

National Parks and Hydraulic Fracturing

BALANCING ENERGY NEEDS, NATURE, AND AMERICA'S NATIONAL HERITAGE



Upper Delaware Scenic and Recreational River and Delaware Water Gap National Recreation Area, New York | Pennsylvania | New Jersey



A current drilling moratorium is keeping fracking threats at bay, just around the bend from the Delaware Valley and River (NJ). ©Steve Greer Photography

The largest undammed river east of the Mississippi River courses through Delaware Water Gap National Recreation Area (NRA) and Upper Delaware Scenic and Recreational River (SRR). For now, the drilling moratorium set by the Delaware River Basin Commission (DRBC), the agency charged with regulating natural gas development in the basin, shields these parks from the escalating Marcellus shale rush. But if the moratorium is lifted, the parks will quickly feel impacts from the entire drilling process—particularly in the upper watershed.

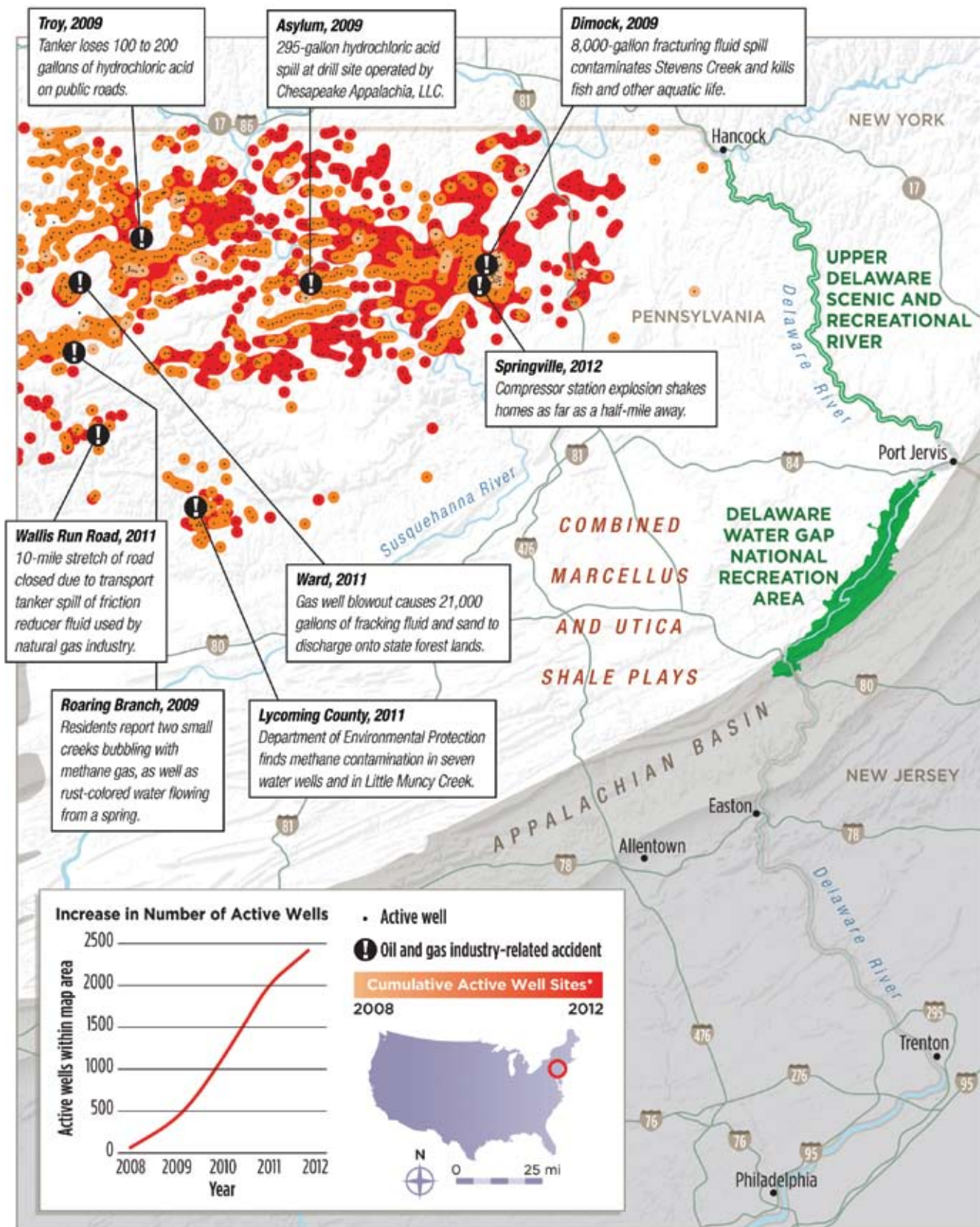
Energy extraction will degrade the area's forests and scenic views. Noise will shatter the peace and quiet of Upper Delaware SRR. Both Upper Delaware SRR and Delaware Water Gap NRA will be forced to contend with pipelines proposed across their boundaries and from the impacts of

compressor stations. In addition, both national parks will face impacts to the river, its recreational values, its plants and wildlife, and area air quality. All of these issues will require the parks to divert human resources away from visitor services to managing the pressures wrought by fracking.

