## **Escaping the Resource Curse:**

Developing Governance and Investment Frameworks to Leverage the Benefits of Energy Development for Rural Prosperity

Extension Inventory – Institutions & Researchers

July 2015

A summary of community development and Extension activities related to oil and gas development in the United States, organized by state and institution.

www.montana.edu/energycommunities









State	University/Institution	Website	Institution's Oil/Gas Programming Overview	Energy Researchers / Extension Contacts	Play
Alabama	Alabama A&M and Auburn Universities	http://www.aces.edu	Joint extension office. Not many activities in this area at Auburn. Coal mining is much larger in Alabama than oil and gas. Limited needs for Extension programs and materials on unconventional oil and gas development. Three publications relate to oil sands in Alabama.	Virginia Caples, Gary Lemme, Danny McWilliams	Chattanooga Shale; Conasauga Shale; Floyd/Neal Shale
Alabama	Geological Survey of Alabama	http://www.gsa.state.al.us	Provides natural resource data and analysis. Website has sections on Petroleum and Shale gas research.		Chattanooga Shale; Conasauga Shale; Floyd/Neal Shale
Alaska	University of Alaska Fairbanks	https://www.uaf.edu/ces	Conducted a business review of the tax structure in the North Slope and made recommendations. Other than that, no programming as the feds/state and oil companies are the only players in Alaska (no private citizens own oil or gas lands in Alaska).	Fred Schlutt	North Slope Shale
Arizona	University of Arizona	https://extension.arizona.edu/	No Extension programming in this area. Oil and gas exploration is not a big industry in Arizona, hardly existent in fact. Mining is a large industry and we do have land and water reclamation efforts on-going associated with mining activities.	Jeffrey Silvertooth	Mancos Shale
Arkansas	University of Arkansas	http://www.uaex.edu/	Extension activities: Held informational meetings, hosted 2006 conference that discussed oil and gas leasing. 2014 Arkansas Law Review Symposium discussed oil and gas. Part of Agricultural and Food Law Consortium (does some work related to oil and gas)	Kathy Desk, Janie Hipp	Chattanooga Shale; Moorefield Shale; Fayetteville Shale
California	University of Southern California	http://gen.usc.edu/	Global Energy Network provides analysis of energy issues and decision making; Price School of Public Policy with Global Energy Network did an economic outlook for CA shale play in 2013		McClure Shale; Monterey Shale
California	University of California	http://extension.universityofcalifornia.edu /	9 campus extension programs. California Institute on Water Resources has different research projects related to impacts of oili and gas devleopment and socil / environmental costs.	Barbara Allen-Diaz, Gwen Arnold, Brent Haddad	McClure Shale; Monterey Shale
Colorado	Colorado Department of Local Affairs, Community Development Division	https://www.colorado.gov/dola	Publishes "Oil and Gas regulation: A guide for Local Goverments". Has an Energy and Mineral Impact Assistance Fund	Gerald Dalh	Baxter Shale; Chimney Rock Shale; Gothic Shale; Green River Shale; Lewis Shale; Niobrara Shale; Pierre Shale
