

August 31, 2018

Wayne National Forest Attn: Plan Revision 13700 US HWY 33 Nelsonville, OH 45764

For your assessment of public information toward a new Wayne National Forest Plan, Food & Water Watch submits these comments for your consideration.

Specifically, with respect to oil and gas operations in Wayne National Forest, we maintain that continued drilling and fracking will¹:

- Fragment and mar landscapes with new roads, well sites, waste pits and pipelines;
- Compete with farmers for local water supplies while consuming millions of gallons of water for each fracked well:
- Produce large volumes of toxic and even radioactive waste, the disposal of which is causing earthquakes and putting at risk drinking water resources;
- Cause accidents, leaks and spills each year that threaten public health and safety and put at risk rivers, streams, shallow aguifers and farms;
- Pump hazardous pollutants into the air, at the expense of local communities, families and farms;
- Risk turning homes into explosive hazards by contaminating water wells with methane and other flammable gases;
- Threaten aquifers for generations by creating new pathways for the potential flow of contaminants over the coming years and decades;
- Disrupt local communities, with broad physical and mental health consequences, increased demand on emergency and other social services, damage to public roads, declines in property value, increased crime, and losses felt by unrelated businesses; and
- Add emissions of both carbon dioxide and methane, contributing to climate change.

Based on this understanding, and taking a long-term view, the 2006 Forest Plan should be revised to reject further drilling and fracking in Wayne National Forest.

¹ For reviews see: Hays, J. and Shonkoff S. "Toward an understanding of the environmental and public health impacts of unconventional natural gas development: A categorical assessment of the peer-reviewed scientific literature, 2009-2015." PLoS ONE. Vol. 11, No. 4. April 20, 2016; U.S. EPA. "Hydraulic fracturing for oil and gas: Impacts from the hydraulic fracturing water cycle on drinking water resources in the United States." December 2016; Physicians, Scientists and Engineers for Healthy Energy. [Database]. "Repository of oil and gas energy research." 2018; Concerned Health Professionals of New York. "Compendium of scientific, medical, and media findings demonstrating risks and harms of fracking (unconventional gas and oil extraction)." Fifth Edition. March 2018; and Food & Water Watch. "The urgent case for a ban on fracking." February 2015.



Of course, continued access to drill and frack for shale gas, natural gas liquids (ethane for plastics for example) and potentially even light crude oil — particularly in the Marietta unit — that's the bottom line the fracking industry and its financiers have in mind for the next Forest Plan.

Within the set of objectives of the 2006 Forest Plan, deep conflicts are present, reflecting this disconnect. The 2006 Forest Plan aims to "facilitate the orderly exploration, development, and production" of oil and gas through systematic drilling and fracking, on one hand, while on the other hand also aiming to "promote healthy riparian and aquatic ecosystems," "provide adequate habitat," promote oak-hickory and other hardwood forest regeneration, develop public interest and understanding of the Forest's natural and cultural environment."

The current process is an opportunity to reconcile these inherent conflicts, in a manner shaped by science and the public interest. Most of the existing scientific literature on the environmental and health impacts of fracking has been published since the supplementary information and determinations published in 2012.⁶ This literature, available through references above, warrants close review, especially in the light of the urgency of climate science.

It is remarkable that the 2013 Ohio Statewide Comprehensive Outdoor Recreation Plan, under Gov. Kasich, touted "numerous opportunities for developed, dispersed and backcountry recreation experience," neglecting to mention that "developed" may including drilling and fracking sites.⁷ The only mention of on-site oil and gas activities in that plan is a warning about campsite availability.⁸

The state's 2015 Wildlife Action Plan identified "... Appalachian northern hardwood forests, bogs, fens, and freshwater aquatic habitats as highly vulnerable to climate change." The report issued an ominous warning: "climate change acting in concert with existing threats could have a 'multiplier effect'." Air, water, and noise pollution, and forest disruptions, that go hand in hand with fracking operations are among the "existing threats" to which the 2015 Wildlife Action Plan alludes. Yet, under the 2006 Forest Plan, selling off oil and gas from beneath Wayne National Forest continues. 11

Recent plots of well sites in Ohio — provided by FracTracker.org, and based on state and industry data — illustrate where activity has already begun. The maps depict the horizontal lengths of fracked Utica shale wells extend underground for 1-2 miles or more, beneath parts of the Wayne National Forest Marietta unit. Antero Resources, Gulfport and others are injecting millions of gallons of fracking fluids over the length of the 2-mile-long horizontal sections of wells, with plans

² USDA. "2006 Land and Resource Management Plan. (2006 Forest Plan)." January 2006 at 2-41.

³ USDA. "2006 Land and Resource Management Plan. (2006 Forest Plan)." January 2006 at 2-9.

⁴ USDA. "2006 Land and Resource Management Plan. (2006 Forest Plan)." January 2006 at 2-15.

