



Wayne Lehman gives an overview of the hydrogeology of the region

The Oak Hills Boreholes – Water discharges from subsurface mines at this location. The discharge area frequently floods during high rains, thus making the area impractical for passive treatment of the water. This water discharges into the West Branch of the Schuylkill River.





Wayne Lehman at 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.



The water held in the old mine pit may find its way into the underground mine workings





The drag line runs on electricity and is used to excavate coal in this area.





Old mine openings can be seen across the valley





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.