Colorado	Colorado State University	http://extension.colostate.edu/	Extension activiites: Fact sheets that provide general historical/technical information. Have avoided environmental impacts as they're awaiting more research. Relevant research institutions: Center for Energy - Water Sustainability, Sustainability Research Network, Colorado Water Watch, Energy Institute. Hosting 5th Annual Natural Gas Symposium, October 27-28 2015	Stephen Goodwin, Cary Weiner	Baxter Shale; Chimney Rock Shale; Gothic Shale; Green River Shale; Lewis Shale; Niobrara Shale; Pierre Shale
Colorado	Oil and Gas Accountability Project	https://www.earthworksaction.org/reform _governments/oil_gas_accountability_proj ect	Working to reform governement policies related to oil and gas at the local, state, and federal levels		Baxter Shale; Chimney Rock Shale; Gothic Shale; Green River Shale; Lewis Shale; Niobrara Shale; Pierre Shale
Colorado	University of Colorado, Boulder	http://www.colorado.edu/	Many departments, researchers, and institutions wokring on oil and gas development, including AirWaterGas (http://airwatergas.org/) - what we know, what we don't know, and what we hope to learn about oil and gas development; Leeds School of Business released Economic assessment of CO oil and gas prices in 2015;	Brian Lewandowski, Richard Wobbekind, Joe Ryan, Michael Hannigan, Melissa Dozier, Mark Williams, John Loomis, Michelle Haefele, William Fleckenstein, Alred Eustes	Baxter Shale; Chimney Rock Shale; Gothic Shale; Green River Shale; Lewis Shale; Niobrara Shale; Pierre Shale
Colorado	University of Colorado Law School	http://www.oilandgasbmps.org/	Intermountain Oil and Gas Best Management Practices Project - large database of BMPs		Baxter Shale; Chimney Rock Shale; Gothic Shale; Green River Shale; Lewis Shale; Niobrara Shale; Pierre Shale
Georgia	University of Georgia	http://extension.uga.edu/	Ecosystem Impacts of Oil and Gas Inputs to the Gulf (ECOGIG) is based at University of GA		Chattanooga Shale; Conasauga Shale
Idaho	University of Idaho	http://www.uidaho.edu/extension	Idaho Forest, Wildlife, and Range Policy Analysis Group	Jay O'Laughlin, Barbara Petty	Unnamed Play
Illinois	University of Illinois at Urbana- Champagne	http://web.extension.illinois.edu/state/ind ex.php	Extension has a "Fracking" task force. They've done some outreach, including 10+ informational sessions throughout southern Illinois on leasing, current issues, legislative updates, and answered questions. Illinois State Geological Survey (part of the Prairie Research Institute at University of IL at Urbana-Champaign) aids industry exploration and development of petroleum and natural gas resources in Illinois. They answer inquiries (typically one-on-one) and address questions from industry, governmental agencies, and general public.	Connie Beck, Robery Bruno, Adam Feig, Jason Haupt	New Albany Shale
Indiana	Purdue University	https://extension.purdue.edu	Ag Econ faculty involved with research. Extension activites: Info on sulfur water control	Gerald Harrison, Farzad Taheripour, Wallce E. Tyner	New Albany Shale
Kansas	Kansas State University	https://www.ksre.k-state.edu/	Kansa Geological Survey has research related to oil and gas, including new oil fields, resources on seismicity, resources on hydraulic fracking, etc. http://www.kgs.ku.edu/PRS/petroIndex.html	Daryl D. Buchholz, Daniel R. Suchy	Excello Shale; Mulky Shale

