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## Dear Commissioners,

It is our responsibility to protect our state's land and waterways for the health of the planet and of all our residents. I call on you to approve a complete ban on fracking.

Climate changed. We see the evidence of it everywhere. The only hope we have now is to speed the transition to clean, renewable, sustainable energy. If we don't, the impacts will not be limited to our water resources, but will endanger every aspect of our lives and very our survival. The DRBC must not allow any practices that enable more fossil fuel extraction anywhere. Protecting the water resources of the basin with a full fracking ban protects much more.

When a site is developed for gas well development, the change is dramatic, essentially transforming the land to an industrial landscape. The result is destruction of acres of vegetation (8.8 acres per well pad in 2011 with 30 acres of forest impacts due to edge effects, more than double that is the trend today), soil compaction and destruction of the natural land contours, alterations to watershed drainage patterns, and hydrologically connected systems such as wetlands and vernal pools. Habitats and complex ecosystems are disrupted or lost. 85% of the Upper Delaware where the Marcellus Shale is located is forested. Forest destruction and fragmentation in turn destroys the ability of the forest ecosystem to capture, clean, and infiltrate precipitation, removes the trees that sequester carbon, reduces biodiversity, encourages invasive species, and destroys vital habitat., Changes to stream water quality occur where gas drilling and related activities are located. For instance, a publication of the Proceedings of the National Academy of Sciences found streams adjacent to gas wells are negatively impacted by runoff and sedimentation (Total Suspended Solids), harming benthic life, fish and wildlife and causing streams to be eroded and destabilized. DRBC follows the state's stormwater rules where a project is located, leaving loopholes in current nonpoint source laws that allow fracking activities to escape strict oversight. This would be a recipe for disaster if fracking were to occur, which is why it must be banned in the Delaware River Watershed.

On March 13, leading scientists and physicians released the Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, 5th Edition documenting fracking's harm to

public health. Please read all of the study's findings. Their conclusion, and mine, is that the only way to truly protect public health is to prohibit fracking and all its associated activities (waste hauling, treatment, disposal). I urge you to ban all of these activities in your final regulations., From the Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, 5th edition, "We close with an observation by Maryland physician Judy Stone, MD, whose recent essay in Forbes speaks for all who have contributed to this Compendium: Fracking profits go to private industry but the public—families and communities—bear the costs of the many health complications from the drilling. There is growing evidence of a variety of health problems being associated with fracking. Common sense dictates that drinking and breathing cancer-causing agents will take their toll. The correlation is too strong to ignore, especially when we have other, cleaner energy options. For our safety and that of future generations, we should not allow the new administration to sell off public lands, nor allow drilling on our land, and should ban fracking completely."

Sincerely,

Sara Palmer