

**COMMENTS FOR 5 MINUTES AT THE FERC SCOPING MEETING
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By Pamela C. Dodds, Ph.D., R.P.G.

I am Pamela C. Dodds and have a doctoral degree in geology and am a Registered Professional Geologist. I am a member and officer of the Laurel Mountain Preservation Association and I serve as the geologist and hydrogeologist for Laurel Mountain Preservation Association in West Virginia. Also, I am a board member on the Water Resources Committee of Highlanders for Responsible Development in Highland County, Virginia. I am a life time member of the National Speleological Association and I am a caver. My comments today concern cumulative impacts to areas where the pipeline construction is proposed. The President's Council on the Environment is the regulatory authority for implementing the National Environmental Protection Act. Their regulations describe cumulative impacts as those resulting from incremental impacts added to impacts of the past, present, and reasonably in the future. Cumulative impacts also include connected impacts, described as interdependent parts of a larger action.

We are especially concerned with cumulative impacts to our watersheds, habitat fragmentation, and radon exposure. The Environmental Protection Agency provides guidance that stormwater discharge from a 10 percent impervious land cover area within a watershed will negatively impact the watershed. So, stormwater discharge from construction within a watershed that equals or exceeds that resulting from a 10 percent impervious cover area will cause damage to that watershed. The proposed pipeline routes through our mountain ridges will cause cumulative damage to every watershed they cross if there are also agricultural or industrial sites within the watershed from which the combined stormwater discharge will equal or exceed that of a 10 percent impervious land cover. The damage consists of decreased groundwater recharge and increased stormwater discharge downstream that causes streambank erosion and thus sedimentation within those downstream areas not protected by erosion sediment control structures at the construction site. There is also destruction of the headwater areas that serve as the base of the food chain for downstream aquatic organisms, including trout. The additional sediments in the downstream areas destroy aquatic habitats for numerous aquatic organisms.

The second cumulative impact of concern is habitat fragmentation for bats and for birds. Bat species, including the endangered Indiana Bat, roost in trees in the forested ridges during several months of the year. Not only is the endangered bat's environment protected, but there will be cumulative damage to the bat populations. Certain migratory bird species that live in our forested ridges require deep forest habitat at particular distances from open areas. The habitat of these birds is protected and there would be cumulative damage to these bird species due to habitat fragmentation.

The third cumulative impact of concern is radon. Radioactive elements are naturally present in the Marcellus shale. Radon gas is released during the fracking process and has been measured at the wellhead as 37 pCi/L. It is this amount of radon gas that travels through the pipelines. Wherever there is venting of the gas from the pipeline, the radon gas is vented also. The EPA cautions that if radon testing in a house is 4 pCi/L, then protective actions should be taken. The connected action of the pipeline construction is that more Marcellus fracking sites will be constructed. The workers at the site of the wellhead have no protection against the radon and don't even have dosimeters to know their exposure. The workers at the compressor stations are exposed in the same manner. The workers and the environment and the people near the venting areas are exposed in the same manner. The end users are exposed in the same manner. The cumulative impact of radon exposure is death of our citizens by lung cancer. The associated connected action to pipeline construction is an increase of Marcellus fracking, with the cumulative impact of greater radon exposure of our citizens.

It is critical that the FERC's NEPA process focus on these cumulative negative impacts to protect the health and safety of our citizens and our environment.