

## APPENDIX G: USEFUL RESOURCES<sup>182</sup>

### Academic

<u>Resource</u>	<u>Description</u>
<b><i>Bucknell University Marcellus Shale Initiative Database</i></b> <a href="#">Click Here</a>	The Bucknell University Marcellus Shale Initiative Database focuses on scientific, technical, sociological, and economic aspects of shale gas production and hydraulic fracturing in the Marcellus Shale and other shale plays. It lists primarily print-based publications and how to obtain them.
<b><i>CMU Research Guide to the Marcellus and Utica Shales</i></b> <a href="#">Click Here</a>	Carnegie Mellon University’s catalog of literature on natural gas extraction by hydraulic fracturing in order to help policymakers and researchers comprehend the existing research on this topic and identify issues for further study. The catalog was commissioned by the PA State Association of Boroughs.
<b><i>Colorado State University Advanced Energy Tracker</i></b> <a href="#">Click Here</a>	The Colorado State University Advanced Energy Tracker is a database that contains information about advanced energy legislation across all 50 states. Legislation is organized into the following categories: electricity generation, energy efficiency, financing, regulatory, natural gas, emissions, transportation, infrastructure, economic development, and other energy. The database provides current legislative language, recent actions, bill sponsor information, and policy trend analyses.
<b><i>Institute for Energy &amp; Environmental Research Marcellus Shale Information Clearinghouse</i></b> <a href="#">Click Here</a>	The Institute for Energy & Environmental Research at Wilkes University works to achieve consensus in the creation of sustainable, environmentally sound public policy on energy issues, including shale gas development, facing northeastern Pennsylvania. The Institute accomplishes its work through basic and applied research subject to internal and external review, innovative education and public outreach, and providing the best information made available by outside sources.
<b><i>Temple University – PA Policy Database Project</i></b> <a href="#">Click Here</a>	The Pennsylvania Policy Database Project is an online resource that provides access to more than 170,000 state and news media records and enables users to trace and analyze the history of public policy in the Commonwealth since 1979.
<b><i>The Shale Network</i></b> <a href="#">Click Here</a>	The Shale Network is a project funded by the National Science Foundation (NSF) to help scientists and citizens store data for water resources that may be affected by gas exploitation in shale. Its primary focus is the Marcellus Shale and other shale plays in the northeastern United States.
<b><i>Shale Training &amp; Education Center (ShaleTEC)</i></b> <a href="#">Click Here</a>	ShaleTEC is a collaboration between Pennsylvania College of Technology and Penn State Extension established to serve as the central resource for workforce development and education needs of the community and the oil and natural gas industry. This website provides resources and course information on educational opportunities related to shale gas.

---

<sup>182</sup> These links are not an exhaustive compendium of information sources for unconventional oil and gas development in Pennsylvania. Rather, they represent resources that the Roundtable found particularly useful in informing and guiding its work.

## Resource

## Description

**Washington & Jefferson College Center for Energy Policy and Management**

[Click Here](#)

The Center for Energy Policy and Management provides opportunities for scientists, industry leaders, elected officials, advocates and citizens to shape policy related to the country's full array of energy sources while working to minimize environmental impact and promote economic growth. The Center's Energy Index generates analyses of the nation's progress towards energy independence and security and translates these analyses into a relatable format that is easily understood so that all parties may use its findings in their work. The Center is dedicated to enriching the civil discussion of the country's energy future by bringing experts together in a spirit of mutual respect and concern for the common good.

## **Government**

### Resource

### Description

**PA DEP – Office of Oil & Gas Management**

[Click Here](#)

DEP's Office of Oil and Gas Management is responsible for statewide oil and gas conservation and environmental programs to facilitate the safe exploration, development, and recovery of Pennsylvania's oil and gas reservoirs in a manner that will protect the Commonwealth's natural resources and the environment. The office develops policy and programs for the regulation of oil and gas development and production pursuant to the Oil and Gas Act, Coal and Gas Resource Coordination Act, and Oil and Gas Conservation Law; oversees the oil and gas permitting and inspection programs; develops statewide regulation and standards; conducts training programs for industry; and works with the Interstate Oil and Gas Compact Commission and the Technical Advisory Board.

**PA DEP Oil and Gas Technical Advisory Board (TAB)**

[Click Here](#)

The Oil and Gas Technical Advisory Board is a five-member committee that was authorized under Act 223 of 1984 (Oil and Gas Act) and retained in Act 13 of 2012. DEP consults with the TAB in the formulation, drafting, and presentation stages of all regulations of a technical nature and guidance documents promulgated under the Oil and Gas Act and other relevant laws. The TAB is given a reasonable opportunity to review and comment on all regulations of a technical nature prior to submission to the Environmental Quality Board.

