



Testimony for CO2 Budget Trading Program Regulation

I'd like to thank the DEP and the Environmental Quality Board for the opportunity to speak today. I'm representing the Elk Creeks Watershed Association where I am on the Board. We are one of over 175 watershed associations in Pennsylvania. All of us on this call are sitting or standing in a watershed right now. Ours is located in southern Chester County. We are in the Chesapeake Bay watershed, but unlike most others, the Elk Creeks flow directly to the Bay and not first into the Susquehanna. Our creeks flow through horse farms, Amish and "English" crop farms, as well as through thousands of mushroom farms, in an area of intense residential development.

The science of climate change is clear. We know that the climate is changing and that human activity is the primary driver of that change. We know that the earth will continue to warm for the rest of this century, even if we finally take appropriate action now. Taking immediate action through effective, fundable and enforceable policies is needed to avoid the worst impacts. Every year we delay, the harder it will be for us to adapt in the years to come.

We want to express our gratitude to Governor Wolf and the DEP for acknowledging the scientific consensus on anthropogenic climate change and for proposing actions that will make sure Pennsylvania does our part in keeping climate change to manageable levels. Doing our part means taking action in many areas, but joining RGGI is probably the single most impactful step we can take.

As a watershed organization, our goal is to maintain or improve the quality of our water resources and to educate the public so that there is increased understanding about watersheds providing drinking water, habitat for wildlife, and soil to grow our food, and the importance of public efforts to protect them. In Pennsylvania, the rivers are a huge part of our history and our quality of life, and the open spaces within our watersheds are used by millions for fishing, hunting, hiking, birding, identifying plants and wildlife, and in our educational programs. The past year has made these benefits even more clear as so many people have reconnected with nature to escape the isolation and stress of the COVID-19 pandemic.

Anthropogenic climate change is already having significant impacts on our watersheds. These changes can be seen in the increasing frequency of severe rain events and in ever-increasing air temperature. From 2001-2012, the amount of our annual rainfall that fell during "heavy rain

events” was 50% above the long term average. This trend will continue. While some areas of the country will become dryer, data predict that our region will become wetter, with more frequent extreme precipitation events. This will lead to increased erosion and degradation of stream quality, particularly for streams that lack robust forest buffers. There will also be increased flash, riverine, and urban flooding.

We know that increased water temperatures lead to reduced dissolved oxygen levels in our streams and lakes. This leads to stress and increased mortality for fish, macroinvertebrates, and the entire ecology of a watershed. One of the reasons watershed associations like ours focus on riparian buffers is because of the cooling effect they have on water. Increasingly, we’ll be fighting an uphill battle as air temperatures climb.

Fortunately, we already have most of the technologies we need to avoid the worst climate change impacts; we just need the political will to enact, fund and enforce policies. Thank you to Governor Wolf and the Board for demonstrating this will. Joining RGGI is essential for maintaining the health of our watersheds and our shared environment in general.

Thank you for the opportunity to provide the perspective of a local watershed association.

Kevin Warren

307 Baker Drive, Lincoln University, PA, 19352

kevin@warren-energy.com

Elk Creeks Watershed Association