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# Research Brief

## Subsurface Conservation Easements: A New Approach for Limiting Fracking and Mining

### Background

Over the course of a few years, hydraulic fracturing, or fracking, has transformed the oil and natural gas industries and helped the United States approach energy independence. Through its “An America First Energy Plan” the Trump Administration has indicated that it will continue to develop the nation’s untapped shale, oil and natural gas reserves.

Given the likelihood that oil and natural gas extraction will continue, conflicts over local land use decisions and concerns over environmental and social risks are likely to persist. Such concerns include potential water and air contamination, greenhouse gas emissions, health effects and community disruptions. A 2016 U.S. Environmental Protection Agency (EPA) final report on the potential impacts of hydraulic fracturing states that the process can affect drinking water supplies in certain circumstances. There have also been studies that suggest

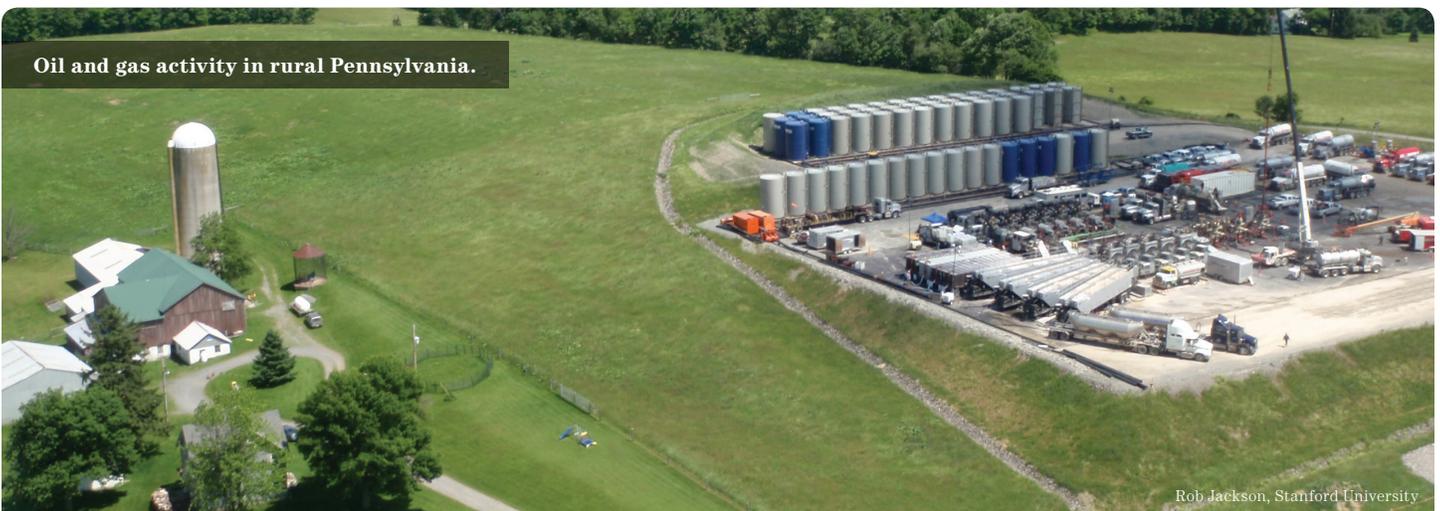
### About the Researchers

Robert B. Jackson is the Michelle and Kevin Douglas Provostial Professor in Stanford’s School of Earth, Energy, and Environmental Sciences, and a Senior Fellow of the Stanford Woods Institute for the Environment and the Precourt Institute for Energy. He studies how people affect the earth, including research on the global carbon and water cycles, energy use and climate change ([jacksonlab.stanford.edu](http://jacksonlab.stanford.edu)). He currently serves as chair of the Global Carbon Project ([globalcarbonproject.org](http://globalcarbonproject.org)). Other researchers include Jessica Owley (University of Buffalo School of Law and the State University of New York) and James Salzman (University of California, Santa Barbara and University of California, Los Angeles Law School).

that living near oil and natural gas production increases the likelihood of asthma.

While cities, such as Pittsburgh, PA, as well as states like New York and Maryland, and even countries including

Oil and gas activity in rural Pennsylvania.



Rob Jackson, Stanford University

France and Germany have banned or placed moratoriums on high-volume fracking because of environmental and social concerns, statutory approaches to restrict oil and gas production have had mixed success. There is potential, however, for private efforts to restrict fracking. To date, though, this has been a largely unexplored approach.

