



CHESAPEAKE BAY FOUNDATION  
*Saving a National Treasure*

# Comments

July 28, 2014

Contact Kelly Donaldson,  
PA Communications & Media, CBF  
717.234.5550, ext. 4205, [kdonaldson@cbf.org](mailto:kdonaldson@cbf.org)

The following comments were prepared and presented by Harry Campbell, Pennsylvania Executive Director for the Chesapeake Bay Foundation (CBF). Comments were presented to the Pennsylvania House Democratic Policy Committee at a public hearing to discuss proposed House Bill 2318 and Leasing of State Parks/Forests.

The following reflect Mr. Campbell's oral comments, as presented to the Committee. Separate, written comments have been submitted to the Committee and are also available.

---

Chairman Sturla, Representative Mirabito, and other distinguished members of the House Majority Policy Committee, my name is Harry Campbell and I am the Executive Director of the Pennsylvania Office of the Chesapeake Bay Foundation (CBF).

I would like to thank you for the opportunity to discuss the environmental impacts on the Chesapeake Bay watershed of drilling for natural gas in the Marcellus Shale formation. A more detailed testimony has been submitted for your consideration.

Today you seek input on the potential impacts of unconventional gas drilling in our state forests. While attempting to address what some of those impacts may be, I would like to focus on the potential cumulative impacts on Pennsylvania's rivers and streams, specifically in the Chesapeake Bay watershed.

Roughly half of Pennsylvania lies within the 64,000 square mile Chesapeake Bay watershed.

IN fact, Pennsylvania makes up over one-third of the Bay watershed, more than any other state. Over 50 percent of the freshwater entering the Chesapeake Bay is from the Susquehanna River. And 36 of the 42 counties in Pennsylvania's portion of the Chesapeake Bay watershed are underlain by the Marcellus Shale formation.

Today, although decades of investments by Pennsylvania in clean water are producing real and measurable returns, the Bay is still out of balance and the Commonwealth remains the largest source of the Bay's nitrogen pollution—one of three main pollutants impacting the Bay. And over 19,000 miles of Pennsylvania streams still do not meet clean water standards due largely to agricultural activities, acid mine drainage, and urban and suburban runoff.

In April of 2010 I spoke to this committee about this very topic. Today, over 4 years later, while there is more information about components of the potential impacts, the answer to the cumulative impacts question is largely the same as it was then—we do not know.

Concerns throughout the watershed about local and regional cumulative impacts to rivers and streams from the industry are growing. A variety of larger-scale technical reports that quantify aspects of the environmental impacts associated with unconventional natural gas development have been released.

A 2010 study by The Nature Conservancy, for example, indicates between 48,000 and 120,000 acres of forest are estimated to be lost in the Susquehanna River basin during the next two decades to make way for well pads, access roads, pipelines, and compressor stations.

Trees are a primary indicator of water quality in rural and urban settings and the loss of these trees—many in dense forested areas—represents a potential for significant water quality impact.

Before unconventional natural gas development started, 83 percent of the watersheds in the Marcellus Shale region were classified as “sensitive.” And according to DCNR’s recent report, 87 percent of streams in the shale gas region are classified as high-quality or exceptional value.

A 2014 TNC report, however, determined the percentage of watersheds considered to be ecologically “sensitive” will decline to 65 percent—a loss of 22 percent—due to land conversion associated with the industry. In fact, a preliminary study by the Philadelphia Academy of Natural Sciences found that the density of drilling activities in a watershed had a profound impact on sensitive aquatic life.

The TNC study also determined the presence of watersheds classified as “impacted” or “non-supporting” of aquatic life and other water quality standards will increase considerably as a result.

Beyond the obvious impacts to surface lands, nitrogen oxide air pollution from the estimated 320 to 1,365 truckloads of equipment necessary to bring a single well into production and associated compressor stations is an often overlooked.

It is concerning to note that the activities associated with natural gas development are not accounted for in the Commonwealth’s clean-up plans for the Chesapeake Bay. Yet these plans detail current pollution loads from agricultural and urban/suburban runoff, septic systems, and sewage treatment plants, and include the actions necessary to reduce those loads to meet Pennsylvania’s portion of the Bay TMDL.

By not knowing the cumulative impacts of the industry on Pennsylvania’s Bay clean-up efforts, Pennsylvania communities, farmers, and businesses could be faced with having to reduce pollution loads even further than currently planned.

Because of these concerns, in 2011 we called on the White House Council on Environmental Quality to conduct federal studies of the cumulative environmental impacts of unconventional natural gas extraction in the Marcellus shale basin, as well as pending exploration activities in the Taylorsville basin. Additionally, we petitioned CEQ to issue a Programmatic Environmental Impact State addressing the cumulative impacts and suggesting reasonable alternatives to mitigate negative impacts throughout the Chesapeake Bay state and promulgate any necessary guidance and regulations based upon the PEIS.

To date, no such study has been initiated.

In our view, House Bill 2318, allows the public to weigh in on potential leasing of State forest lands, as well as providing for a more proactive approach to analyzing the potential impacts associated with the development of natural gas resources. Calling for a state forest environmental review is akin to, but on a smaller more specific scale, CBF’s call for a PEIS.

While some may argue that an environmental impact study or review may delay natural gas development activities, neither that nor this bill would prevent nor put a halt to the exploration, drilling or production of this important, domestic energy resource.

CBF does not oppose natural gas development if done with extensive environmental care and in full accordance with all applicable environmental laws, nor have we called for a permanent ban on unconventional natural gas development in the region.

But over 4 years after I spoke to this Committee on this issue, the answer to the cumulative impacts question is largely the same as it was then—we do not know.

Again, thank you for the opportunity to share our views.