Problem
Sugar Creek is a tributary of the Williams River in Pocahontas County. Dogway Fork is a tributary of the Cranberry River, spanning Pocahontas and Webster Counties, in the southeastern part of the state. Both ultimately drain to the Gauley River. For both streams, their most sensitive use designations are Trout Waters—waters that sustain year-round trout populations—and Water Contact Recreation, including swimming and fishing uses.

West Virginia Division of Natural Resources (WV DNR) applied limestone sand into both streams to neutralize the acid in the waters. This treatment helped bring the streams’ water pH back into compliance with water quality standards. The state removed sections of both streams from its impaired waters list in 2006.

Results
The limestone sand treatment raised the pH of the streams. Recent water quality monitoring has shown that the typical pH reading in Sugar Creek is now 6.4, and in Dogway Fork it is 7.0. After the limestone treatments, WV DNR began stocking trout and has maintained trout life in the streams. In total, 2.5 miles of Sugar Creek and 6.8 miles of Dogway Fork have been restored to viable trout fisheries.

Partners and Funding
WV DNR uses license fees and funds invested from various legal settlements for their limestone sands treatment program. WV DEP is the state’s water quality management agency and assists WV DNR in identifying opportunities for restoration. WV DEP’s Nonpoint Source Program has since worked with WV DNR to...
target stream restoration projects on priority nonpoint source pollution control sites in the Upper Buckhannon watershed.

pH data from WV for Sugar Creek mile point 0.2.

pH data from WV for Dogway Fork mile points 0.0 and 1.80.