## Karen Frock

Thank you for the opportunity to comment on the proposed draft regulations addressing hydraulic fracturing and additional clarifying amendments. Please see the attached PDF.

March 30, 2018

Dear Delaware River Basin Commission:

Thank you for carefully considering the potential impacts of high volume horizontal hydrofracturing for natural gas extraction, and its associated infrastructure, facilities, and practices, in the Delaware River Basin.

I was born in the Delaware River watershed; my parents owned a home for 36 years within a mile of the Delaware River and 250 feet from a tributary of the Delaware. My family and some of my dearest friends live in the Delaware River watershed.

I grew up loving the Delaware, its associated landscapes and waterways. Even as development increased in that watershed, efforts to preserve open space, county and state parks, and stream integrity helped maintain the beauty and natural qualities still to be found there. You must continue that important tradition of conservation: for the value of ecological services provided by wetlands, forested areas, and waterways, and for their priceless value to humans and wildlife.

When college drew me from the Delaware to the Susquehanna River watershed, the magnificent forests, mountains, streams, and river led me to stay here, marry someone also drawn to settle here, and buy property. We have lived for 34 years on the Loyalsock, our state's 2018 "River of the Year," where I also operate a business, for the quality of life and work environment such an "exceptional value waterway" valley provides. The changing seasons; arriving, departing, and resident wildlife; and neighbors and visitors who also cherish these natural attributes are integral to our lives and to the sustainable economic value provided by outdoor recreation and nature tourism.

Thus, it is with grief, anger, frustration, and determination to try and make a difference that we have watched the degradation of these constitutionally-protected natural assets due to the incursion of the natural gas industry in north central Pennsylvania. I applaud Governor Wolf for upholding a moratorium and outright ban of fracking in the Delaware River Basin; I urge and implore him to see that we here in the Susquehanna River Basin should be given the same protections and valued to the same extent as our families and neighbors to the east. Municipalities in all parts of our country are committing to renewable energy in the short term—not in a far distant future, which will obviate any need to subject our lives, homes, habitats, and living creatures to the short and long term consequences we are seeing, and will see, from natural gas extraction using present technologies.

The Loyalsock, alone, has seen a ten-mile slick water spill along the creek, that was flushed into it during the "clean up"; tens of thousands, if not hundreds of thousands, of gallons of gasoline spilled into it during a Sunoco Logistics gasoline pipeline rupture from a "freak" weather event – events that are happening here with increasing frequency and may be caused in part by our

dependence on fossil fuels and their impact on the climate; a spill last fall of more than 60,000 gallons of flowback water because of contractor incompetence, which reached a tributary of the Loyalsock and may eventually affect private water wells in the residential community surrounding this industrial activity carried out by Inflection Energy, which has a dismal record of violations in our county. There are now two water withdrawal sites permitted by the Susquehanna River Basin Commission on the Loyalsock for natural gas hydrofracturing uses that allow millions of gallons per day to be withdrawn, even during drought watch time periods, and more gas industry withdrawal applications are expected. The creek, itself, has been leased for subsurface rights by the state of Pennsylvania so that when operators including Inflection and Pennsylvania General Energy extend horizontal well bores underneath and adjacent to it and frack to extract gas the state may realize some revenue returns – but if these operations damage the waterway and its inhabitants, we will all be the ones paying the price. And this is just one of our important waterways flowing to the Susquehanna.

Meanwhile, because Loyalsock State Forest tracts important to our creek and river's health are leased, Pennsylvania General Energy has put, and is putting, well pads on mountain and ridge tops in the Loyalsock watershed and Inflection Energy plans a well on private land on the same ridge, the Allegheny -- so the last large swathes of unfragmented forests in our region are now seeing access roads, pipelines, impoundments, drilling operations, chemical storage, and at some point will see compressor stations and other related construction. Other state forests in the region have already seen these impacts. Where once you could hike or ski all day within 14 miles of 30,000 people and hear nothing but the birds and the wind, now you encounter industrial sites.

