chairman Erickson and other distinguished members of the Senate Majority Policy Committee, my name is Ellen Ferretti and I am a Vice President with the Pennsylvania Environmental Council (PEC). I would like to thank you for the opportunity to discuss local impacts of Marcellus Shale development.

PEC is a statewide nonprofit organization that, for four decades, has advanced innovative and consensus based solutions to environmental challenges at both the policy and project level. With offices and staff throughout the state, we are keenly aware of the pace and extent of natural gas development within the Commonwealth. As a resident of Dallas Township, Luzerne County, I have witnessed and had the opportunity to discuss impacts throughout Northeastern Pennsylvania.

Although PEC's focus has been primarily on evaluating Marcellus Shale development on a comprehensive basis, individual impacts can include:

- Fragmentation of forested blocks and disruption of plant and animal habitats without the benefit of advance management planning.<sup>1</sup>
- Highway, road and bridge degradation due to increased truck traffic serving aspects of the industry ranging from material delivery to movement of equipment.
- Water access points that are not practical or safe for the increased truck activity necessary to complete withdrawal.
- Substantially increased traffic on mainly rural, often two-lane roads without the benefit of an established and well-planned roadway network to serve both the present industry and the future of the region.
- Increased demand for housing to service what may be a temporary work force.
- Increased demands on local and county municipal services, such as police, fire, emergency management and planning commissions.

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<sup>1</sup> To better understand these impacts, PEC highly recommends a Pennsylvania Energy Impacts Assessment issued by the Pennsylvania Chapter of The Nature Conservancy (November 2010): [http://www.nature.org/media/pa/tnc\\_energy\\_analysis.pdf](http://www.nature.org/media/pa/tnc_energy_analysis.pdf)

- Polarization of community members over the details of Marcellus activities, so much so that public meetings, such as local zoning hearings, have become contentious and often hostile.

However, when you attempt to truly account for these individual impacts, you will discover a void created by the lack of a comprehensive or coordinated system to gather and employ factual data and information relative to all aspects of the industry; from planning and land development to cumulative impacts. Into that void goes all manner of speculation, misinformation, and mistrust – when combined with what limited factual data and information we have, the result is nothing less than rampant confusion. Elimination of this void would create a solid core upon which to build the foundation for a cooperative growth of community and industry while also serving to better protect the environment and human health.

The Pennsylvania Environmental Council issued a report in July of 2010 entitled, ***Developing the Marcellus Shale: Environmental Policy and Planning Recommendations for the Development of the Marcellus Shale Play in Pennsylvania***. This Report was based on dialog from the Pennsylvania Marcellus Shale Policy Conference held in May of 2010 in Pittsburgh. A copy of the full Report is available on PEC's website.<sup>2</sup>

The following two passages from that Report give emphasis to this position...

*“Based on published information related to unconventional shale gas well development that has been occurring for longer periods of time...there is a concern that the cumulative impact of large-scale gas development in Pennsylvania will cause environmental and human impacts. However, at this point in the trajectory of shale gas development, there is an insufficient amount of empirical data to determine the nature and degree of severity of such potential cumulative impacts. The development of a regulatory structure to protect human health and the environment over the course of shale gas development in the Commonwealth is imperative and should be based on the principle of adaptive management, but this principle requires affirmative efforts to develop sound, publicly accessible databases of empirical evidence.”*

And,

*“Extraction and delivery of gas from the Marcellus Shale reserve, and perhaps other shale gas formations that are known to exist in Pennsylvania, will unfold over many decades, so the full extent and impact of this activity is unknown. For this very reason Pennsylvania should approach management in a comprehensive fashion, mindful of potential, long-term cumulative impacts to the natural and built environment. Our current regulatory process – which authorizes activities on a permit-by-permit basis irrespective of other activity – falls short of this goal. Nor does the current process strive for the proactive identification, development and application of best management practices that promote the Commonwealth's goal of protecting the environment and public health, safety and welfare now and in the future.”*

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<sup>2</sup> [www.pecpa.org/marcellus](http://www.pecpa.org/marcellus)

For local impacts to be better understood, and more importantly for those impacts to be effectively mitigated or avoided, Pennsylvania must make the investment to fill the information void. This investment must include:

- (1) the routine collection, recording and publication of relevant information throughout the life cycle of a well (from well pad site selection through post-production well plugging);
- (2) research concerning potential long-term cumulative impacts;
- (3) research and development for the formulation of best management practices;<sup>3</sup> and
- (4) establishment of a planning protocol, with a reasonable mechanism for constructive community input, that will minimize the risk of environmental, ecological and other community impacts.<sup>4</sup>

PEC strongly believes that if this investment is made, we can enhance certainty for both our communities and the industry – a win-win for Pennsylvania.

As a follow-up to our Report, PEC is currently working on a legislative and regulatory proposal that will effect the Report's objectives and recommendations. We will make sure that all members of General Assembly receive a copy of the proposal once finished.

In conclusion, when discussing the local impact of Marcellus Shale drilling, conversations will vary based on perception, which will of course change depending on where you live, what you value, and how you may be personally impacted. Aside from subjective observations, there is a real need for the aforementioned "sound, publicly accessible databases of empirical evidence" as well as a management approach that is comprehensive and mindful of potential, long-term cumulative impacts to the natural and built environment. Several significant steps have already been taken by the Departments of Environmental Protection and Conservation & Natural Resources, as well as through innovations and efforts by the industry, but the job is not finished. As PEC stated with the release of our Report last year: we have one chance to get this right, and we have little time to lose. That view remains, and holds-all-the-more true today.

Respectfully submitted,

Ellen Ferretti

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<sup>3</sup> Given the characteristics of developing shale gas production wells – a complex and intensive process involving multiple parties across a diversity of locations – statutes and regulations can only go so far. It is imperative that the industry be encouraged and incentivized to employ best management practices to best protect our communities and environment.

<sup>4</sup> As noted in PEC's Report, Colorado has already established a voluntary, regional planning option for shale gas development.