

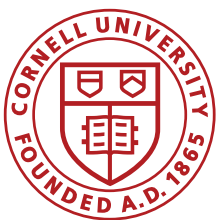
# Escaping the Resource Curse: Summary Report from the Extension Inventory

July 2015

[www.montana.edu/energycommunities](http://www.montana.edu/energycommunities)



An inventory of Extension activities for the project “Escaping the Resource Curse: Developing Governance and Investment Frameworks to Leverage the Benefits of Energy Development for Rural Prosperity.” Extension Inventory by Jerry Grebenc (Great West Engineering) and Kristin K. Smith (Montana State University).



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## **PURPOSE**

To identify the optimal ways to engage and assist extension and community development professionals working on issues related to oil and gas development.

## **METHODS**

The Extension Inventory was divided into two phases.

Jerry Grebenc completed Phase 1 of the project. He identified states and their land grant universities with existing or potential shale gas or oil plays using U.S. Energy Information Administration maps and other resources. He then created a library of oil and gas resources by institution (see Appendix C for a list). Jerry began identifying key contacts and completed nine interviews via email and phone.

Kristin Smith completed Phase 2 of the project. She expanded on Jerry's list of key contacts and researched each of the institutions identified by Jerry to understand the range and extent of programming that they provide. She added to Jerry's library of oil and gas resources by doing the following search:

- For each land-grant university, used the following search “oil and gas ‘land-grant university name’”
- If no results returned, searched for “oil and gas cooperative extension ‘land-grant university name’”
- Visited each website and looked for oil and gas related outreach materials

The inventory includes webinars, videos, fact sheets, PDFs from presentations, and other outreach materials, primarily from Extension offices. Generally, journal articles were not included in the inventory unless specifically cited by an interviewee, added by request, or included in a resource list on an Extension website.

While the inventory is not exhaustive, it offers a snapshot of the type and format of outreach being done – primarily by Extension offices – related to oil and gas development.

In addition to updating the inventory, Kristin interviewed ten key contacts over the phone using a semi-structured interview script. During the interviews, she took detailed notes.

In total, 35 universities were identified as having a corresponding shale gas or oil play. Nineteen key contacts were interviewed for this project.

## **FINDINGS**

### **Existing Programming**

The existing programming being done is on range of topics. The most frequently mentioned topic was on leases and mineral rights. The majority of outreach on oil and gas development has been occurring for five years or less.

#### Common topics

- Leases and mineral rights
- Housing (availability, rates)
- Water quality
- Fiscal management
- Transportation (specifically, impacts on roads)
- Agriculture and environmental impacts

#### Other topics mentioned

- Pipeline easements, right of ways, and eminent domain
- Excise tax
- Emergency management
- City and county financial planning
- Earthquakes
- Regulations at drill sites
- Policies (such as zoning)
- Childcare
- Downtown redevelopment

Much of the programming being done is through face-to-face conversations and community forums. Due to the sensitive nature of some of the issues, several Extension professionals noted that it is better to meet individually than in larger group settings, where people might not feel comfortable asking questions.

At the University of Alabama, they had an information session that broke out into individual tables afterward. This was seen as more effective as it allowed people to ask specific questions in a less public way. Similarly, a survey by the Colorado State University Extension found that in-person workshops, fact sheets, and field visits were the most preferred delivery methods for information by community leaders.

At the University of Oklahoma, Extension professionals use the Public Policy Education model, in which you talk about scenarios and consequences instead of pros/cons, to ease potential tension. There is a forthcoming article about this model and its effectiveness.

Several Extension professionals noted that they used their programming to bring together diverse stakeholders, including industry leaders, community policy makers, and landowners. Many felt they were the “bridge” between stakeholders.

### Common Outreach Methods

- Face to face meetings
- Community forums and information sessions
- Publications: Fact sheets, one-page summaries, and newsletter articles
- Regional meetings
- Workshops
- Webinars

### Resources Used

The following institutions are the opinion leaders for oil and gas development issues within the group of professionals interviewed (cited as resources used in at least two interviews):

- Penn State Extension (most mentioned)
- Ohio State (second most mentioned)
- Duke Energy Project
- Texas A&M
- North Dakota University
- Montana State University

### Best Practices

Some Extension offices already have best practice publications available.

For example:

- Checklists for negotiating leases or easement (Texas A&M)
- Not called best practices, but lists of questions you should ask related to fiscal management and leasing. Also, extensive fact sheets (Penn State)
- Leasing and lease negotiations (Michigan State University)
- Groundwater quality (Michigan State University)

Others, when asked about best practices, noted that they are in the process of trying to develop guides. One individual stated, “We are in a reactionary stage. To identify best practices will take time. We haven’t looked back, yet.”

One interviewee felt that a list of best practices would be useful outcome of forming a national network related to oil and gas development issues.

### Collaborations & Existing Networks

- National Association of Community Development Professionals – Conference session on oil and gas impacts
- National Extension Energy Summits

