



Wayne Lehman gives an overview of the hydrogeology of the region

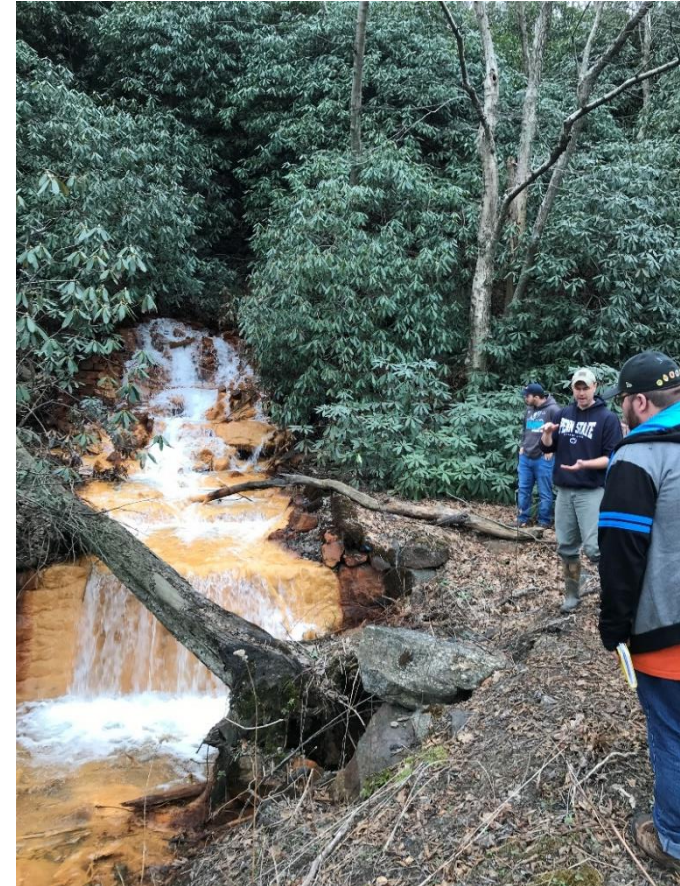


Joe met us at the Wadesville Quarry to give us a summary of the site





This discharge goes by two different names as it is from two different deep mines at the eastern end of the valley: Pott-Bannon and Repplier. These two mines are separated from the deep mines to the west which drain out of the Pine Knot discharge. If the barrier pillars between these two zones are breached, this discharge could flow west to the Pine Knot underground and then be treated with the Pine Knot discharge.





The convergence of the West Branch of the Schuylkill River and the Pine Knot Discharge

Wheeler Run – This stream channel used to have a flume which kept the water from entering the subsurface mine pool. However, the flume was in a state of disrepair. The Schuylkill Headwaters Association removed the flume and lined the stream channel with an impermeable barrier. Due to the high flows that are experienced in this area, they also had to coat the rocks in the stream channel with cement to hold them in place. Over time the cement will weather away and be replaced with natural sediments.



Since the stream channel work, a crop fall has started to develop beside the stream. This crop fall has become deeper over the past years (see pictures from 2014 and 2015 field trips).





The strip mine across the street has been open a total of four times as economic changes made coal extraction feasible.



Crop fall (right) was a location of a DOT drainage. Instead of allowing the water to sit in the crop fall and seep into the mine pool, discharge is rerouted to the stream channel.





Another stop in the headwaters . . . This region has been extensively mined, as apparent from the overburden on either side of the valley. Coal waste had been exiting this valley during times of intense rainfall and turning waters downstream black. The Headwaters Association obtained funds to stop this pollution.



The Otto remediation site in Reilly Township has a depth of 12 feet for iron collection but needs more time for precipitation to occur. Future renovations to this system may include injection of oxygen or a longer path through the wetlands