In a new report, researchers propose a mineral estate conservation easement (MECE) to provide landowners with the ability to restrict hydraulic fracturing and other oil and gas subsurface activities in areas of social or ecological vulnerability. The MECE creates a logical extension of traditional conservation easements, and could be of particular interest in current or proposed areas of fracking activity that are ecologically or socially vulnerable or where there is a high population density, such as areas of Colorado and Texas. The researchers consider current conservation easements, the possibility of applying MECEs to current legislation and whether MECEs could qualify for federal tax deductions.

### The Foundation – Conservation Easements

More than 100,000 conservation easements now cover more than 40 million acres. A conservation easement looks and operates much like a contract, where the landowner and the easement holder – a non-profit organization or a government entity – agree to restrict particular types of uses and activities on the property. Easements can be created by donation, sale, exaction or condemnation. Their popularity is attributable to the flexibility and ease of creating conservation easements, the lower cost of purchasing land use restrictions compared to purchasing full title to the land and the potential tax benefits and other financial incentives for landowners.

### The New Tool: Mineral Estate Conservation Easement (MECE)

An MECE is a conservation easement that would encumber only subsurface rights, and would provide a way to protect land from subsurface mineral extractions, while still allowing the surface to be open to development. An MECE ultimately gives the landowner flexibility to restrict activities in perpetuity.

- The protections provided would include preventing potential risks of groundwater contamination, land subsidence and induced seismicity associated with fluid injection for fracking, wastewater disposal or other activities. Therefore, accepted legal purposes for an MECE would likely fall under protection of water or natural resources.
- Conservation easements that include surface and subsurface activities, as well as conservation easements that only include surface activities are in frequent use, yet an MECE, where only subsurface activities are considered hasn't been tested.
- With split estates, one person or entity owns the surface of the land and another owns the subsurface (stated in the property deed). Mineral or subsurface estates are generally considered the dominant estate, with a right superior to that of the surface owner. Often, however, landowners own full fee-simple title – both surface and subsurface rights – to their land.
- Ultimately, two types of landowners may be interested in MECEs: those who own only the mineral estate and wish to prevent fracking and mining, and those who own the entire piece of land (specified in property deed) and wish to place a conservation easement solely on the subsurface estate.

### The Uniform Conservation Easement Act and State Conservation Easement Enabling Acts

State property law determines whether conservation easements are enforceable. While various state-enabling acts differ slightly, they follow similar patterns of setting acceptable conservation purposes and affirming that



- Arizona is the only UCEA state where MECEs appear to be questionable.
- 16 states do not have laws that support MECEs
- Four states – Colorado, Tennessee, New Hampshire and Rhode Island – could possibly support an MECE, or something similar to an MECE.

## MECE Tax Deductibility and Valuation Issues

One of the biggest drivers of conservation easements has been the ability of landowners to receive a federal tax deduction for transferring property rights to qualifying entities. Federal laws, governed by the Internal Revenue Code (IRC), set the rules for tax deductibility. The IRC does not allow tax deductions for partial interests, with the sole exception of conservation easements. None of the acceptable purposes for conservation easements, in terms of the IRC, clearly cover groundwater resources. Thus, without amendments to the IRC, MECEs will not be clearly eligible for charitable tax donations. Even if an MECE is tax deductible, there are questions remaining surrounding how large the deduction should be – that is, how to value an MECE in dollars.

## Policy Considerations

1. Landowners should consider MECEs as a tool for restricting fracking and resource extraction in general.
2. Amendments to state-enabling acts to confirm and clarify the enforceability of MECEs are needed. Language could include protection of groundwater and prevention of seismic activities.
3. States should consider adopting language in the UCEA, particularly the text defining acceptable purposes for conservation easements to include: “protecting natural resources, maintaining or enhancing air or water quality.”
4. To encourage the adoption of MECEs for tax deductibility purposes, clarification of guidance documents for the IRC is needed. “The protection of groundwater and prevention of seismic activity” should be added to the list of acceptable purposes.

5. Additional analysis aimed at developing a valuation tool for MECEs is needed.
6. Additional legal research is also needed to understand the priority of MECEs in situations of forced pooling.

## Conclusions

MECEs have the potential to be a widely used tool for landowners to exercise their rights and responsibilities. Where statutory uncertainty remains, minor statutory or regulatory amendments are possible in most cases. MECEs provide property owners with a new option to protect their land and minimize potential effects on natural and freshwater resources.

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This brief is based on the comment: “Mineral Estate Conservation Easements: A New Policy Instrument to Address Hydraulic Fracturing and Resource Extraction,” by Robert B. Jackson, Jessica Owley and James Salzman, published in *Environmental Law Reporter*, February 2017. <https://elr.info/news-analysis/47/10112/mineral-estate-conservation-easements-new-policy-instrument-address-hydraulic-fracturing-and-resource-ext>

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