

## Laura Navitsky

The Delaware River Basin Commission should not allow hydraulic fracturing companies to use our freshwater and give us their wastewater. Pennsylvania is beautiful because of its water supply which makes it one of the greenest states. One of my favorite things to do in the Lehigh Valley growing up was to go tubing in the river and now as an adult I hope to enjoy the natural beauty of this area for many years to come. If we start diverting water to a water-consumptive industry like hydraulic fracturing, our area may begin to look more like the Western states which chronically suffer from droughts. The Delaware River Basin Commission is already aware of a Susquehanna River Basin Commission (SRBC) report that 96% of water withdrawn for hydraulic fracturing is used consumptively, i.e. permanently removed from the basin's ground/surface waters ("18 CFR Parts 401 and 440", p. 7). While it may sound like we are only temporarily letting these companies "borrow" our water and that it will be replenished, the truth is that we will be losing vast quantities of water and accepting an unusable, toxic byproduct in its place.

Besides decreasing the water supply through water withdrawals, the transportation of wastewater back to the area for disposal is apt to degrade the quality of our fresh water. People who are not familiar with "fracking" wastewater may not know how toxic it really is but I do because I worked with it firsthand. For my master's thesis I simulated production water spills using wastewater from Marcellus shale drilling operations and measured their effects on the soil, vegetation, and resulting leachate. At 200 ppt salinity, production water brine is 400 times more saline than saltwater, which in itself is enough to cause major ecosystem and crop damage; it also contains barium, chlorides, and other constituents of the underlying geologic formation, along with the many other additives used during injection. The public should not confuse it with everyday wastewater that can be sent to a water treatment plant.

As much as it would be nice to think that there will be no accidental spills that contaminate our surface waters, it is unrealistic to assume that none of this large quantity of wastewater will enter our water basin. According to the Federal Motor Carrier Safety Administration, in 2015 there were 415,000 police-reported large truck crashes nationwide. With the increased traffic of water tanker trucks on our roads and highways there will be accidents and spills, not to mention the additional road congestion problems. Even given the miracle of no traffic accidents, one only needs to watch a garbage truck to know that there will be effluent escaping from these trucks while in transit. There is no doubt in my mind that this industry causes environmental problems, and export/import of water for usage in hydraulic fracturing should not be allowed here.