**PA Public Utility Commission (PUC)**

[Click Here](#)

The PUC was created in March 1937. Its mission is to balance the needs of consumers and utilities, ensure safe and reliable utility service at reasonable rates, protect the public interest, educate consumers to make independent and informed utility choices, further economic development, and foster new technologies and competitive markets in an environmentally sound manner. More recently, Act 13 gave the PUC administrative oversight of the unconventional well impact fee and review of local oil and gas ordinances.

**PA Marcellus Shale Advisory Commission Report**

[Click Here](#)

Adopted on July 15, 2011, the Marcellus Shale Advisory Commission Report offered 96 recommendations that outlined a comprehensive strategic plan for the responsible development of natural gas in the Commonwealth. The report informed the eventual content of Act 13.

<u>Resource</u>	<u>Description</u>
<p><b><i>Act 13 of 2012 – DEP information related to the current PA Oil and Gas Act</i></b>  <a href="#">Click Here</a></p>	<p>Act 13 of 2012 was the first comprehensive update of the Oil and Gas Act since the 1980s. It enacted updated environmental standards and authorized local governments to adopt an impact fee. Among the Act's other provisions are increased setback requirements for unconventional gas development, enhanced protection of water supplies, and uniform state regulation of well development.</p>
<p><b><i>PA Coal and Gas Resource Coordination Act with 2011 Amendments</i></b>  <a href="#">Click Here</a></p>	<p>The amended Coal and Gas Resource Coordination Act establishes spacing requirements between natural gas well clusters and workable coal seams. The 2011 amendments included changes to definitions; updates to relevant permitting requirements set forth in the Oil and Gas Act; a requirement that well clusters covered by the Act be at least 2,000 feet apart, unless otherwise agreed upon by the coal and gas operators; and a requirement that oil and gas operators, whose well clusters will penetrate an operating coal mine obtain the written consent of the coal operator before drilling as a prerequisite to obtaining a drilling permit.</p>
<p><b><i>PA Oil and Gas Conservation Law of 1961</i></b>  <a href="#">Click Here</a></p>	<p>The Oil and Gas Conservation Law of 1961 defines and prohibits waste in the production of oil and gas; defines the powers and duties of the Oil and Gas Conservation Commission (which DEP subsumed upon its creation) with respect to the prevention of waste in the production of oil and gas from certain geological horizons; protects correlative rights; provides for the spacing of well drilling operations; and provides for the unitization of lands and horizons for the purpose of regulating well spacing.</p>
<p><b><i>PA Act 127/Gas and Hazardous Liquids Pipeline Act</i></b>  <a href="#">Click Here</a></p>	<p>Act 127 expands the PUC's authority to enforce federal pipeline safety laws as they relate to gas and hazardous liquids pipeline equipment and facilities within the Commonwealth of Pennsylvania. The Pipeline Act requires the Commission to develop and maintain a registry of pipeline operators within Pennsylvania. The Commission will recover the costs of this program by assessments on pipeline operators based on the total intrastate regulated transmission, regulated distribution, and regulated onshore gathering pipeline miles in operation for the transportation of gas and hazardous liquids in Pennsylvania during the prior calendar year.</p>
<p><b><i>PA Dormant Oil and Gas Act</i></b>  <a href="#">Click Here</a></p>	<p>The Dormant Oil and Gas Act provides for the creation of a trust for the benefit of absentee owners of interests in oil and gas; authorizes the trustee to enter into leases of interests in oil and gas under terms and conditions authorized by the Court of Common Pleas; and provides for the administration of the trust and for payment of moneys to the trustee.</p>
<p><b><i>Chapter 78 of the Pennsylvania Code</i></b>  <a href="#">Click Here</a></p>	<p>Chapter 78 includes most Pennsylvania regulations that govern the oversight of the oil and natural gas industry. It is currently under revision based on provisions in Act 13.</p>

