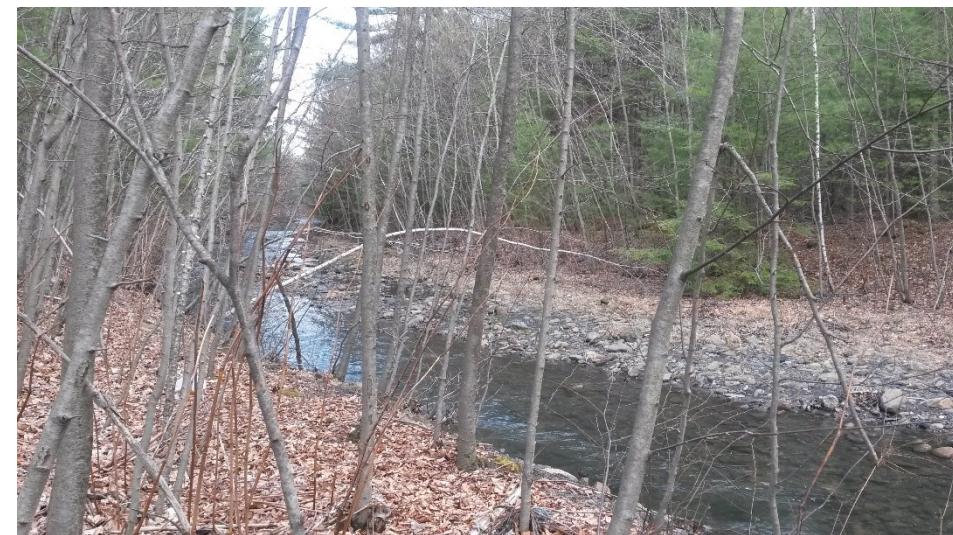
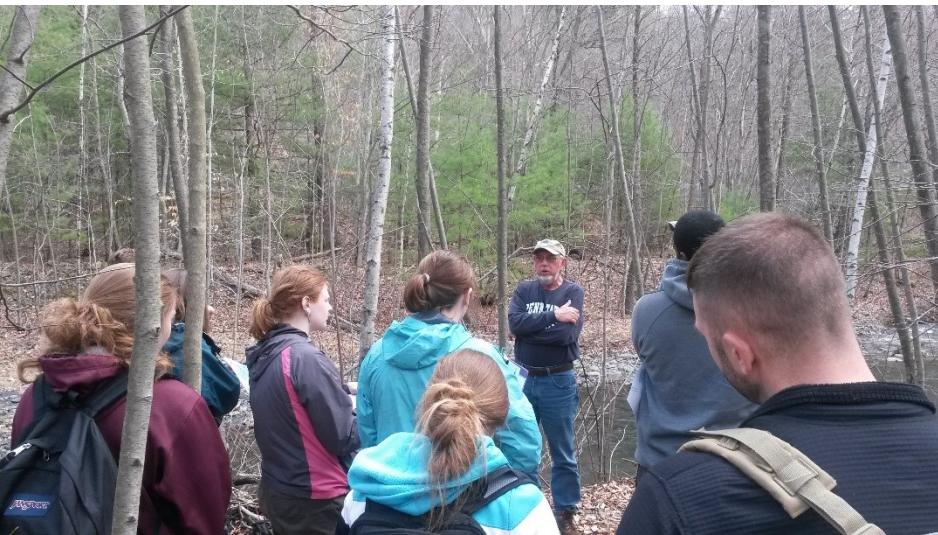




Bill Reichert at the convergence of the West Branch of the Schuylkill River and the Pine Knot Discharge





The headwaters of the Schuylkill Watershed – This region is severely impacted by its long mining history. Water has been shifted and moved by many generations of miners, and the subsurface is fractured by the mining process. Water that enters the subsurface mine pools becomes contaminated with sulfuric acid and iron from pyrite oxidation. The Schuylkill Conservation District and the Schuylkill Headwaters Association are making efforts to clean up the region through passive remediation projects.





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.



At The Potato Patch (the former location of an Irish community) surface water drains to the old strip mine and is held there until it seeps into the subsurface mine pool. This water becomes contaminated with iron as is apparent by the orange color of the pool within the stripping pit.



At the top of The Potato Patch, Bill Reichert talks to the students about the difficulty in balancing remediation efforts and progress with the needs of the downstream residents





The old drag line has been abandoned here. It was built in the Midwest, walked to PA, and spent many years as the workhorse of this coal mine. This equipment is operated by only two men, taking the place of many mine workers in the mining practices of the last century.





The poplars grown here in the reclaimed strip mine are flourishing because of biosolid application. There is currently a limit of 60 tons per acre on biosolids, even within reclaimed strip mines.





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

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





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 year (see pictures from 2014 field trip).