These are historic, as well as natural, treasures that are being "taken" – for that is the real "taking." Both of the companies' operations I just described are taking place where freedom seekers traveled during slavery times, led by local people determined to help them escape from oppression. After the mass extractions of the "big cut" in the late 1800s that destroyed the forests, leading to fires and catastrophic flooding, the Commonwealth's stewardship of the forests over more than a century gave us back Penn's Woods. You could once again imagine what the journeys through those forests were like, because we have mature second growth and abundant wildlife. Until the advent of the natural gas industry here, we have had assets invaluable to hunters, hikers, birdwatchers, and many others who cherish natural places for solitude and recreation, while allowing a responsible forest products industry, heavily regulated to maintain the resource for the long term. These are now at imminent risk of destruction.

DO NOT allow any water to be extracted from the Delaware River Basin for high volume horizontal (or vertical, for that matter) hydrofracturing. In addition to facilitating a poorlypracticed, questionable technology with deleterious effects upon our Commonwealth, the reality of water withdrawal and distribution for those who live in proximity to these waterways is periods of incessant water tanker truck traffic, literally from dawn until midnight and sometimes throughout the night, large trucks passing in pairs every few minutes, pounding highways and bridges that were not built for such abuse, adding greatly to the risks of travel on our roads, adding large amounts of Diesel pollution, jerking us awake with jake brakes at all hours, subjecting us to noise that drowns out the sound of family gatherings, the waterways, and associated Nature.

As the well pad construction moves closer and closer – in some cases in unconscionable proximity to homes – people have to make the decision: do we try to sell out and leave to protect our families? Do we stay, as we have, and continue trying to protect our lives and our assets? We spent almost four years in our township, one with only 600-some residents, and significant funds, to amend our zoning ordinance to address the advent of the gas industry here, having formerly had no protections. Now that is being tested and challenged by the gas industry. My family had to come up with \$808 out of our own pockets to have base line water testing done, simply so that we can document future damage that may be done as a result of gas industry malfeasance in the future. For what other industry are citizens forced to take such measures in order to assert what is our constitutional right: clean water, clean air, and environmental integrity?

Let me remind you, also, regarding interstate aspects of gas industry operations and transportation: pollution and traffic hazards know no boundary lines. My neighbors across the creek may be in a different township, but they are subject to the same risks from what happens in my township, as I am in regard to what happens in theirs; and all the states involved in the DRBC will share the risks if you allow the industry to gain any foothold in the Delaware River Basin.

DO NOT allow what has been done and is being done here to take place in the Delaware River Basin. CONTINUE to protect your natural assets and people, including my family and friends. DO NOT allow water to be extracted, transported, contaminated and stored, "processed," or injected in your watershed. DO NOT allow these hazards on your highways. DO NOT allow the tons of toxic and carcinogenic emissions routinely emitted by "normal" operations of well site activities, compressor stations, storage tanks, and other infrastructure. There are enough industrial pollutants in Pennsylvania, particularly eastern and southeastern PA, already. DO NOT allow additional releases of climate damaging methane from your part of our states. DO NOT allow the quality of life and safety of living to be jeopardized. DO NOT allow degradation of sustainable outdoor recreation, natural, cultural, and heritage tourism to take place for an industry we should not be allowing to proliferate and that will leave us with future risks and contamination to remediate when the casings and pipelines eventually fail, which they inevitably will. LEARN from what we are experiencing, what western PA has experienced, what other parts of the country have experienced. LEARN from Pennsylvania's history of irresponsible extraction industries of the past and do not allow that to happen again.

Thank you for your consideration of these comments. Where municipalities have to weigh the potential benefits of resource extraction or development against the welfare of the people, our governments must give precedence to us – to We, the People, in the place where independence was declared and our rights to life, liberty and the pursuit of happiness were bought with blood. Do not sacrifice the people and Pennsylvania for natural gas extraction with present technologies and "best practices" that are anything but. Leave the gas in the ground,

where it can be a future resource if it can truly be extracted, some day, without risking everything that we hold dear. Focus on sustainable, renewable energy technologies that can avoid the need to ever extract it.

Sincerely, Karen L. Frock