



Restoring the Headwaters

Schuylkill Headwaters Association



Our mission is “to promote the environmental integrity of the Schuylkill River, its tributaries, and the watershed that lies within the boundaries of Schuylkill County.”

Headwaters of
the Schuylkill
River near
Tuscarora
Springs



The Legacy of Coal Mining on our waterways...

Abandoned Mine Drainage [AMD]

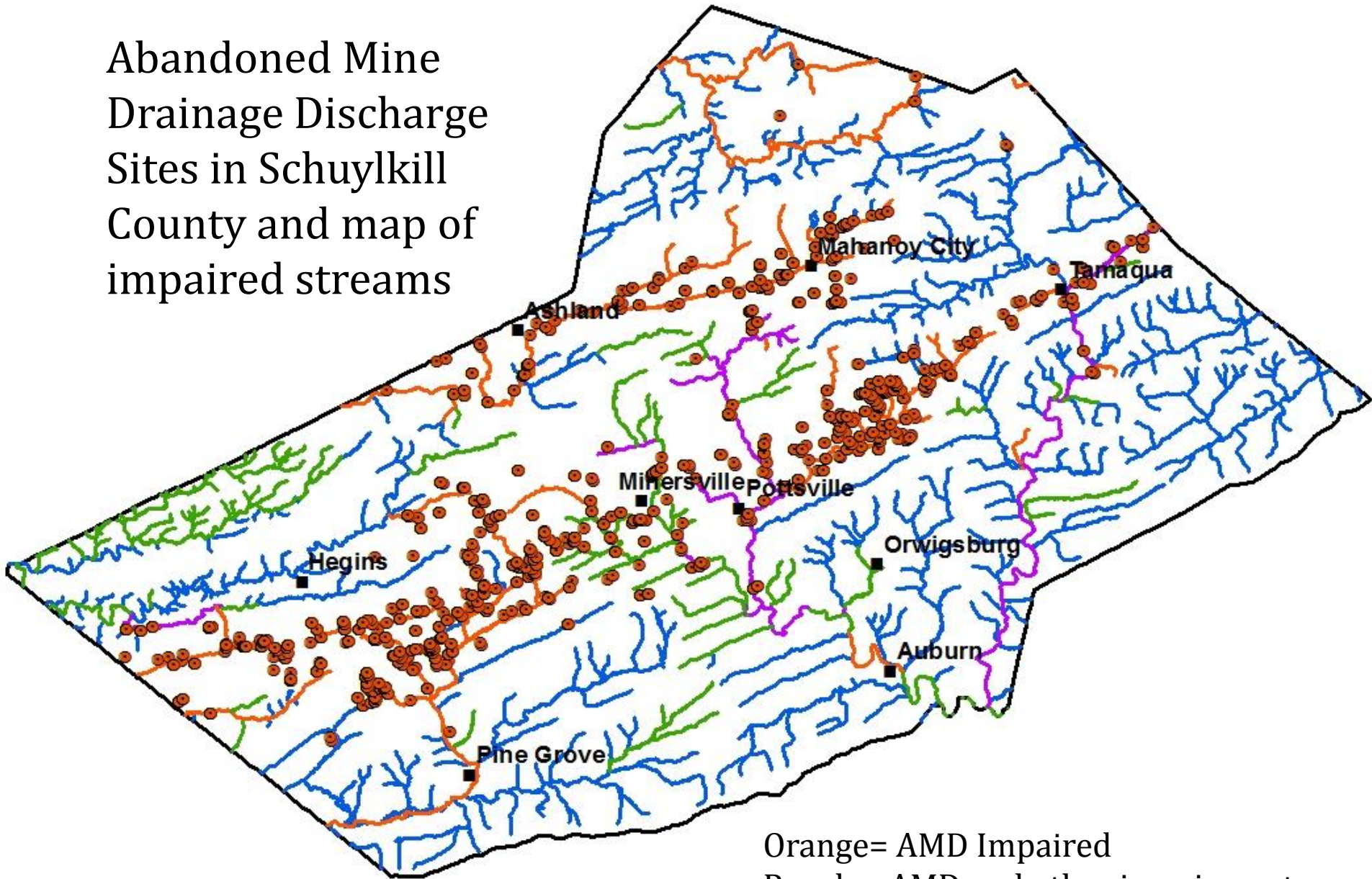
AMD impacts **3,000**
miles of streams across
Pennsylvania and **129**
miles in Schuylkill
County.



There are over **160** abandoned mine sites in Schuylkill County!



