

Richard

Shingles

321 Dunford Lane

Newport

VA

24128

shingles@vt.edu

Dear Commissioners,

Fracking is no longer the path to American energy. It is obsolete, causing more harm than good.

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.

The Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, 5th edition speaks to the simple fact that you cannot completely protect people from fracking operations. We cannot prevent accidents from happening. As documented many times handling wastewater in the Delaware basin will cause impacts and contamination. It is not a question of if but when and where.

Sincerely

Richard Shingles