

## OSM/VISTA helps a WV family save their home from Acid Mine Drainage



Danielle Adams is finishing a two-year term of service as OSM/VISTA for Friends of the Cheat on a high note: she just helped a WV family find a way to clean up the Acid Mine Drainage seep that has been damaging their property and polluting the stream for almost two decades.

### Meet the Conners

Danielle first met the Conner family in summer 2005 while she was monitoring a section of Muddy Creek in Preston County, WV. She was lost and just about to give up when a man on an ATV pulled up beside her. He gave her directions and, after asking what she was doing in the creek, asked her to monitor on his family's property. There was some water there, he said, that had killed all the fish in his uncle's fishpond.

Jeremy Conner, his uncle, Charles, and aunt, Joanne, showed Danielle the dead fishpond as well as the source of the pollution: thick orange water oozing across their yard, burning the grass, and staining the soil. With a pH of 2.5, it was the worst water Danielle had seen, even after a summer of monitoring many impaired tributaries of the Cheat River.

Charles showed Danielle the spot in the backyard where he once grew his family's vegetables. The mine drainage had ruined his garden. He showed her the trenches he dug by hand and the pipes he laid to try to control the drainage. He had to shovel the sludge from the pipes every month, he said, or else they backed up and spilled mine drainage across the yard.

"You can't do anything in the back yard," explained Joanne. "The grand-kids can't play in it because of the mess."

The Conners spoke most passionately, Danielle said, when they told her about how they'd tried to save the fish by shuttling them in buckets to a pond higher up on the hill. Charles told Danielle that even if he wanted to give up and move, no one would buy his property with its acid mine drainage damage.

"He came across as such a really nice guy and that's why I felt so bad for what he has to deal with every day of his life," said Danielle. She decided to help the Conners figure out a way to clean up the mess.



Danielle monitors the AMD seep behind the Conner house.

**“No one knew who was supposed to take care of it.”**

Acid Mine Drainage (AMD) pollution, which occurs when water washes over pyrite in coal layers and is then exposed to air, is the number one polluter of streams in Appalachia. The Surface Mining Control Act of 1977 (SMCRA) addressed AMD by mandating that mine operators reclaim their mine sites and meet state water quality standards. Any mine not doing so forfeits the bond they pay at the start of operations. The act also created the Abandoned Mine Lands Reclamation Fund for reclaiming mine sites abandoned before 1977.

The pollution in the Conners yard was either from a pre-1977 abandoned mine or a post-1977 bond forfeiture mine. In WV, the Department of Environmental Protection (DEP) Special Reclamation office oversees bond forfeiture mines while the DEP’s Abandoned Mine Lands and Reclamation office (“AML office”) oversees abandoned mines.

Danielle thought it would be easy enough to figure out which office could help the Conners. She soon found it was a little more complicated.

The Conners first discovered AMD in their yard right after the mine closed in the 1980’s. Initially, Charles Conner wrote to WV Congressman Allan Mollohan and explained the situation. Mollohan forwarded the letter to the DEP. Here, things got complicated.

The mine at the Conners’ falls into a legal gray area. SMCRA was passed in 1977 but it took awhile for individual states to organize a permanent enforcement program. WV didn’t organize its permanent program until 1981 and implementation of this program was delayed until 1982 by a lawsuit. Therefore, the question is: should mining permits issued between 1977 and 1982 be treated as pre-SMCRA or post-? AML or Special Reclamation?

The DEP responded to the Conners’ letter explaining that the AMD seep on his property wasn’t covered under Abandoned Mine Lands program or Special Reclamation either. “No one knew who was supposed to take care of it,” Danielle explained. And so, Charles Conner kept shoveling out his trenches.

That is, until Danielle heard the Conners’ story. “Friends of the Cheat wanted to help the Conners,” said Danielle. “We just wanted to work together with all three parties to solve this problem.”

She started by contacting people in the AML office with whom Friends of the Cheat had worked before. She said that if the site were actually an AML site, Friends of the Cheat would work together with WV DEP to build a treatment project there.

The AML office researched the history of the mine and found that coal production continued into the 1980’s and could not be considered an AML site. They referred her to the Special Reclamation office.

There, Danielle learned that an official decision made in 2000 dictated that the site was not a Bond Forfeiture site. Danielle’s only hope was getting that decision changed.

Danielle wrote to Special Reclamation explaining the situation. She said that Friends of the Cheat wanted to help build a project at the Conner property but needed to know if it was an AML or bond forfeiture site. Then, this summer, Danielle heard the good news that Special Reclamation had decided to put the Conner's property on their list of sites to monitor. Once the office has enough water quality data, they will prioritize the site and re-route and treat the water so that it no longer damages the Conner's property or pollutes the stream.

"I don't think they worried too much about it until Friends of Cheat got involved," said Joanne. However, she says she feels hopeful now. "The State has been out here two times in the last month; they're looking into it."

**"The majority of people don't know about it."**

Though Danielle is pleased she was able to inspire others to help the Conners, she knows there are many more similar problems throughout Coal Country. "Usually the seeps we find are not in people's yards; they are less visible," she explained. However, she says as Friends of the Cheat becomes more well-known in the community, more people contact the watershed group for help with treating AMD seeps and other water quality issues.

Danielle came from Massachusetts to work with Friends of the Cheat through the OSM/VISTA program. Though she briefly studied AMD in a college environmental studies class, she thinks the majority of people outside of Coal Country have never heard of AMD. "When I told people what I was going to do [with the OSM/VISTA program], they were even shocked that we still mine coal in this country." She thinks Coal Country won't solve its water quality problems until more people know about AMD. "If we're benefiting from energy from coal, how do we deal with water quality issues from 500 miles away?"

Danielle returns to Massachusetts at the end of August to study in the International Development, Community, and the Environment masters program at Clark College. She says working with OSM/VISTA gave her practical experience that she will use in her studies and afterwards. "I really like working on a watershed level because it crosses the boundaries of towns and states. You work with a variety of topics and people. You can prove to the community the benefit of keeping water clean—how it can impact the economy, education, health.... The more fields that recognize the importance of clean water, the more people that will know and care about clean water."

Danielle says she hopes to stay in contact with the Conners and keep updated on the clean-up process.