Kansas	KS Federal Reserve	https://www.kansascityfed.org	Produces energy surveys, as well as employment impacts from oil and gas development		Excello Shale; Mulky Shale
Kentucky	University of Kentucky	https://extension.ca.uky.edu/	Extension website has fact sheets, information about leases, and Kentucky Geological Survey (past and present records/maps of oil and gas wells)	Keenan Bishop, Jenrose D. Fitgerald, David Harris, Jerry Weisenfluh	Chattanooga Shale; Cleveland Shale; Clinton Shale; Huron Shale; Ohio Shale
Louisiana	Lousiana State University	http://www.lsu.edu/	Center for Energy Studies provides energy information and analysis for policymakers, businesses, and civic groups.LSU Energy Law Center has Journal of Energy Law& Resources	David Dismukes	Haynesville/Bossier Shale; Tuscaloosa
Maryland	University of Maryland	http://extension.umd.edu/	Extension has limited publications available. Fracking recently banned in MD.	Paul Goeringer	Marcellus Shale
Massachusetts	Harvard Law School	http://environment.law.harvard.edu	Envrionmental Law Program has several researchers working on legal issues related to oil and gas, including an Oil and Gas Discussion Group.	Wendy B. Jacobs, Kate Konschnik	
Michigan	Michigan State University	http://msue.anr.msu.edu/	Extension Activities: One-on-one meetings, workshops, webinars, new articles, fact sheets. Webpage for landowners and local officials. Landowner information meetings about regulations, technology advancements, and leases. Videos on how to understand and negotiate leases and tips for owners before signing mineral rights leases. Best practices on groundwater quality from the industry and best practices for leasing/leasing negotiations.	Michael R. Betz, Russell P. Kidd, William Knudson, David. Schweikhardt, Dean Solom, Curtis Talley	Antrim Shale; Ellsworth Shale
Mississippi	Mississippi State University	http://msucares.com/		Gary Jackson, Judith Phillips	Floyd/Neal Shale; Tuscaloosa
Mississippi	National Sea Grant Law Center	http://nsglc.olemiss.edu/	Agriculture and Food Law Consortium		Floyd/Neal Shale; Tuscaloosa
Montana	Headwaters Economics	http://headwaterseconomics.org/	Non-partisan research nonprofit, provides economic analysis of energy	Ray Rasker, Mark Haggerty	Bakken; Cody Shale; Gammon Shale; Heath Shale; Niobrara
Montana	Montana State University	http://www.msuextension.org/	Extension Activiites: Local Government Center, webinars, oil and gas resources related to water quality (website), Guides on oil and gas leasing	Tim Fitgerald, Julia Haggerty, Paul Lachapelle	Bakken; Cody Shale; Gammon Shale; Heath Shale; Niobrara
Montana	University of Montana	http://www.bber.umt.edu/	College of Forestry & Conservation. Bureau of Business and Economic Research has programming in energy reearch, including oil, natural gas, coal, renewables, minerals, and alternative	Brady Allred, Terry Johnson, Bill Whitsitt	Bakken; Cody Shale; Gammon Shale; Heath Shale; Niobrara
National	US Geological Survey	http://www.usgs.gov/		Jack C. Pashin	
Nebraska	University of Nebraska - Lincoln	http://extension.unl.edu/	Earth and Atmospheric Sciences departments offers courses in petroleum geology field, including Schramm course in economic and exploration geolgory.  Extension has efforts to collect cores and cuttings from around the state and answes inquiries about oil and gas in eastern Nebraska	Jesse Korus, Steve Sibray, Dirac Twidwell	Niobrara Shale
Nevada	University of Nevada, Reno	http://www.unce.unr.edu/	No programming in this area. However, website has oil and gas info, interactive maps for oil and gas wells, etc.	Mark Walker	Chainman Shale
New Jersey	Rutgers University	http://www.rutgers.edu/	Rutgers does not have programming for O&G except for Martha Withjack and Roy Schliche's course Earth's Resources and Global Economy and instruction for our graduate students in basics of petroleum. We do not have anything specific to unconventional, in part because fracking is banned in NJ, but have had several colloquia on the topic	Michael Dziedzic, Martha Withjack, Roy Schliche, Paul G. Falkowski, Hilary Kasman, Julie Zalaskus	Marcellus Shale
New Mexico	New Mexico State University	http://extension.nmsu.edu/		C. Meghan Downes, James Peach	Lewis Shale; Mancos Shale;
New York	Cornell University	https://www.cornell.edu/	Extension activities: Website resources, FAQs, guides for landowners, public presentations, webinars. Extension specialists frequently collaborate with researchers; Natural Gas Resource Center brings together resources from academia, industry, local government, etc. Community and Regional Development Institute. Cornell / CCE Marcellus Shale Team - researches Marcellus Shale and provides education for citizens to facilitate decision making process. KAUST- Cornell Center for Energy and Sustainability is researching is research improved techniques for unconventional production; Atkinson Center for a Sustainable Future; Energy Studies in the College of Engineering has a list of oil/gas specialists; Community and Regional Development Institute has a Community and Energy subgroup	Warren Allmon, Sharon Anderson, Joseph A. Bennett, Heather Blaikie, Adam Blair, Lawrence M. Cathles, Brett Chedzoy, Susan Christopherson, Jim Grace, Rod Howe, Lynn Irwin, David Kay, David Orr, Brian Rahm, Andrea Ramudo, CJ Randall, Susan Riha, Sarita Rose Upadhyay, Katherine E. Ziegenfuss	Marcellus Shale gas
North Carolina	Duke University	https://duke.edu/	Duke University Energy Initiative. The Shale Public Finance project is examining the financial implications for local governments associated with increased domestic oil and gas production, largely from shale resources. A previous report focused on net fiscal impacts for local governments associated with recent oil and gas production, and case studies of experiences in particular regions will be forthcoming.	G. Newell	
North Carolina	North Carolina State University	https://www.ces.ncsu.edu/	Extension activities: Work with landowners, local governments, state government, environmental groups. Use website and public meetings to conduct programming.	Theordore Feitshans, Brandon King, Jeffrey Reid, Mike Walden	Dan River Basin; Deep River Basin

