

Bedford County Public Schools 2023-2024 DCR MWEE Grant

As a result of the funding received through the DCR Grant, Bedford County Public Schools, in partnership with James River Association were able to provide all 7th grade students at Forest Middle School (294 students) and Liberty Middle School (187 students) Meaningful Watershed Educational Experiences. These included two in class lessons including a Paint Out Pollution service project as well as a one-day field trip engaging in station-based activities. Students were able to engage with topics related directly to our local watershed and Virginia SOLs.

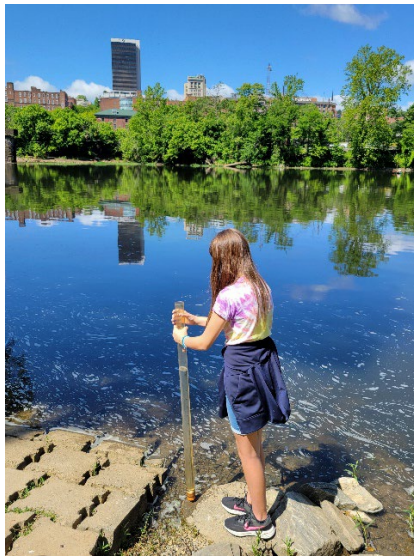
In Class Lessons

In class lessons included abiotic and biotic water quality factors that would be tested during the upcoming field experiences as well as an in depth look at the State of the James 2023 Report and interactive discussions using an Enviroscape (3D Watershed) model.



Field Experience at James River Association's Upper James River Center

Students rode a BCPS school bus to Riveredge Park and engaged in land-based and water-based activities. At the land-based activity stations, students explored and interpreted James River food chains and food webs and discussed predator-prey dynamics, energy flow, and the interdependence of species within the ecosystem. Students also investigated abiotic water quality factors by gathering water quality samples and testing for pH, temperature, and other relevant parameters. At the water-based activity, students kayaked on the James River and gathered macroinvertebrate samples to then assess using the biotic water quality index. The field experience with JRA was an exciting and meaningful hands-on opportunity for students and teachers.



Students from Liberty Middle School at the land-based abiotic water quality testing station



Students listening to the river safety talk, then kayaking on the James River prior to gathering macroinvertebrates

Paint Out Pollution Education & Service Project

JRA educators lead in class lessons to discover sediment pollution, the #1 pollutant of the James River and stormwater management. Students then completed a service project to build stormwater management awareness by painting storm drains on campus.



Stormwater drains at Forest Middle School