



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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Hadley, MA 01035-9589



In Reply Refer To:
FWS/Region 5/ES

JUN 25 2010

Carol Collier, Executive Director
Delaware River Basin Commission
P.O. Box 7360
West Trenton, New Jersey 08628-0360

Dear Ms. Collier:

The National Park Service (NPS) and the U.S. Fish and Wildlife Service (USFWS) (jointly the Services) strongly support the Delaware River Basin Commission's (Commission) June 14, 2010, Supplemental Determination of the Executive Director expanding the requirement for Commission approval to new natural gas "exploratory" well projects and gas wells drilled through shale formations, in the area draining to the Special Protection Waters (SPW) in the Delaware River Basin. However, the Services believe that those "exploratory" wells already approved by the Pennsylvania Department of Environmental Protection (PADEP) should also be subject to Commission review under the new regulations now being drafted by your staff.

Consideration of all Natural Gas Projects

With the exception of activities related to hydraulic fracturing (for increasing production), the environmental effects of natural gas well construction, either as a "production" well or as an "exploratory" well, or into shale or non-shale formations, is virtually identical. Each drilling project involves construction of a well pad and associated roadways, the drilling of a well bore, the withdrawal and transport of surface or groundwater, and the recovery and handling of flow-back water and drilling fluids. As stated in your May 19, 2009, Executive Director's Determination, "Each of these activities, if not performed properly, may cause adverse environmental effects, including effects on water resources."

Additionally, it appears to be industry standard to convert exploratory or test wells to full production wells if suitable gas deposits are encountered. Based on our discussions with PADEP staff working on Marcellus permitting in southwestern Pennsylvania, we concluded that exploratory wells fall into two general categories. A small number of wells (e.g., one to two per county) are drilled during the initial phase of expansion into a new area and are truly exploratory wells intended to optimize drilling practices for the new area. The second and larger category of "exploratory" wells includes wells drilled during subsequent expansion into an area. Only a very

small percentage of these wells are abandoned without being converted to a production well. In fact, Pennsylvania regulations do not distinguish between exploratory and production wells for State-issued permits. The high rate of exploratory-to-production well conversion, the environmental effects common to both, and the cumulative effects are of concern to the Services.

Trust Resources

The high quality waters and habitats of the upper Delaware Basin support a variety of natural resources that are managed in trust by the Services for the benefit of the American people. Large-scale changes in land use and increased water withdrawals, like those associated with natural gas development (including the construction of exploratory wells) will likely affect the Services' trust resources and should be reviewed for both individual and cumulative environmental effects.

The natural resources of concern include the NPS Upper Delaware Scenic and Recreational River, the Delaware Water Gap National Recreation Area, the Middle Delaware National Scenic River, and the Lower Delaware Wild & Scenic River. The legislation establishing these units cited the need to protect the "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values ...and to fulfill other vital national conservation purposes."

USFWS trust resources in the Delaware Basin include federally listed species, migratory birds, several inter-jurisdictional fishes, and an approved National Wildlife Refuge. The species are protected under the Endangered Species Act (16 U.S.C. 1531 et. seq.) include the federally listed dwarf wedgemussel (*Alasmidonta heterodon*), Indiana bat (*Myotis sodalis*), bog turtle (*Glyptemys muhlenbergii*), and Northeastern bulrush (*Scirpus ancistrochaetus*).

The USFWS administers migratory birds under the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). Approximately 200 species of migratory birds have been identified within the upper Delaware Basin, including an increasing population of bald eagles (*Haliaeetus leucocephalus*) and the largest congregation of wintering bald eagles in the northeast. Additionally, the Delaware River corridor and the corridor along the Kittatinny Ridge within the watershed are designated as Audubon Important Bird Areas. Many species of migratory birds for which USFWS has responsibility breed in or migrate through the high-quality riparian corridors of the Basin.

Managed fish species inhabiting the Delaware River and its tributaries include, but are not limited to, the federally endangered shortnose sturgeon (*Acipenser brevirostrum*), the American shad (*Alosa sapidissima*), Eastern brook trout (*Salvelinus fontinalis*), and American eel (*Anguilla rostrata*). These and other migratory fish species in the Delaware River and its tributaries are important to the aquatic environment and to the economies of many Pennsylvania, New York, and New Jersey communities.

The USFWS has also recently approved the creation of the Cherry Valley National Wildlife Refuge in eastern Pennsylvania. Cherry Creek, in the bottom of the valley, ultimately flows into the Delaware River. The established boundary for this new refuge encompasses 20,466 acres in Monroe and Northampton counties, and when completed will protect an area that stretches west from the Delaware Water Gap National Recreation Area and encompasses a stretch of the Appalachian Trail and the slopes of Kittatinny Ridge.

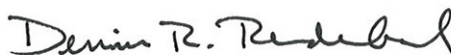
Summary

Natural gas development has the potential to significantly degrade the natural habitats and water quality in the Delaware River Basin, therefore we fully support the Commission's review of all natural gas well projects in the areas draining to SPW. Furthermore, we strongly support the Commission's promulgation of new regulations for assessing the individual and cumulative effects of natural gas development and believe that through thoughtful siting of gas well pads and infrastructure and the use of Best Management Practices, degradation of the high quality natural resources in the Basin can be minimized. We look forward to working with you in the future on this issue. Please contact Paul Phifer, Assistant Regional Director for Ecological Services, at 413-253-8304, if you have any questions.

Sincerely,



Marvin E. Moriarty
Acting Northeast Regional Director, USFWS



Dennis Reidenbach
Northeast Regional Director, NPS