North Dakota	Dickinson State University	http://www.stromcenter.com/	Strom Center - Hosted Bakken Researchers Convening meeting, The Economic and Community Impact of the Bakken Energy Boom, in May 2015. The Western North Dakota Energy Project provides info about resource development in the Bakken to area leaders, local citizens, entrepreneurs, etc. Coordinates webinar series.	Ray Ann Kilen, John Hurlimann, Ray Ann Kilen	Bakken Shale; Gammon
North Dakota	North Dakota Association of Oil and Gas Producing Counties	http://www.ndenergy.org/	A 19-county member organization, including the counties of Adams, Billings, Bottineau, Bowman, Burke, Divide, Dunn, Golden Valley, Hettinger, McHenry, McKenzie, McLean, Mercer, Mountrail, Renville, Slope, Stark, Ward, and Williams. Members must have oil, gas, or leasing development in the county boundaries. Associate memberships are also available to oil industry companies.	Daryl Dukart	Bakken Shale; Gammon
North Dakota	North Dakota State University	https://www.ag.ndsu.edu/extension	Center for Community Vitality has oil and gas resources. Section on website for ND Oil and Gas Law. Extension provides mostly face-to-face meetings. Occasional newsletter articles. Worked with cities around community development issues like zoning. Tried to bring landowners and oil companies together in same room. Worked with agriculture producers to help them understand what's a good lease, who has the rights, etc.	Shelby Bohnenkamp, Jackie Buckley, Carol Cwiak, Margaret Fitzgerald, Lynette Flage, Joann Beckman, Bill Goetz, Cole Gustafson, Glen Musek, Andrew Putz, David Ripplinger, David Saxowsky, Kathleen Tweeton	Bakken Shale; Gammon
North Dakota	Vision West ND	http://www.visionwestnd.com/	Covers the nineteen oil and gas producing counties in western North Dakota - working to build economic sustainability. Completes assessments, regional plans, provides webinars, etc	Deb Nelson (DLN Consulting)	Bakken Shale; Gammon
Ohio	The Ohio State University	http://extension.osu.edu/	Extension activities: Workshops, face-to-face meetings. We have a NTEL grant for research. Serve as a bridge between industry and community; we give a lot of talks. We're spoken to 20,000+ people through our outreach, at least 50% have been farmers, landowners, community leaders. Extension has an extensive shale education program with 11 staff members. OSU Subsurface Energy Resource Center crontributes to the knowledge of subsurface resource development and its associated environmental issues, as well as serves as a resource to policy makers	Gerald Allen, Nancy Bowen-Ellzey, Joe Campbell, Sarah Cross, Jeffrey Daniels, Michael Farren, Peggy Kirk Hall, Mike Hogan, Mark Ladnefeld, Clif Little, Mike Lloyd, Karen Manci, David Marrison, Myra Moss, Mark Partridge, Chris Penrose, Eric Romich, Chris Zoller	Huron Shale, Marcellus Shale; Ohio Shale; Utica Shale
Oklahoma	Oklahoma State University	http://www.oces.okstate.edu/	Extension activies: Topics covered include water quality and quantity impacts. Regulations around drill sites. Housing rates. Have talked about but haven't pursued doing something on leasing and mineral rights/purchases. Hosted a series of five community outreach forums, where we summarized data of OK cities and counties. We brought in state regulators and industry representatives to speak in public settings. We did a series for county educators looking at agriculture and environmental impacts (including financial, sociological, earthquakes, etc). We're putting together a 30-page doc that pulls together many resources. Will be available end of summer 2016. In November 2015, University hosted 11th annual Oil and Gas Accounting Conference	Dave Shideler, Samuel Fuhlendorf	Caney Shale; Excello Shale; Woodford Shale
Oklahoma	University of Oklahoma College of	http://www.law.ou.edu/		Owen L. Anderson	Caney Shald; Woodford; Excello-Mulky
Pennsylvania	Lycoming College	http://www.lycoming.edu/		Jonathan Williamson	Marcellus Shale; Utica Shale
Pennsylvania	Pennsylvania Geological Survey's Oil, Gas, and Subsurface Geological Services office	http://naturalgasresourcecenter.com/	The Natural Gas Resource Center's purpose is to help connect area residents and businesses with information about the gas industry, and to connect the gas industry to businesses and organizations in Cameron, McKean, and Potter Counties.	John A. Harper	Marcellus Shale; Utica Shale
Pennsylvania	The Pennsylvania State University	http://extension.psu.edu/	Extension has a comprehensive website, FAQs, service directories, webinars, meetings, videos and infographics, fact sheets, applied research, and one-onone assistance. Marcellus Educational Consortium. Leasing, fiscal management, infrastructure, social issues, etc. Strong legal program, which offers presentations and some one-on-one advising. Also work being done with local officials, attorneys, and county judges. Originally most of the programming (which began in 2008) was focused on leasing questions and money (primarily from landowner point of view). Now, much larger range of issues, including water quality and pipeline installation.	Susan Brantley, Kathy Brasier, Dan Brockett, Charles Costanzo, Matt Henderson, Brian Kelly, Tim Kelsey, Jim Ladlee, Jon Laughner, David Messersmith, Ross Pifer, Bryan Swistock, Walt Whitmer	Marcellus Shale; Utica Shale
Pennsylvania	University of Pennsylvania	http://www.upenn.edu/	University of Pittsburgh has hosted several oil and gas events, incluidng 2011 and 2012 conference on Health Effects of Shale Gas Extraction hosted by Graduate School of Public Health (http://mediasite.cidde.pitt.edu/Mediasite/Catalog/Full/566b50d1554d4 2a5977f61354f1eda3321) and Shale Gas Roundatble: Deliberations, Findings, and Recommendations (http://iop.pitt.edu/shalegas/)	Christina Simeone, Jeremy Weber	Marcellus Shale; Utica Shale