⁵ USDA. "2006 Land and Resource Management Plan. (2006 Forest Plan)." January 2006 at 2-45.

⁶ Ohio. "Supplemental information report: Horizontal drilling using high volume hydraulic fracturing." 2012.

⁷ Ohio. "Statewide comprehensive outdoor recreation plan." 2013 at 29.

⁸ Ohio. "Statewide comprehensive outdoor recreation plan." 2013 at 69.

⁹ Ohio. "State wildlife action plan." 2015 at 115.

¹⁰ Ohio. "State wildlife action plan." 2015 at 34.

¹¹ Center for Biological Diversity et al. "Protest of the Bureau of Land Management's planned March 22, 2018 competitive oil and gas lease sale and the determination of NEPA adequacy for oil and gas leasing in the Wayne National Forest, Marietta Unit." February 20, 2018.

¹² As for Ironton and Athens units, companies are not angling for access, but in the Athens unit there is an oil and gas disposal well receiving drilling and fracking wastes for underground injections.



for more wells sites and more than 10 wells extending from each well site.¹³ With "sweet spots" within the Marcellus play already facing "exhaustion," allowing a wave of widespread drilling and fracking within Wayne National Forest is exceptionally shortsighted.¹⁴

For local communities targeted with fracking, new jobs and positive economic impacts have proven elusive. Historically, only modest proceeds from this leasing make it into county coffers, as a local payout for shouldering the risks and harms from fracking.¹⁵ Today, fracking companies are increasingly conducting fracking operations via automation and remote control, from distant corporate offices. One hedge fund partner, marveling at the marriage of Big Data and Big Oil recently shared his view: "we're seeing automation technologies that will, at the end of the day, improve margins and perhaps displace the need to rehire folks in an upswing." ¹⁶

Along with Wall Street, large private equity funds — managers of cash for the super-rich — are plowing money into maximizing oil and gas production under this production model, relying on steady oil and gas demand for steady returns. This is despite the air, water and noise pollution, and the marred landscapes, in communities targeted with fracking. More broadly, the concept of maximizing oil and gas production — including for export — flies in the face of established climate science. Continued drilling and fracking within Wayne National Forest, as facilitated by the 2006 Forest Plan, amounts to denial of that science. We urge you reconcile the conflicting objectives within the plan by putting a stop to drilling and fracking in the Wayne National Forest.

More than a year before the 2006 Forest Plan was published, authors identified paths along streams and through hardwood forests of the Marietta unit as integral to the Underground Railroad. Over many decades countless Black Americans fled Virginia and other slave states via passage across Ohio River, through the Marietta unit of the forest.

The 2006 Forest Plan recognizes that many Underground Railroad passages traversed through what is now the Wayne National Forest, but the specific routes that researchers have identified through the Marietta unit were not noted.¹⁹ These routes include Marietta to Palmer Station (via Duck Creek or Little Muskingum River), Newport Station to Palmer Station, New Matamoras Station to Palmer Station, Palmer Station to Stafford Station, and Hannibal Station to Woodsfield Station.²⁰

This long, bloody chapter in history adds undeniable national significance to the lands that form the Wayne National Forest. It further adds context for a thorough assessment of the area's

¹³ Antero Resources. [Presentation]. "2018 Investor Day." January 18, 2018 at 3 and 22.

¹⁴ Miller, Kathryn. BTU Analytics. "New pipes to accelerate sweat spot exhaustion in Marcellus/Utica." March 5th, 2018.

¹⁵ USDA. "Final Environmental Impact Statement. 2006 Land and Resource Management Plan." January 2006 at 3-257.

¹⁶ Ernst & Young. "Inside the energy technology revolution." April-June 2017 at 3.

¹⁷ Goldman Sachs. [Presentation]. "Shale innovation: Brawn to brains to bytes." June 23, 2017; Private Equity International. "Energy Special." July 2018.

¹⁸ Burke, Robert H. and Charles H. Fogle. "Washington County underground railroad." Arcadia Publishing. 2004 at 14; Burke, Robert H. [Quiver graphic]. "The underground railroad in Southeast Ohio." 2005.

¹⁹ USDA. "Final Environmental Impact Statement. 2006 Land and Resource Management Plan." January 2006 at 1-20 and 3-281 to 3-282.

²⁰ Burke, Robert H. [Quiver graphic]. "The underground railroad in Southeast Ohio." 2005.



"social, cultural, and economic conditions," its "cultural and historic resources and uses" and its "multiple uses and their contributions to local, regional, and national economies."²¹

Therefore, we also urge you to use the new Forest Plan process as an opportunity to bring this history of the Wayne National Forest to the fore. New Special Areas within the proclamation boundary ought to be designated to promote the national significance of the "paths to freedom" that crisscross the forest.²²

Sincerely,

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²¹ 36 CFR Ch. 11. § 219.6.(b).

²² USDA. "Final Environmental Impact Statement. 2006 Land and Resource Management Plan." January 2006 at 3-282.