Clean Water Flows, Where Pollution Doesn't Go - Drinking Water In Coal Country

Authors: Anna M. Coleman, RS Locations: Wyoming County, WV



Rapid Response Teams

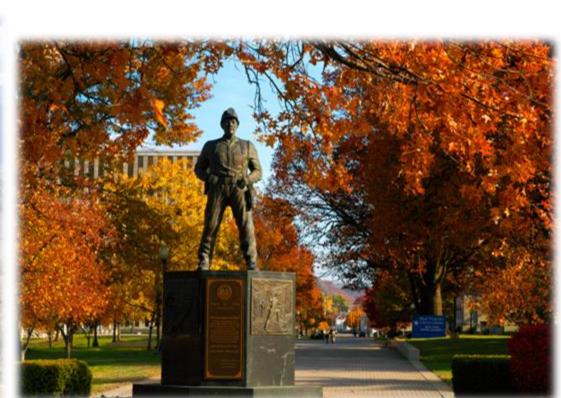


Coal History In West Virginia

- ≥ 1742 Coal is discovered in the area that would become the state of WV
- ≥ 1863 WV became a state on June 20
- 1883 First State Mine Inspector
- 1887 Legislature passes first significant mine safety laws
- **≥** 1905 WV Department of Mines Created
- ≥ 1925 Highest reported year of mine deaths (686)
- ≥ 2020 Fewest reported year of mine deaths (2)
- ≥ 2025 WV is the 2nd largest coal producing state in the USA, producing 14% of the nations total coal production.









Water Quality Concerns

- February 2023, Residents of Wyoming County, WV first became concerned when water burst up from the ground in a local's yard flooding the property and home.
- Discolored water observed flowing in Indian Creek
- Additional residents complain of foul smelling, discolored water coming from their water wells and home faucets.
- Additional complaints of livestock and wildlife deaths in the area
- Independent water testing showed high levels of lead, copper, arsenic, manganese, and other toxins.
- Residents believe the water is being contaminated by coal bed methane extraction water waste.
- Many residents begin only consuming bottled water, and non-profit groups begin distributing potable water to those in need.
- Public Water is not available in the area.
- Residents file complaints with numerous state agencies to investigate.
- Residents file a lawsuit against the area coal companies.



Multi-Agency Investigations

The WV RRT was activated to assist in the water quality investigation. The West Virginia Department of Health, Office of Environmental Health Services (WVDH-OEHS), The West Virginia Department of Environmental Protection, Division of Mining and Reclamation (WV DEP), the Wyoming County Health Department (WCHD), and the West Virginia Office of Laboratory Services (OLS) assisted with planning, investigation, sample collection, and sample testing. WV DEP is the lead investigating agency. The team consists of registered sanitarians, environmental resource analysts, environmental engineers, and laboratory scientists.







Laboratory Services



Water Sampling Results and Discussion

Water samples from Indian Creek were collected. Residents were offered free water testing of their water wells. Roughly 10 homes were resampled due to elevated levels of manganese. The final results reveled the water was within drinking water standards. The water results were compared to state and national drinking water standards and the results were explained to the residents. However, it was concluded by the WV DEP that underground pressure from the abandoned flooded mining complex had forced water to gush from holes in the ground between rock and dirt at the residence where water was observed bursting from the yard. 3 coal mining companies in the area have been court ordered to secure and seal mine shafts to stop additional flooding. Some of the companies have went bankrupt or changed ownership. This investigation is still ongoing in 2025.



Figure 2. Wyoming County resident experiences water bursting up from the ground in his front yard.



Figure 3. Discolored water discharging from an artesian well, being directed into Indian Creek.





Conclusion

In conclusion, the water quality in and around Indian Creek is still under joint investigations. Several agencies are involved to ensure a thorough investigation and to give the citizens of Wyoming County, WV peace of mind in their water and their government regulatory agencies. Due to the small number of residents, cost to connect, and distance from existing public water systems, public water in this area is not a viable option. Current lawsuits are ongoing in circuit court where coal companies direct blame at each other in Wyoming County. This case has raised discussion among state officials regarding abandoned mine cleanups and the responsibility of bankrupt coal companies.





