

Joshua Skibinski

On behalf of the undersigned representatives of the sportsmen's community, we are writing today in support of the Delaware River Basin Commission's proposed regulations regarding natural gas development in the watershed. We welcome these steps to protect our natural resources from the potential impacts of hydraulic fracturing in this critical Basin. At the same time, we are concerned about several aspects of the proposed rules, and urge the DRBC to strengthen the regulations to more fully protect our water resources.

The undersigned organizations represent a cross-section of the more than 15 million anglers, hunters, and wildlife watchers who spend \$12 billion a year in Pennsylvania, New York, New Jersey and Delaware. While we recognize the economic benefits of energy development, we have long been concerned about the effects hydraulic fracturing can have on our natural resources—the streams and forests where we hunt and fish. Many of us have spent years working with government agencies, conservation partners, and the industry to encourage policies and practices that avoid, minimize, and mitigate impacts to clean water and wildlife habitat from development across the Marcellus region.

Installing oil and gas well pads, water impoundments, access roads, and new pipelines has the potential to damage fish and wildlife habitat if not properly managed. "Fracking" a well requires millions of gallons of water; if drillers source this water from local streams during spawning seasons or periods of low flow, they can do serious harm to aquatic species. We live in constant concern about spills and leaks of fracking fluids, flowback, and produced water.

Simply put, drilling thousands of wells would have a major impact on the watershed, from headwater tributaries to the main stem of the Delaware. A study by the nonprofit research organization CNA ("The Potential Environmental Impact from Fracking in the Delaware River Basin," August 2015) found that hydraulic fracturing of the Marcellus shale in the watershed could require the construction of 1,000 pads, which would require clearing five to 10 percent of headwater forest areas and would increase erosion rates by up to 150 percent during the development phase. Discharge of fracking wastewater could raise instream levels of harmful chemicals if not properly treated. The report concluded that the "changes to land cover and associated impacts to area forests, hydrology, and water quality appear the most likely to occur and most difficult to mitigate completely."

The DRBC's decision in 2010 to review natural gas projects in the watershed was in keeping with its mandate to protect water resources in a Basin that supplies drinking water to 15 million people. It also recognized the Delaware River's status as "Special Protection Waters" across its non-tidal reach. Since then, the Commission has studied "the evolving scientific literature on the impacts of natural gas development on water resources," and has concluded that hydraulic fracturing "presents risks, vulnerabilities and impacts to surface and ground water resources." Given this thorough review of the scientific literature, and in consideration of the Basin's historic, economic, and ecological significance, we believe the Commission's decision to prohibit fracking is justified. We are concerned, however, that the regulations would allow drillers to export great volumes of water for hydraulic fracturing elsewhere, and permit the industry to send fracking wastewater into the Basin for treatment. We urge the Commission to strengthen the draft regulations to address impacts from these activities.

Among our concerns:

- As drafted, the regulations do not set conditions for the withdrawal of water for fracking outside the Basin. They do not consider impacts to aquatic resources and other users; do not require pass-by monitoring to protect streams' ecological flow requirements; and do not address invasive species

controls or impacts of erosion and sedimentation.

- Appropriately, the draft regulations require that "pollutants of concern" in any effluent not exceed background concentrations. But this list of pollutants does not account for the more than 1,600 chemicals that the EPA has detected in fracking fluids and produced water. The Commission should establish a comprehensive set of water quality standards for all possible constituents in fracking wastewater.

- The rules do not outline mechanisms for monitoring, inspections, and enforcement to ensure that the export of source water or import of wastewater does not degrade water quality in the Basin. This is essential if the Commission is to safeguard the watershed from potential impacts of this activity. The Basin is home to some of our region's best trout water. The Upper Delaware is a nationally designated Wild and Scenic River where anglers can find a wild brown and rainbow fishery not unlike great western rivers. Elsewhere in the Basin, we pursue stripers and shad and smallmouth. Our forests are home to bear, deer, pheasant and grouse—and a wealth of sportsmen's recreation. We appreciate that the DRBC is taking necessary steps to ensure that this river and this watershed continues to be a special place.

Sincerely,

Josh skibinski