South Dakota	South Dakota State University	https://www.sdstate.edu/sdsuextension/	Extension activities: A lot of face-to-face meetings. We just held a Community Impacts of Energy Development Conference. Presented at other conferences and for a leadership group in SD. Presentations cover general topics of energy development. Write articles for iGrow about energy development, water quality, and housings. iGrow (a service of SDSU Extension) has articles and resources related to oil and gas.	Jeffrey Jacquet, Paul Thares	Gammon; Eagle
Tennesse	Tennesse State University	http://www.tnstate.edu/extension/	We do not have an active Extension programming on oil and gas development. We have Extension programming on biofuels and biomass production for bio fuels.	Latif Lighar, Matthew Murray	Chattanooga Shale
Texas	Rice University	http://www.rice.edu/		Kenneth B. Medlock III	Barnett Shale; Bend Shale; Eagleford Shale; Haynesville/Bossier Shale; Pearsall Shale; Percha Shale; Woodford Shale
Texas	Texas A&M University	http://agrilifeextension.tamu.edu/	Extension activities: For legal issues, they do face-to-face meetings, some webinars. Mostly about leasing (negotiations, terms) and pipeline easements (including eminent domain). Crisman Institute for Petroleum Research includes the Halliburtion Center for Unconventional Resources, Chevron Center for Well Construction and Production, Schlumberger Center for Reservoir Description and Dynamics, and the Center for Energy, Environment, and Transportation Innovation.	William Thomas Allen, Benton Arnett, Harold Hunt, Tiffany Dowell Lashmet	Barnett Shale; Bend Shale; Eagle Ford Shale; Haynesville/Bossier Shale; Pearsall Shale; Percha Shale; Barnett - Woodford Shale
Texas	University of Texas at San Antonio	http://www.utsa.edu/		Thomas Tunstall	Barnett Shale; Bend Shale; Eagle Ford Shale; Haynesville/Bossier Shale; Pearsall Shale; Percha Shale; Barnett - Woodford Shale
Texas	Texas State University	http://www.txstate.edu/		Dianne Rahm	Barnett Shale; Bend Shale; Eagle Ford Shale; Haynesville/Bossier Shale; Pearsall Shale; Percha Shale; Barnett - Woodford Shale
US	US Department of Energy, NETL	http://www.netl.doe.gov/		William Hochheiser	
Utah	Utah State University	https://www.usu.edu/	Has an unconventional gas program, focuses mostly on technical	Roger Banner, Ken White	Cane Creek Shale; Chimney Rock Shale; Gothic Shale; Green River Shale; Hovenweep Shale; Mancos Shale; Manning Canyon Shale
West Virginia	West Virginia Center on Budget & Policy	http://www.wvpolicy.org/about	Nonpartisan, nonprofit policy research organization	Sean O'Leary	Huron Shale; Marcellus Shale; Utica Shale;
West Virginia	West Virginia University	http://ext.wvu.edu/	Extension activities: Regional meetings; 40 educational programs; website; statewide conference; fact sheets; one-on-one meetings.	Mary Beth Adams, Tim Carr, Joshua P. Fershee, Georgy Plaugher, Norm Schwertfeger, Jeff Skousen	Huron Shale; Marcellus Shale; Utica Shale;
Wyoming	University of Wyoming	http://www.uwyo.edu/uwe/	Extension has published reports, including oil and gas trends and reclamation considerations. University of WY has education programs in oil and gas, inclduing Wyoming Center for Hydrology and Geophysics and a new oil and gas drilling rig simulator. The Wyoming Reclamation and Restoration Center (WRRC) is an interdisciplinary program housed within the College of Agriculture and Natural Resources and works closely with the School of Energy Resources. Enhanced Oil Recovery Institute (http://www.uwyo.edu/eori/) is working to increase oil recovery in Wyoming oil fields	Timothy J. Considine, Jay Norton, Roger Coupal, Thomas Foulke	Niobrara Shale; Dakota, Frontier, Parkman, Turner, Sussex, Shannon and Mowry Formations