Stop #1 – The confluence of the West Branch and the West West Branch of the Schuylkill River. Wayne discussed the hydrology of the area in terms of watershed and the problem of lost water, transferred through underground mine workings.

Stop #2 – 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.

Stop #2 – The Oak Hills Boreholes. These boreholes discharge water directly into the West Branch of the Schuylkill River, degrading the water quality. As this stop is just downstream of the Pine Knot Discharge as well, the quality of the water of the West Branch at this location is highly dependent upon the mine discharges.

Stop #3 – The confluence of the West Branch (left) and the Pine Knot Discharge (right). There is sometimes enough Aluminum in this discharge to coat the stream channel with white precipitate.

Stop #4 – Greenbury Reclaimed Strip Mine. This location has been reclaimed to its 1972 grade. Biosolids have been used at the poplar test pit. After seven years of growth, the poplars treated with biosolids are more than 10 ft tall while the untreated poplars are less than 4ft tall. This renewable resource can be used for paper pulp.

Stop #5 – The Greenbury Reclaimed Strip Mine. The water at the base of this reclaimed section of the strip mine is blocked from entering the natural stream channels of the watershed. It will instead seep unto the underground mine workings over time. It provides wetland habitat for ducks.

Stop #6 – The Drag Line. This equipment, from Marion Ohio, runs on electricity and is operated by 2 men.

Stop #6 – Class photo at the drag line.

Stop #7 – 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.

Stop #8 – Dyer Run. This is another example of a stream channel which was lined with an impermeable barrier and covered in large rocks. Cement is only used in some places along the length of the channel. Location of seeps in the stream channel were found with resistivity surveys.

Stop #9 – Diverting the water. Water which used to be diverted into a crop fall, with a connection to the subsurface mine pool, is now diverted to the stream channel to decrease the total volume of water that exits the mines as AMD.

Stop #10 – The top of the watershed. The final stop of the day was at the headwaters, an area which has been extensively mined as apparent from the piles of overburden on either side of this valley.