

# Natural Gas Development and State Forests

## Shale Gas Leasing Statistical Summary

May 2017

### Fact Sheet



### Visit Our Website

DCNR maintains a comprehensive website about natural gas development on state forest lands.

Visit [www.dcnr.state.pa.us/forestry](http://www.dcnr.state.pa.us/forestry) and click on “Natural Gas Drilling on State Forests.”

For more information about natural gas development and state forest lands call (717) 787-2703 or email [paforester@pa.gov](mailto:paforester@pa.gov).



The Department of Conservation and Natural Resources (DCNR) Bureau of Forestry manages Pennsylvania’s 2.2 million-acre state forest system for many uses and values, including pure water, recreation, scenic beauty, plant and animal habitat, sustainable timber and mineral resources.

Natural gas extraction has been a use of the state forest system since 1947. This fact sheet offers a look at the current statistics on state forest lands as well as recent Marcellus Shale activity.

### Acreage Summary

- ◆ Marcellus Shale and Utica Shale underlies approximately 1.5 million of the 2.2 million-acre state forest system.
- ◆ Approximately 617,092 acres of the 1.5 million in the Marcellus gas play are potentially exposed to natural gas development.
- ◆ Development and gas storage leases issued by the Commonwealth currently total approximately 333,722 acres.
- ◆ Natural gas development has the potential to occur on an additional 283,370 acres through private leases where the Commonwealth does not own the subsurface rights — termed “severed rights”. The Commonwealth does not receive rents and royalties from these acres. Full development of all the severed lands cannot occur due to the ownership degree and geographic position. It should be expected that full development may occur on a small subset of the severed lands where it makes economic sense.

### Shale Gas Leases

- ◆ DCNR has issued three shale gas-specific leases totaling 138,866 acres. Together they have generated \$413 million in “bonus-bid” revenue for the Oil and Gas Lease Fund.
- ◆ The first shale gas lease occurred in 2008, consisted of 74,023 acres, and generated \$163 million in revenue.
- ◆ The second lease sale was held in January 2010, consisted of 31,947 acres, and generated \$130 million.
- ◆ The third lease occurred in May 2010, consisted of 32,896 acres, and generated \$120 million.
- ◆ Shale gas extraction (deep drilling) is allowed on areas previously leased for shallow gas drilling.
- ◆ DCNR also manages a river lands leasing program and has issued 25 leases on 4,347 acres since 2010.

### Shale Gas Wells

- ◆ As of May 2017, DCNR has approved 239 well pads and 1,026 shale gas wells since 2008 (2008, 21; 2009, 179; 2010, 303; 2011, 315; 2012, 76; 2013, 79; 2014, 47; 2015, 6; 2016, 0; 2017, 0). Each well pad can host 6 to 24 wells.
- ◆ Approximately 646 wells have been drilled. Approximately 623 wells are completed and producing natural gas. They have generated approximately \$545 million in royalty revenue since 2008.