Abandoned Mine
Drainage Discharge
Sites in Schuylkill
County and map of
impaired streams



Orange= AMD Impaired
Purple= AMD and other impairment
Green=Other impairment
Blue= Clean streams

WIP
**IDENTIFICATION AND SUMMARY OF PROBLEM AND
POLLUTION SOURCES**

- Abandoned Mine Drainage (AMD)
- Sediment Runoff and Abandoned Mine Drainage from Refuse Piles
- Uncontrolled Stormwater Runoff
- Sewage
- Agriculture Related Impairment (Nutrient and Sediment)
- U. S. EPA Superfund Sites

Pine Forest



Silver Creek



Silver Creek Monitoring data

- Avg. flow:
- 1170 gpm

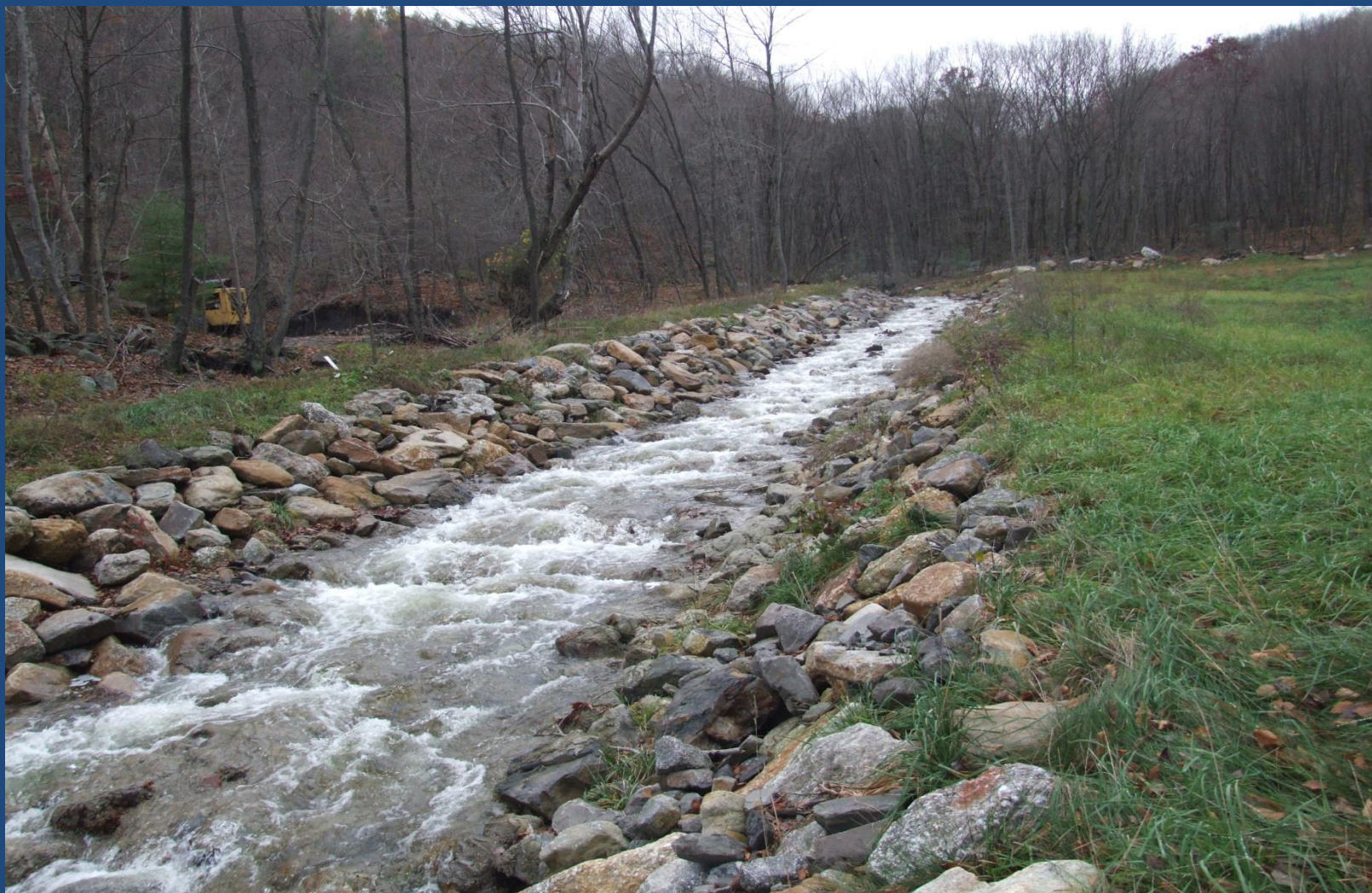
- Raw water:
- Fe – 15.9 ppm
- pH – 5.8

- Treated water:
- Fe – 3.40 ppm
- pH – 6.72

- Iron removal:
- 175.7 lbs. / day 64,130 yr.
- 32 ton per year



Wheeler Run



Bell Colliery



Bell Colliery



Bell Colliery Monitoring data

- Avg. flow:
- 281 gpm
- Raw water:
- Fe – 2.99 ppm
- pH -- 4.3
- Treated water:
- Fe – 1.08 ppm
- pH – 7.0
- Iron removal:
- 9.7 lbs. / day -- 3540 yr.



