

**BASELINE ENVIRONMENTAL MONITORING AT A MARCELLUS
SHALE GAS LOCATION IN SOUTHWESTERN PENNSYLVANIA**

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Most studies of the environmental impacts of shale gas development (including horizontal drilling and hydraulic fracturing) suffer from the lack of baseline monitoring to determine conditions prior to gas development. Recognizing this limitation of existing studies, eight government organizations are collaborating on an assessment of the environmental impact of Marcellus Shale development in southwestern Pennsylvania. This study differs from its predecessors by having one full year of baseline monitoring before development starts. Then monitoring of environmental parameters will continue through pad and access road construction, drilling, completion, and into early production. Monitoring will include impacts to air quality (US Dept. of Energy), water quality and quantity (US EPA, US Geological Survey, US Army Corp. of Engineers, and Pennsylvania Topographic and Geologic Survey); wildlife resources (US Fish and Wildlife Service and Pennsylvania Dept. of Environmental Protection) and future land use (US Forestry Service). Overview of the study and early results of baseline monitoring will be presented.

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