- Sustainability Research Network – Collaboration between California State Polytechnic University Pomona, Colorado School of Mines, Colorado School of Public Health (University of Colorado Denver), Colorado State University, National Oceanic and Atmospheric Administration, National Renewable Energy Laboratory, University Center for Atmospheric Research, University of Colorado Boulder, University of Michigan. The aim is to create a framework to evaluate environmental, economic, and social trade offs between development of natural gas resources and protection of water and air resources and to convey results to public in a way that improves development of policies and regulations governing natural gas and oil development. Funded by NSF.
- Shale Energy Group (TX, ND, PA)
- PA Bar Association has a shale energy committee
- Marcellus Shale Multi-State Academic Research Conference (Cornell University, Penn State University, West Virginia University, Northeast Regional Center for Rural Development, and Ben Frank Technology/Central and Northern PA). [Conference Summary](#).
- Center for Sustainable Shale Development – Focused on shale development in Appalachian Basin
- NETL funded collaboration between the Research University Alliance, West Virginia University, Ohio State University – broad-based education, research, and outreach initiative on unconventional hydrocarbon resources
- Agriculture and Food Law Consortium does some oil and gas programming (members include National Agriculture Law Center at the University of Arkansas, National Sea Grant Law Center at the University of Mississippi School of Law, Agricultural Law Resource and Reference Center at the Penn State Dickinson School of Law, and Agricultural & Resource Law Program at The Ohio State University)
- Mississippi State University and University of Alaska – Fairbanks started a partnership in June 2015 to develop unmanned aircraft solutions for oil and gas industry (specifically in North Slope of Alaska and Gulf of Mexico)
- Informal networks
  - Group of people from Ohio Extension, North Dakota Extension, South Dakota Extension and some economic development people from Montana that communicate via conference calls but not regularly
  - Duke University brought together researchers from North Dakota, Pennsylvania, Texas, and Colorado
  - Bucknell University – a group formed after a meeting at Bucknell, though interviewee was not sure if the group still met

### **Programming Needs**

One Extension professional noted that there were many resources available on the “macro” level but more “micro” level information was needed. Other Extension

professionals echoed this sentiment by asking for information on either the community or individual scale.

#### Community Scale Programming Needs:

- Impacts on economy, housing, local services, schools
- Impacts on environment, including reclamation and recovery
- Optimal tax structures for communities
- Eminent domain and pipeline construction
- How to plan for boom/bust
- Health impacts
- Communications skills between companies, town officials, and landowners

#### Individual Scale Programming Needs:

- Leasing - Questions about negotiating and pricing (who's getting how much and for what; How do we know we're getting a fair price; Sharing the experiences of actual people and their leasing negotiations. Royalty rates and easements)
- Mineral rights
- Severability of surface and subsurface rights
- Contact information for individuals (who should they call if they notice "x" happening or have questions about "x")
- Family communication skills (how to navigate communication when family members don't agree)

The most discussed programming need was related to leasing and mineral rights. This was also a commonly asked question from constituents.

Some professionals voiced a need for more "macro" information, including environmental impacts on air and water, as well as more information about seismic activity.

Others noted that they don't have access to the data they need and/or the data available is not giving them the right information. For example, one person noted,

We've been reliant on secondary data due to lack funding and staff, but secondary data isn't capturing the effects...We're not seeing employment impacts, for example. So, we expect these drilling teams are regionally based...The census population estimate, the formula, doesn't capture structural change. It's not going to capture these short bursts of employment. Knowing the impact of local infrastructure is hard except from stories. It's a challenge in terms of data."

Additionally, many people felt there was a lot of information and resources available, but it needs to be aggregated to make it more accessible.

This need extended beyond research and into professional expertise and human resources. One Extension professional noted, “When you get outside my areas of expertise, I have to start scrambling to find a person.” He went on to suggest that a list of key contacts should be created which included their areas of expertise.

### **Network Strategies**

There was some debate over whether a network was needed, and – if so – should it be regionally or nationally structured. Overall, sixteen of the nineteen interviewees felt a network – either regionally structured or nationally - would be useful.

#### For a Regional Network

Of the eighteen interviews, two people felt that a network would be useful, but it should have a regional basis. Several other people felt that their state’s regulations were so specific, that no network – whether national or regional – would be useful.

- “Things are so regionally focused, it would be tough to draw general discussions. We can benefit from others’ research, but I would be very careful on a national level.”
- “I can see value in an information exchange, but there’s so much variability in state law.”

#### For a National Network

Of the eighteen interviews, thirteen people felt that a national network would be useful for their work. Many people felt both regional and a national network would be useful.

- “I would love for there to be a dialogue around oil and gas...The boom and bust with hydrofracking is happening so quickly that being able to reach out and grab a survey already developed is very useful.”
- “It would be valuable to help share information. There hasn’t been a lot of sharing between state Extension offices.”
- “There’s a difference between Oklahoma shale deposits – the basin here – and other basins. I get the regional differences, but there’s also national issues we’re all going to face.”
- “I could see value...We would have a network to turn to with people who have been through it before. There’s going to be a lot of problems, so it would be nice to prepare.”
- “We can learn from what’s taking place in other places...We’re missing a lot if we limit ourselves regionally.”
- “The philosophy is that the boom is different than the others, but we don’t need to reinvent the wheel. There are communities that have done a better job than others. Why? How do we understand this and learn lessons?”
- “It would be great to have an active group to say, ‘Here’s what I know. Here’s what’s happening.’ But, it would have to offer me value – the



information I need on a timely basis – or help me know that there is no information.”

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**About the Project: Escaping the Resource Curse**

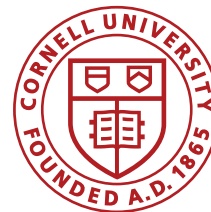
*With funding from the [USDA NIFA \(Project #2014-05498\)](#) and support from the Institute on Ecosystems and Montana State University*

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This research project seeks to develop research-informed extension solutions focused on the economic impacts of oil and gas drilling for rural communities and agricultural stakeholders.

We intend to innovate a new conceptual framework for thinking about costs and benefits by conducting original research in three shale development areas: the Marcellus (Pennsylvania), Bakken (North Dakota & Montana), and the Upper Green River (Wyoming).

A key goal of this integrated project is to address capacity shortages and inefficiencies across the spectrum of extension and community development approaches to farm, landowner, and local business impacts from energy development.



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This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2014-05498.

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.



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