Mary D Borehole Old ball field



Mary D Recreation Complex



On line June 10, 2013



Mary D Monitoring Data

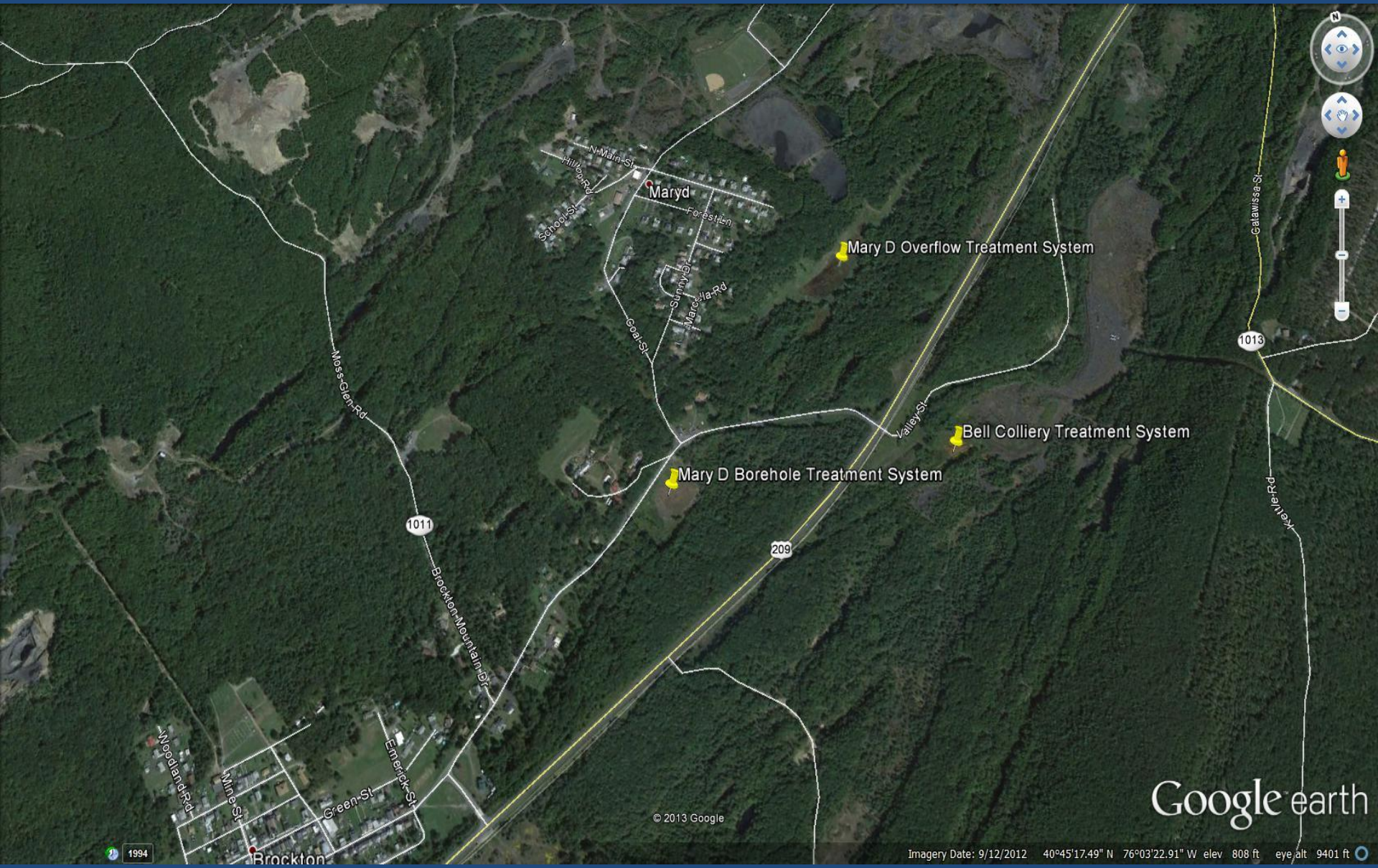


- Avg. flow:
- 689 gpm

- Raw water:
- Fe – 7.2 ppm
- pH – 5.5

- Treated water:
- Fe – 1.0 ppm
- pH – 7.5

- Iron removal:
- 30.5 lbs./day -- 11,130 yr.



Google earth

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Imagery Date: 9/12/2012 40°45'17.49" N 76°03'22.91" W elev 808 ft eye alt 9401 ft

1994

Silver Creek



Our Silver Creek AMD Treatment System is being converted into an educational park to involve local residents in improving our environment.



Students mouths always drop open when we tell them that the Silver Creek AMD System removes between 150 to 300 pounds of iron oxide every day!