What's At Stake

In southern New York, two rivers flow south and join near the town of Hancock to form the main stem of the Delaware River, which continues south to serve as the border between Pennsylvania and New York. Farther downstream, the river separates Pennsylvania and

Fracking Near the Delaware River Basin



Sources: NPCA; EIA; www.fracktracker.org

New Jersey, and then ultimately flows into Delaware Bay, one of the most productive estuaries along the East Coast. The national Great Waters Coalition designated the Delaware River a United States Great Water, and the Delaware Estuary (which includes Delaware Bay and the tidal portion of the river) is part of the National Estuary Program administered by the U.S. Environmental Protection Agency. The river also provides drinking water to 15 million people.

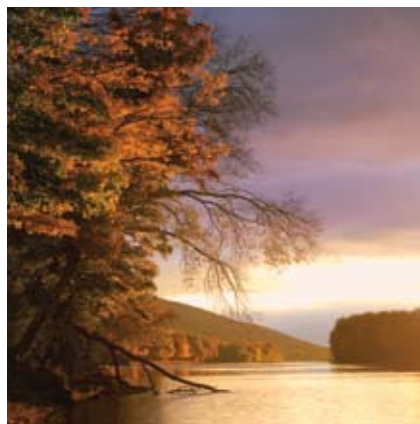
Two national parks protect this remarkable resource: Upper Delaware SRR and Delaware Water Gap NRA, both a short drive from New York City and its immediate suburbs. Upper Delaware SRR offers water-based recreational activities, eagle watching, clean air, and peace and tranquility along an intact river corridor. Between 2007 and 2011, average annual recreational visits topped 273,500. The park is also home to the federally listed endangered dwarf wedgemussel (*Alasmodonta heterodon*), long thought to have disappeared from the Upper Delaware River but recently rediscovered through intensive field surveys.¹

Just downstream is Delaware Water Gap NRA, offering a full slate of water activities, as well as hiking, biking, birding, horseback riding, and a diverse set of historic treasures. Between 1997 and 2011, average annual visitation hovered around 5 million. The park harbors a large number of black bears, as well as other wildlife residents that include 26 species of reptile, eight of which

are of special concern in either Pennsylvania or New Jersey. One of these, the bog turtle (*Glyptemys muhlenbergii*), is federally listed as threatened.²

Fracking and Park Resources

Upper Delaware SRR sits atop the gas-rich Marcellus shale. Within this formation, the most attractive lands for shale gas fracturing lie high up in the watershed. Much is at stake if fracturing occurs near Upper Delaware SRR, including the peace and tranquility



of the region, its quiet natural soundscape, and its quality night skies. All of these qualities will fade with the ground disturbance and road traffic typically associated with the drilling process. Fracking would also introduce sediment into the small creeks that feed the Delaware River, diminishing water quality.

Contamination of ground and surface waters is also a concern. While the evidence of groundwater contamination from existing fracking operations is mixed, and the risks of surface water contamination are still unquantified,

fracturing nonetheless poses a threat: Clean water is absolutely essential to this park's recreational activities.

Impacts to water quality and quantity from fracking could also affect several important fisheries at Upper Delaware SRR.³ As one of the last undammed major rivers in the Eastern United States, the Delaware River provides important spawning and nursery habitat for American shad (*Alosa sapidissima*) and American eels (*Anguilla rostrata*). The river also provides habitat for several rare and endangered freshwater mussels. All could suffer from sedimentation, chemical contamination, and diminished water flows associated with fracking.

While the prospect of hydraulic fracturing directly next to Delaware Water Gap NRA is not likely, the park will still be seriously impacted if water quality and water quantity are affected upstream. The park already is facing potential infrastructure issues associated with the Northeastern gas boom. Roads and pipelines for transporting recovered gas could mar scenic views and impose serious habitat loss and fragmentation. The potential for air pollution is another challenge. Intensive oil and gas development in other parts of the United States is linked with air quality problems, and fracking near these two Delaware River national parks could elevate concentrations of ground-level ozone and visibility-impairing haze—hardly the qualities that visitors expect to find in these two exceptionally attractive national parks.

Above: Fracking poses a risk to the natural and recreational resources of the Delaware River. ©Richard Genova

1. Cole, J. C., P. A. Townsend, and K. N. Eshleman. 2008. Predicting Flow and Temperature Regimes at Three *Alasmodonta heterodon* Locations in the Delaware River. Technical Report NPS/NER/NRTR-2008/109. National Park Service. Philadelphia, PA.
2. <http://www.nps.gov/dewa/naturescience/reptiles.htm>, accessed 6/29/2012
3. <http://www.nps.gov/upde/naturescience/waterquality.htm>, accessed 9/13/2012



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