<b><u>Resource</u></b>	<b><u>Description</u></b>
<p><b><i>Interstate Oil and Gas Compact Commission</i></b>  <a href="#">Click Here</a></p>	<p>The Interstate Oil and Gas Compact Commission is a multi-state government agency that promotes the conservation and efficient recovery of domestic oil and natural gas resources while protecting health, safety, and the environment.</p>
<p><b><i>Blueprint for a Secure Energy Future</i></b>  <a href="#">Click Here</a></p>	<p>In March 2011, the White House released the "Blueprint for a Secure Energy Future" – a comprehensive plan to reduce America’s dependence on foreign oil, save consumers money, and make the United States the leader in clean energy industries. The blueprint supports the responsible development of the nation’s oil and natural gas resources, with the specific goals of promoting safe practices and reducing energy imports.</p>
<p><b><i>EPA Hydraulic Fracturing Research Advisory Panel</i></b>  <a href="#">Click Here</a></p>	<p>At the request of Congress, EPA is conducting a study to better understand any potential impacts of hydraulic fracturing on drinking water and groundwater. The scope of the research includes the full life span of water in hydraulic fracturing. A final report is expected in for public comment and peer review in 2014.</p>
<p><b><i>U.S. Secretary of Energy Advisory Board’s Shale Gas Production Subcommittee</i></b>  <a href="#">Click Here</a></p>	<p>The U.S. Secretary of Energy Advisory Board’s Shale Gas Production Subcommittee created 20 recommendations regarding shale gas production that are classified into three categories: recommendations ready for implementation, primarily by the federal agencies; recommendations ready for implementation, primarily by the states; and recommendations that require new partnerships and mechanisms for success.</p>
<p><b><i>National Energy Technology Laboratory (NETL)</i></b>  <a href="#">Click Here</a></p>	<p>NETL is headquartered in South Park, Allegheny County and represents a substantial national and regional resource on shale gas development with many relevant research projects currently underway. NETL is leading a consortium of eight state and federal agencies tasked with evaluating the environmental impacts on a Marcellus Shale test site located in Washington County, PA. This NETL prospective test site will monitor impacts to drinking water and examine the impacts to air quality, terrestrial and aquatic wildlife, seismic activity, soil properties, vegetation, and future land use.</p>
<p><b><i>U.S. FERC – Gas Pipeline Projects</i></b>  <a href="#">Click Here</a></p>	<p>This Federal Energy Regulatory Commission (FERC) database provides a listing of and information related to major onshore pending pipeline projects throughout the United States.</p>

## Industry

<u>Resource</u>	<u>Description</u>
<b><i>American Petroleum Institute</i></b> <a href="#">Click Here</a>	The American Petroleum Institute (API) is the national trade association of America's oil and natural gas industry. API works with industry subject-matter experts to maintain more than 600 standards and recommended practices related to the oil and gas industry. Additionally, API works to improve the compatibility of oil and gas operations with the environment while economically developing energy resources.
<b><i>Energy in Depth</i></b> <a href="#">Click Here</a>	Launched by the Independent Petroleum Association of America, Energy in Depth is a research, education, and public outreach campaign that is focused on the promise and potential of responsibly developing America's onshore energy resource base.
<b><i>Marcellus Minutes – PA Marcellus News Feed</i></b> <a href="#">Click Here</a>	Marcellus Minutes provides industry news and Pennsylvania capitol insights, including news and updates on legislative movement, industry developments, and industry-related studies on shale gas.
<b><i>Marcellus Shale Coalition</i></b> <a href="#">Click Here</a>	The Marcellus Shale Coalition (MSC) works with exploration and production, midstream, and supply chain partners in the Appalachian Basin and across the country to address issues regarding the production of natural gas from the Marcellus and Utica shale plays. It provides in-depth information to policymakers, regulators, media, and other public stakeholders on the positive impacts responsible natural gas production is having on families, businesses, and communities across the region.

## Media

<u>Resource</u>	<u>Description</u>
<b><i>The Allegheny Front</i></b> <a href="#">Click Here</a>	The Allegheny Front is a radio program covering environmental issues in Western Pennsylvania produced at WYEP-FM, a Pittsburgh NPR affiliate. It provides information on local and regional environmental news through stories, interviews, news, and commentaries.
<b><i>NPR – StateImpact Pennsylvania</i></b> <a href="#">Click Here</a>	StateImpact Pennsylvania is a collaboration among WITF, WHYY, and National Public Radio. This website covers the economic and environmental impact of Pennsylvania's booming energy economy, with a focus on Marcellus Shale drilling.
<b><i>PA Environment Digest Daily Blog</i></b> <a href="#">Click Here</a>	The PA Environment Digest Daily Blog provides daily links to environmental news stories from across Pennsylvania.

## Resource

## Description

### ***PA Environment Digest Newsletter***

[Click Here](#)

The PA Environment Digest Newsletter is a weekly newsletter that provides news and links on environmental issues throughout Pennsylvania.

### ***Pittsburgh Business Times – Energy, Inc.***

[Click Here](#)

“Energy, Inc.” coverage is accessed from this page, where all Pittsburgh Business Times energy-related stories are accessible.

### ***Pittsburgh Post-Gazette – Pipeline***

[Click Here](#)

Pipeline is a specialty news website launched by the Pittsburgh Post-Gazette that employs multimedia, social media, and interactive maps. Additionally, Pipeline provides daily coverage from the Post-Gazette and other news organizations to provide a resource for Marcellus Shale news and information.

