HYDRAULIC FRACTURING: STATES TAKE ACTION

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NCSL OVERVIEW

- Bipartisan organization
  - Serves the 7,383 legislators and 30,000+ legislative staff of the nation's 50 states, commonwealths and territories

- NCSL Energy Program
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  - Finance, funding
  - Fossil fuels (oil, gas, coal)
  - Infrastructure
  - Nuclear generation
  - Renewable energy
  - Transmission, distribution
  - Utilities
OVERVIEW

- Domestic oil and natural gas outlook
- What is hydraulic fracturing?
- States take action: *why now?*
  - *Economic Impacts*
  - *Environmental concerns*
- State legislative overview
U.S. DOMESTIC CRUDE OIL PRODUCTION
(millions of barrels per day)

U.S. DRY NATURAL GAS PRODUCTION
(trillion cubic feet)

Source: EIA, Annual Energy Outlook 2013 Early Release
WHAT IS HYDRAULIC FRACTURING?

- Injection of water, sand and chemicals at high pressure.
- Fluid generates small fissures, freeing trapped oil and gas.
- Proppant (usually sand) keeps the cracks open while oil or gas is removed.
- Hydraulic fracturing has been used since the 1940s.

Source: U.S. Environmental Protection Agency, Hydraulic Fracturing Study
**STATES TAKE ACTION: WHY NOW?**

- **Technology advances** – the combined use of hydraulic fracturing and horizontal drilling significantly enhances oil and natural gas recovery

- Increased **public concern** as industry expands into (possibly densely populated) regions where the process is unfamiliar

- Industry offers tremendous **economic benefits** to state and local economies
ECONOMIC & ENERGY SECURITY BENEFITS

ACTIVITIES BEFORE, DURING, AND AFTER DRILLING GENERATE SIGNIFICANT ECONOMIC IMPACTS

- Job creation
- Tax revenues
- Indirect benefits from the purchase of goods and services
- Lower natural gas and electric power prices
- Increased domestic energy security
PUBLIC HEALTH AND ENVIRONMENTAL CONCERNS

- **Water**
  - Water contamination from spills and leaks
  - Water withdrawals
  - Managing wastewater

- **Air quality**
  - Methane emissions

- **Seismic Activity**
HYDRAULIC FRACTURING: KEY ISSUE

At least **225 bills in 40 states** were introduced in 2013 that address hydraulic fracturing.
LEGISLATIVE TRENDS (2013 - 2014)

States are working to alleviate public health and environmental concerns, while also taking advantage of the economic potential.

- Severance Taxes/Impact Fees
- Water Quality
- Water Withdrawals
- Well Spacing
- Setback Locations
- Mechanical Integrity
- Chemical Disclosure
- Land Use
- Surface Rights versus Mineral Rights
- Moratoria/Studies
- Wastewater Treatment/Storage/Disposal
34 states have enacted a fee or tax on the severance, production, and sale of oil and/or natural gas.

At least 24 states considered legislation to impose new or amend existing oil and gas severance taxes.

In 2012, more than $18.7 billion was generated in the U.S. from severance taxes.

Severance taxes accounted for 9.6 percent to 82.1 percent of total state tax revenue in 7 states - Oklahoma, Louisiana, West Virginia, Montana, New Mexico, North Dakota, and Alaska.
22 states (including California and Illinois) have disclosure requirements.

At least 9 states have pending legislation.

Disclosure rules vary widely from state to state.
**MECHANICAL INTEGRITY TESTS/CASING REQUIREMENTS**

- More stringent regulation of drill casings or other mechanical integrity measures may prevent water contamination
- **Iowa's H.B. 128** (pending) and **Wyoming's S.B. 157** (failed) would require integrity tests of casings or other mechanical testing prior to fracking.

**WELL LOCATION RESTRICTIONS**

- Well setbacks or location restrictions can help create buffers between drilling and public drinking water resources
- **New York's A.B. 5378** would prohibit drilling within 10 miles of the NYC water supply infrastructure
- **Pennsylvania's H.B. 800** would prohibit drilling within the surface or subsurface area of, or using hydraulic fracturing or horizontal drilling within, 2,500 feet of any primary source of community water
Wyoming's S.B. 157 (failed) would have mandated baseline groundwater testing prior to all oil and gas development.

Illinois' S.B. 1715 requires baseline and post-hydraulic fracturing testing of surface water and groundwater sources.

Illinois' S.B. 1715 and Michigan's H.B. 4902 (pending) creates a presumption of liability for water pollution.

Louisiana's S.B. 203 (failed) would have established withdrawal limits on the use of ground water.
TREATING, DISPOSING, AND TRANSPORTING HYDRAULIC FRACTURING WASTE

- At least 12 states introduced legislation in 2013 related to the treatment and disposal of waste water resulting for hydraulic fracturing.

- Bills introduced in 2014:
  - Maryland’s H.B. 865 would prohibit the treatment, discharge, disposal or storage of hydraulic fracturing waste in the state.
  - New York’s A.B. 4559 prohibits the use of wastewater from hydraulic fracturing for road spreading for dust control or de-icing.
  - Pennsylvania’s H.B. 799 would require vehicles to display a placard on the outside of the vehicle indicating it is carrying hydraulic fracturing wastewater.
At least 5 bills were introduced in 2013 in New Jersey that would prohibit hydraulic fracturing in the state.

New York's S.B. 4276 and A.B. 5974 would establish a 5 year moratorium on high-volume hydraulic fracturing.

New Hampshire H.B. 1608 prohibits hydraulic fracturing for natural gas and oil production.

West Virginia H.B. 2062 requires a study of the human and environmental impacts of shale gas development.
CONCLUSION

Oil and natural gas development offers tremendous economic benefits, and states are working to ensure that the resource is developed safely.

- Hydraulic fracturing is a key issue in state legislatures, especially in densely populated regions where the practice is unfamiliar.
- States are working to increase transparency through fracking fluid chemical disclosure requirements.
- States are also considering mechanical integrity requirements to prevent spills and leaks.
- Severance taxes and impact fees generate revenue, and states are addressing severance tax rate structures in various ways.
CONTACT DETAILS AND RESOURCES

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NCSL Publications

- Reviewing Hydraulic Fracturing: State Action in 2013 (coming soon)
- State Revenues and the Natural Gas Boom (June 2013)
- States Take the Lead on Regulating Hydraulic Fracturing: Overview of 2012 State Legislation (March 2013)
- Natural Gas and Hydraulic Fracturing: A Policymaker’s Guide (April 2012)

Additional Resources

- NCSL Energy and Environment Database
- NCSL Energy Program