My name is Sandra Brown, I live at 1841 Bristoria Rd., Holbrook, PA 15341 which is about 12 miles west of Waynesburg, PA. In 2005 I purchased a 45 acre farm and started raising grass-fed Scottish Highland beef, roasting chickens and laying hens. I am 67 years old and a former suburban housewife. The name of my place is So'Journey Farm.

There are many details in the Act 54 to CAC Report that bear commenting on—what length of grouting is done in streams, why mining information at DEP is so scrambled as to be virtually unusable—but I need to address larger issues and bigger pictures here. Things like the future of agriculture and my farm business in particular when there is no water.

It's actually a very good time to be in farming. Even young families with limited incomes are concerned about the food that goes into their children's mouths, and as an aging American, I know the purity and nutritional content of the food I eat is the first non-negotiable to a healthier, longer life. Small and medium sized farms such as mine are experiencing surprising economic growth because the buying public has also become the informed consumer. The grass-fed Scottish Highland beef and French roasting chickens I raise sell out every year and I cannot meet the demand. With a simple email to existing customers I can sell a whole cow and currently get over \$7.50 a pound for my beef, including the hamburger. Roasting chickens—a variety bred for the European market which prefers more dark meat—are pasture raised and fetch \$4.50 a pound. At 7 pounds minimum they cost over \$30 apiece and still sell out, the flavor of meat raised on this little piece of heaven in West Greene County is unparalleled and it sells itself.

But only if there is water to continue farming.

This is not a business that could simply be moved to another region—the flavor of the product from this farm is unique, tied closely to the mineral content of the soil expressed in the flavor and nutritional content of the grass. "Terroir" is the French word for flavor of the land—rather like Burgundy wine only tasting genuine when it comes from Burgundy.

As steward of this land, it is my intention to return the land to the next farmer in better condition than when I received it. Topsoil will be thicker, forages will be more nutritious, invasive plants will, hopefully, be tamed.

But there is no farming this land if there is no water.

There are four springs and two wells on the property, the main spring creating the hollow where the original log house was built, which then feeds the main house (built in 1880), waters the chickens and then fills the 2 million gallon pond which has crappy, perch, bass and catfish. During periods of drought I have used the pond and wells to irrigate the corn and vegetable garden. On the

steeper hillsides where the cattle graze the springs provide all their drinking water.

With water you can farm just about anywhere; with no water there's no farming.

Water resources on agricultural land can NOT just be dependent on the rainfall—the land for agriculture has to have carrying capacity to get the animals and farm through periods of drought. And that's where the springs, well, and streams and tributaries come in—they somehow manage to keep flowing. This is because the rock strata laid over millennia is still intact and holds the water for later use. Coal mining destroys that strata, breaks the plate, and the water table is gone. *In perpetuity.* Has the permanent, total loss of this water ever been factored into the cost of coal?

I feel that Act 54 as currently written perpetuates a false sense of the value of resources. We're discussing stream grouting lengths and we should be discussing what the loss of water to agriculture *in perpetuity* should be worth. We recognize coal as a resource and barely put a price on the value of water.

The Commonwealth of Pennsylvania has to decide if water is a valuable resource, and if so, how valuable? Can we put a price on it? Can we estimate the loss in agriculture when all the springs are gone and the streams dried up? How would this affect Pennsylvania's bottom line?

There are a host of specific "corrections" and "improvements" the DEP could be prevailed upon to make, but the essential task is protection of the environment, not divvying out limited resources until they are essentially gone, (please remember the statistic of 3 in 4 streams damaged and try and imagine the number of seeps and springs that have been lost) and if that agency cannot rise to the job, then another entity should be given the task.

As seen in Greene County, mining of coal can create a trophic cascade—the food chain becomes broken as the link between the land and agriculture becomes broken. Growing of food (crops and animals) for future generations declines as farmland is bought up for undermining and water is taken. "Taken" is the only way to describe what is happening, since there is hardly a price put on the water that has been lost over the past hundred years—streams that have stopped functioning or disappeared, springs and seeps that have dried up—and not enough courage to prevent its disappearance over the next hundred years. The DEP hardly has the resources and time to try and save this precious water, and clearly the Commonwealth needs to pay more attention to the loss of water resources, especially if it intends to maintain it's primary industry.

Remember, please, that agriculture is the state's leading industry, providing \$5.8 billion in cash receipts and \$45 billion in total economic impact to the Commonwealth's economy. Animal agriculture alone represented \$1.5 billion in household income, and 60,000 jobs.

In sustainable farming we like to say "the Watershed = the Foodshed." No watershed, no foodshed.

West Greene County was once a vivid farming community—now less than a handful of farmers remain, everyone else bought out by prospects of an 1860 acre coal mine that was never built. Not only could the coal company not guarantee the safety of the Exceptional Value streams in the pad site for the new mine, coal's fortunes had begun to fall. Now China and India would be the beneficiaries of SW PA's water loss, since coal-fired electrical plants here were switching to natural gas to meet Federal air quality standards. This is a trend we can now jump ahead of by firming up standards for water protection, being courageous enough to protect the agricultural land for future Pennsylvanians. Heaven knows there will plenty of mouths to feed because of continued population growth and even when the lights are out people will still want to eat.

We know more now about the cost of burning coal than we did a hundred years ago. More than even 30 years ago, and it's time we re-calculated the true cost of this fossil fuel to our land and water supply, re-affirming our ability to feed ourselves in the future. How can we possibly justify injuring 3 of every 4 streams in the Commonwealth that are subject to undermining?

And fines based on a new formulation for the value of water loss should go into effect immediately, continuing until either the problem has been fixed or a final judgment is reached on what is due the landowner AND the Commonwealth for the loss of water. In my opinion it's not just the landowner that should receive compensation—the Commonwealth owns these waters too and if the water is lost IN PERPETUITY the replacement must be also. Could any resource extraction corporation pay the true cost of providing water *in perpetuity?* Why is agriculture the only industry shouldering this burden?

Just this week another stream, Polen Run near Ryerson Station State Park has been sacrificed to coal mining. When will it stop? When this region, so historically rich with agricultural treasure is as dry as the American Southwest? As California? The destruction of water tables—the very ability of the land to hold water—is more permanent than drought.

The answer to these questions is in your hands.