

# GOVERNOR'S ENVIRONMENTAL EXCELLENCE



## AWARDS

**APRIL 8, 2025**

**ENVIRONMENT VIRGINIA SYMPOSIUM**

MARSHALL HALL, VIRGINIA MILITARY INSTITUTE

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**The Governor's Environmental Excellence Awards recognize successful and innovative efforts that improve Virginia's environment. The annual awards program is run as a partnership between the Department of Environmental Quality and the Department of Conservation and Recreation.**

### **Thank you to our judges:**

**Dana Adkins**, Chickahominy Tribe  
**Sharon Baxter**, DEQ  
**Abby Credicott**, Dominion Energy  
**Melanie Davenport**, DEQ  
**Tom Faha**, DEQ (retired)  
**David Gunnarson**, Lockheed Martin (retired)  
**Kristal McKelvey**, DCR  
**Steve Silberstein**, Micron (retired)  
**Frank Stovall**, DCR  
**Allison Tillett**, DCR  
**Dr. Wie Yusuf**, ODU  
**Ed Zimmer**, DOF

### **Award categories:**

**Environmental & Sustainability Program**  
**Environmental & Sustainability Project**  
**Land Conservation**  
**Virginia Outdoors Plan Implementation**

### **For more information:**

Visit [DEQ's website](https://www.deq.state.va.us/) to learn more about the Governor's Environmental Excellence Awards.

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#### **Photos from top to bottom:**

Naval Weapons Station Yorktown: Living Shoreline Project  
Department of Defense: Chesapeake Bay Program  
HRSD: James River Land Improvements - Trails Phase I





## Department of Defense

### CHESAPEAKE BAY PROGRAM

The Department of Defense (DoD) was one of the first federal departments to be formally involved in Chesapeake Bay watershed restoration efforts. These efforts advance the goals and outcomes of the Chesapeake Bay Watershed Agreement in Virginia. DoD's Chesapeake Bay Program (CBP) not only sustains but improves the health of the Bay and its broad value for the welfare of the Commonwealth's residents. The CBP's success is rooted in staff and partners' commitment and dedication.

One example of CBP's commitment is the leadership roles taken by its members within the broader multi-state Chesapeake Bay Program Partnership, which works together to protect the bay. DoD's CBP team also ensures that Virginia's military installations are leading in actions taken to protect the bay. They host internal quarterly meetings with all Bay Watershed installation staff and stakeholders to facilitate cross-service information exchange, success-story sharing, and updates on relevant topics.

The CBP completes annual progress evaluations for all installations, including annual strategic planning meetings, tracking implementation status, and reporting on metrics. The Chesapeake Bay benefits from the expertise the CBP shares with other installations. For example, DoD's CBP Coordinators played a pivotal role in partnering with many others to put forth a successful application package resulting in the formal designation of two Sentinel Landscape Partnerships in the Commonwealth.

Staff from DoD CBP have also worked to review draft guidance on the beneficial use of dredged material and to support DoD living shorelines by serving as a resource for others in the engineering and development of living shorelines. In the last 2 years, their efforts have led to the installation of over 4,000 linear feet of shoreline restoration, 1,000 feet of stream restoration, 125 acres of impervious surfaces treated, and 44 acres of trees planted.■





**GOLD**

## Hampton Roads Sanitation District

### JAMES RIVER LAND IMPROVEMENTS - TRAILS PHASE I

Hampton Roads Sanitation District (HRSD), in partnership with the City of Newport News, developed a mile of new trails around Riverview Farm Park as part of the Sustainable Water Initiative for Tomorrow (SWIFT) program. Located near its James River Treatment Plant, HRSD completed the first phase of trail upgrades to Riverview Farm Park, including a new trail system with boardwalks along Flax Mill Creek, Deep Creek, and the James River.

The project also features pathways connecting to boardwalks, along with

trailheads, scenic overlooks, and parking facilities. HRSD and the City of Newport News reached an agreement for HRSD to purchase property and install the aquifer replenishment wells in exchange for enhanced amenities and new trails at Riverview Farm Park. The additions help protect wildlife, improve access to amenities, and foster a greater understanding of the importance of sustainability for future generations of the City of Newport News.

HRSD hosted multiple open houses and

engagement events to gather feedback on desired park amenities from the community. These trails not only provide safer, longer paths, but also serve as an educational resource for younger generations, allowing them to explore local ecosystems and the history of the park.

The new trail systems provide expansive views of the water and surrounding natural areas that were previously inaccessible to the public, while allowing for aquifer replenishment.■





## Naval Weapons Station Yorktown

### PENNIMAN SPIT LIVING SHORELINE PROJECT: INSTALLATION RESILIENCE & ECOSYSTEM ENHANCEMENT



The US Navy partnered with the Virginia Institute of Marine Science to design and permit a living shoreline restoration project. Through this project, Naval Weapons Station Yorktown reduced erosion along three miles of shoreline, fortified federal Superfund sites, protected military training grounds, complied

with the Sikes Act for natural resource protection, supported the 2014 Chesapeake Bay Agreement's environmental objectives, and preserved the unique ecosystem of the York River.

