2024-2025 Virginia Watershed Educational Programs Project Mountain Castles Soil & Water Conservation District

Classroom Programs

Classroom programs using materials purchased with grant funds were held in

- Craig County MS 6th grade (42 students)
- Craig County MS 7th grade (45 students)
- Craig County MS 8th grade (37 students)
- Central Academy MS 6th grade Botetourt County (60 students)
- Read Mountain MS 6th grade Botetourt County (180 students)

Classroom programs used materials such as the EnviroScape model to reinforce the concept of "watersheds," how humans can negatively impact water quality, and best management practices (BMPs) that can help mitigate water pollution. Activities such as Project WET's "Ask the Bugs" were also implemented to help students prepare for the field experiences.

The driving questions for all students were "How do we impact people and the environment downstream from us? "and "How are we impacted by people upstream?"

Field Experiences

Field experiences using materials and/or services purchased with grant funds included

- Craig County MS 6th grade field experience held in Mill Creek and the wetlands of Fenwick Mines Recreation Area (48 students and teachers)
- Central Academy MS 6th grade field experience held in Catawba Creek on the Roanoke Cement Company Farm (125 students and teachers)
- Read Mountain MS 6th grade field experience held in Catawba Creek at the Virginia Tech Catawba Sustainability Center (190 students and teachers)

- Craig County MS 7th grade canoeing experience on the James River near Oxbow Farm (35 students and teachers)
- Craig County MS 8th grade canoeing experience on the James River near Oxbow Farm (25 students and teachers)
- Read Mountain MS 7th grade canoeing experience on the James River near Oxbow Farm (175 students and teachers)

Field experiences included investigations of the creek, river, and the surrounding watershed. Students studied impacts of agricultural BMPs, land use, and riparian buffers by conducting macroinvertebrate sampling, water quality monitoring, collecting temperature data, and conducting soil and scavenger hunt investigations.

Summary of Accomplishments

As a district, one of our major goals is to provide students with positive outdoor experiences which connect them to their local watershed and waterways. Our belief is that classroom programs simply provide the framework and tools to help make outdoor investigations and experiences more valuable.

We want students to get wet and experience the outdoors first-hand. While some students already have "connecting" experiences with their families or other groups, we have found that for an increasing number of students, the experiences we provide with the help of grant programs like this one are vital. Many have never paddled on the James River, picked up a crayfish, held a salamander, or had meaningful experiences in nature before. All of these things were accomplished with the help of materials and experiences provided with this grant.

While we have been providing classroom and field experiences for Botetourt County students for several years, this grant helped us kick-start a similar program in Craig County. Most importantly, we were able to forge relationships with teachers, administrators, <u>bus drivers</u>, and community members which will help us sustain and expand on this program moving forward. We even got an article in the *New Castle Record*.

One challenging area that we continue to work on is how to provide students with some kind of action project to drive home their learning and experiences. With funding from this grant, we invested in watercolor supplies to provide students with the opportunity to paint something from nature that impacted them during their time with us. Inspired by Rosalie Hayslett's *Tiny Worlds of the Appalachian Mountains*, we stressed how "tiny" things can

carry big meanings simply because someone took the time to notice them and learn something about them.

Craig County 6th grade students had the best opportunity to try this, because we were able to build some time into the field trip schedule. While there are still kinks to be worked out, the results were promising.

We would like to focus more on this part of the experience as we continue to use the materials purchased through this grant in the years ahead. We also want students to include an "artist's statement" so they can share why they chose that particular image to share. Hopefully, we can get to the point where student work can be displayed at school, at public events, or through the media.