



AMD Borehole #3 on
Solomon Creek

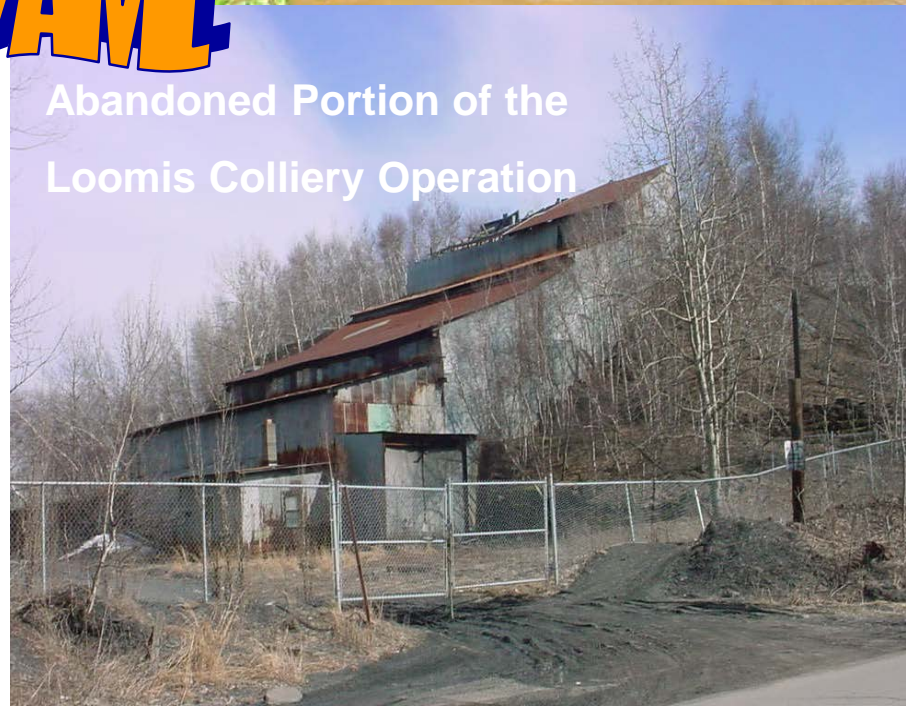


S. Branch Newport Creek



Nanticoke
Creek 10' High
Beaver Dam

AMD/AML



Abandoned Portion of the
Loomis Colliery Operation

Data Analyses: Qualitative

Upper S. Branch Newport Creek



- No EPT
- Found a single Hellgrammite
- Severely Impacted by AMD

Stream Index

Marginal/Poor

Data Analyses: Quantitative

Upper S. Branch Newport Creek

pH	D.O. (mg/L)	Alkalinity (mg/L)	Acidity (mg/L)	Iron (mg/L)	H2O Temp (° F)
4.7	11	51.3	153.9	7.5	59

Taxa Richness	EPT Richness	MHI	%Tolerant	%Dominance
1	0	3	0	100

Data Analyses: Qualitative

Lower S. Branch Newport Creek



- Heavy iron-laden sediment coats the entire stream bottom
- Coal banks erode directly into the Creek



- No EPT
- Severely Impacted by AMD from the Honey Pot Outfall
- Beaver dam was breached above the sampling area

Stream Index

Poor

Data Analyses: Quantitative

Lower S. Branch Newport Creek

pH	D.O. (mg/L)	Alkalinity (mg/L)	Acidity (mg/L)	Iron (mg/L)	H2O Temp (° F)
4.8	10	68.4	56.43	6.5	59

Taxa Richness	EPT Richness	MHI	%Tolerant	%Dominance
0	0	0	0	0

Data Analyses: Qualitative

Headwaters of Nanticoke Creek

Stream Index

Excellent



- Headwaters of Creek are directly on top of the Pottsville geologic formation

- Glacial till and conglomerates can be found in the stream bottom

- Good % of riffle/run/pools

- High D.O.

- Erosion from Coal banks South of sampling location

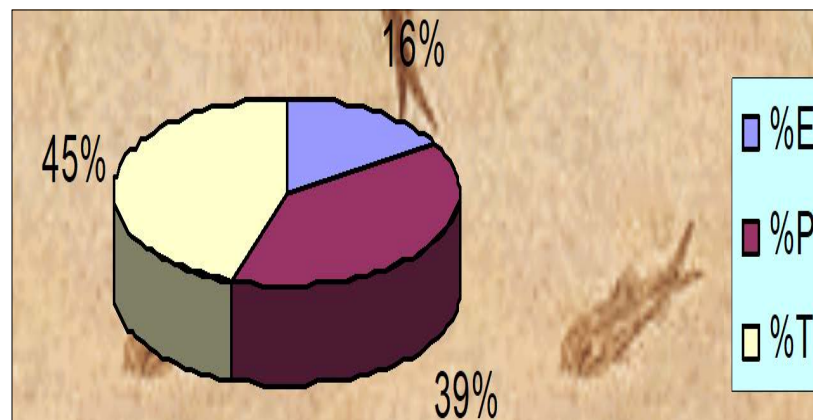
- Creek is “lost” into the underground mine workings < 100 yds from sampling point

Data Analyses: Quantitative

Headwaters of Nanticoke Creek

pH	D.O. (mg/L)	Alkalinity (mg/L)	Acidity (mg/L)	Iron (mg/L)	H2O Temp (° F)
7	10	0	17.1	0	52

Taxa Richness	EPT Richness	MHI	%Tolerant	%Dominance
12	9	3	4.3	5.4



Data Analyses: Qualitative

Lower Nanticoke Creek



- No EPT
- No aquatic life present
- Filamentous algae masses prevalent



- Iron-coated stream bottom
- Chronic AMD

Stream Index

Poor

Data Analyses: Qualitative

Lower Nanticoke Creek



- Severely polluted by AMD
- Surprised to find a turtle coated with iron oxide precipitate surviving in isolation of any other living terrestrial life
- 15' high beaver dam exists as a potential hazard just North of the sampling location



- ~ 2.5 acres of surface area of water is being held back by the beaver dam

Dundee Outfall: Discharges to Nanticoke Creek