### ***ProPublica***

[Click Here](#)

ProPublica is an independent, non-profit, newsroom that produces investigative journalism in the public interest. One of the many issues that ProPublica is focusing on is hydraulic fracturing. Its stories focus on regulation, environmental issues, and energy policy.

## **Non-Profit**

## Resource

## Description

### ***CCAP Shale Gas/Act 13 Analysis and Resources***

[Click Here](#)

The County Commissioners Association of Pennsylvania (CCAP) advocates for and provides leadership on important issues for Pennsylvania’s 67 counties. Its Shale Gas/Act 13 Analysis and Resources page informs county commissioners and administrators about pertinent shale gas and Act 13 information.

### ***Health Effects Institute (HEI)***

[Click Here](#)

HEI is a nonprofit corporation chartered in 1980 as an independent research organization to provide high-quality, impartial, and relevant science on the health effects of air pollution.

### ***Environmental Defense Fund (EDF)***

[Click Here](#)

EDF is taking a leading role to ensure that natural gas provides real and sustained carbon benefits without harming the environment or health of the communities where gas development occurs. This page summarizes EDF’s activities and publications in the natural gas arena.

### ***Ground Water Protection Council***

[Click Here](#)

The Ground Water Protection Council (GWPC) is a nonprofit 501(c)6 organization whose members consist of state groundwater regulatory agencies that come together within the GWPC organization to mutually work toward the protection of the nation’s groundwater supplies. The purpose of GWPC is to promote and ensure the use of best management practices and fair but effective laws regarding comprehensive groundwater protection.

<b><u>Resource</u></b>	<b><u>Description</u></b>
<b><i>FracFocus</i></b> <a href="#">Click Here</a>	FracFocus.org is a national hydraulic fracturing chemical registry managed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. The website was created to provide the public with information about hydraulic fracturing and groundwater protection. Users are able to search for wells in their area and find a list of chemicals that have been used in the development of those particular gas wells.
<b><i>IEHN – An Investor Guide to Disclosing Risks from Hydraulic Fracturing Operations</i></b> <a href="#">Click Here</a>	The Investor Environmental Health Network (IEHN) created this guide to offer best practice recommendations to energy companies for reporting and reducing risks and impacts from natural gas operations in shale relying on hydraulic fracturing. The guide suggests organizational shale gas goals, practices, indicators, and examples from existing companies.
<b><i>PEC – Marcellus Facts</i></b> <a href="#">Click Here</a>	Marcellus Facts is a news and information aggregation project of the Pennsylvania Environmental Council (PEC). Its goal is to provide an open and broad-based resource for news and information about Marcellus Shale development in Pennsylvania. Articles for this site are culled from a variety of independent sources.
<b><i>PEC – Marcellus Shale Lease Guide</i></b> <a href="#">Click Here</a>	The Marcellus Shale Lease Guide is intended as a resource for Pennsylvania residents who are considering leasing their property for Marcellus Shale gas production or who have decided to lease and are beginning the negotiating process. It identifies some of the key environmental issues that can be addressed in a lease; summarizes the types of approaches that have been used to address these issues in Marcellus Shale gas leases in Pennsylvania; and offers options for handling these issues in a more protective Marcellus Shale gas lease, using best management practices employed in oil and gas leasing in Pennsylvania and nationwide.
<b><i>Research Partnership to Secure Energy for America (RPSEA)</i></b> <a href="#">Click Here</a>	RPSEA is a non-profit corporation comprising nearly 200 U.S. energy companies, research universities, and independent research organizations. RPSEA works to provide stewardship in focused research and development and the deployment of safe, environmentally sensitive technology in order to use domestic hydrocarbon resources in the United States.
<b><i>Risk Based Data Management System (RBDMS)</i></b> <a href="#">Click Here</a>	RBDMS is a data management tool used by state regulatory agencies to manage and analyze oil and gas program data and water resources management information. RBDMS can help to assess and reduce the risk to underground sources of drinking water and provides data about oil and gas well locations, permitting, and production to the public and industry owners.

**Resource**

**Description**

***River Alert  
Information  
Network (RAIN)***  
[Click Here](#)

RAIN is a consortium of 33 public water supply systems in the Ohio River Basin that are collaborating to detect and prevent any contamination in their systems. The RAIN system includes early warning water quality monitors at 29 sites along the Monongahela, Allegheny, Shenango, Youghiogheny, Beaver, and Ohio rivers.

***State Review of Oil  
and Natural Gas  
Environmental  
Regulations  
(STRONGER)***  
[Click Here](#)

STRONGER is a multi-stakeholder organization whose purpose is to assist states in the documentation of the environmental regulations associated with the exploration, development, and production of crude oil and natural gas. STRONGER shares innovative techniques and environmental protection strategies and highlights opportunities for program improvement. The state review process is voluntary and is a non-regulatory program.