

Old Dominion University Research Foundation

The Enhancing Watershed Education and Environmental Exploration Mobile Outdoor Teaching Lab was developed to expand access to Meaningful Watershed Educational Experiences (MWEEs) for students participating in the Maritime Engineering and Environmental Studies Academy (MEESA), Newport News Public Schools (NNPS), and regional educational outreach initiatives. Old Dominion University Research Foundation designed and created a mobile environmental education van capable of bringing hands-on STEM and watershed learning experiences directly to students and community members throughout the Hampton Roads region. The project supports MEESA's mission of preparing students for careers in maritime engineering, environmental science, and related STEM fields through authentic experiential learning opportunities focused on environmental stewardship, engineering design, data analysis, and problem-solving.

The Mobile Outdoor Teaching Lab Van serves as a fully operational mobile field laboratory equipped with environmental monitoring tools, field investigation supplies, outdoor instructional equipment, safety resources, and technology tools capable of supporting environmental education and outreach programming throughout the region.

The project aligns with Virginia Science Standards of Learning, Career and Technical Education competencies, and environmental literacy initiatives connected to watershed education and sustainability.

The goals of the Enhancing Watershed Education and Environmental Exploration Mobile Outdoor Teaching Lab project are to:

- Foster STEM learning opportunities
- Promote environmental stewardship
- Create lasting community engagement
- Increase opportunities for outdoor and field-based learning
- Support interdisciplinary environmental and maritime education
- Expand access to environmental monitoring tools and scientific investigations
- Support watershed education aligned with Meaningful Watershed Educational Experiences (MWEEs)

The project specifically aimed to:

- Increase student engagement in environmental science and watershed investigations
- Provide authentic field-based STEM learning experiences
- Support environmental literacy initiatives throughout the Hampton Roads region

- Create a sustainable regional environmental education resource
- Expand educational access for historically underserved communities

Learn more about the MWEE Van at <https://sites.google.com/odu.edu/theilab/mwee-van?authuser=1>