This project used an innovative design for a living shoreline, addressing long-term sea level rise by elevating all project elements to higher elevations. This proactive approach helps future-proof the shoreline against the impacts of rising waters. Additionally, the project incorporated new, alternative substrates for oyster attachment, which are manmade structures designed with varied configurations to maximize surface area, encouraging oyster recruitment and supporting ecosystem health.

One of the standout features of the project was its use of grant funding from the Readiness and Environmental Protection Integration Program (REPI) and the REPI Challenge Grant Program.

By combining cutting-edge engineering design, a commitment to environmental stewardship, and strategic funding, this project not only enhances coastal resilience but also contributes to the long-term sustainability of local ecosystems and economics. Its success paves the way for similar initiatives aimed at mitigating the effects of sea level rise while preserving vital marine habitats.

The Penniman Spit Living Shoreline makes a significant contribution to environmental conservation and restoration by



addressing critical ecological and community health concerns along the York River. By restoring a spit that protects a unique soft mud bottom habitat, the project safeguards a biodiverse ecosystem essential to river fauna. The innovative methods employed in this initiative incorporate elements of hybrid living shorelines, including oyster reef sills and alternative oyster reefs, to enhance resilience. ■

### BEFORE



### AFTER





BEFORE



## SILVER

### Arlington County Department of Environmental Services

#### BALLSTON WETLAND PARK

Arlington County Department of Environmental Services retrofitted Ballston Wetland Park, which improves stormwater flow and serves as a wildlife refuge. This project converts a neglected dry pond into a constructed wetland, which includes design features such as a forebay to collect sediment, a Watergoat trash net to collect floating debris, multiple water channels to maximize water quality treatment, various types of wetland habitat for wildlife, a new viewing platform for educational purposes, and a trash rack at the outflow to collect trash for removal.

Cleared of sediment and now capable

of taking excess rainwater from 450 surrounding acres, the retrofitted Ballston Wetland improved stormwater flow and filtering, in addition to the capture of trash, while also serving as a wildlife refuge and pastoral commons in Ballston's urban core. Retrofitting the pond to provide more water quality treatment is an innovative conversion of an underutilized space to provide water quality benefits, wildlife habitat, recreational benefits, and educational value.

The project also helps the County comply with its municipal separate storm sewer permit requirements and contributes to



restoring the Chesapeake Bay. The wetland is the single largest water quality treatment facility in Arlington, treating stormwater from 230 impervious acres and removing over 150 pounds of phosphorus, 1,250 pounds of nitrogen, and 126,000 pounds of sediment a year, which is equivalent to 10% of the County's Chesapeake Bay clean-up target.

The wetland also maintains the pond's design to reduce peak flows in Lubber Run by 30%, reducing flood risk and making Arlington more flood resilient. ■

AFTER





## SILVER

### Department of Corrections (DOC) State Farm Correctional Complex

#### STATE FARM CONSERVATION PROJECT - JAMES RIVER SUBWATERSHED RESTORATION

Through the State Farm Conservation Project, DOC's Agribusiness Unit mitigates natural resource degradation through efforts that promote soil stabilization, encourage natural regeneration in wetlands, and reduce nutrient and sediment runoff at the State Farm Correctional Complex. DOC's Agribusiness Unit is charged with assisting DOC Food Service by producing and distributing foods to reduce the department's institutional food cost and oversees a 4,500-acre farm operated by staff and inmates.

The Conservation Project represents the first quadrant of a four-part initiative. Its planning began in fall of 2020 and was completed in fall of 2023 thanks to the input of many partners. The completed portion of this restoration project improves natural regeneration and provides a healthy environment for livestock. To reduce pollutants from entering the watershed,

DOC installed over 5,500 linear feet of fencing, installed 13 water troughs, and planted nearly 26 acres of forested riparian buffer with native hardwood species. These ongoing efforts promote soil stabilization, natural regeneration in wetland and riparian areas, and reduce nutrient and sediment runoff.

The project has provided training for numerous inmates and allowed DOC to pilot the Chesapeake Bay Landscaping Professional certification through Wetlands Watch, the James River Association, and the Virginia Cooperative Extension. Inmates with farm work assignments learn new skills, providing a competitive advantage upon re-entry. ■



#### BEFORE



#### AFTER





## SILVER

### Giles County

#### TRAIL CENTER AT MOUNTAIN LAKE LODGE

The newly opened Giles County Trail Center at Mountain Lake is an exemplary project supported by the Virginia Outdoors Plan. The Trail Center provides residents and visitors with information on the rich diversity of outdoor recreation opportunities within Giles County, which drive the County's tourism industry. The Center promotes access and awareness of the many opportunities in Giles, including over 50 miles of the Appalachian Trail, 37 miles of the New River, and world-class fishing and hunting.

The Trail Center meets all the criteria of the Virginia Outdoors Plan for a regional featured project, including both statewide and regional significance, addresses needs identified in the Virginia Outdoors Demand Survey, and has the support of multiple jurisdictions. The Trail Center, through its promotion of the multitude of outdoor recreation opportunities in the area, is designed to help reduce pressure on some of the locations that realize excessive visitation.

Many partners came together to make this project a reality. Giles County sees the Trail Center as a service that provides value to its residents, visitors, and businesses, demonstrating that the County should be providing these services supporting human health and economic development. ■



#### BEFORE

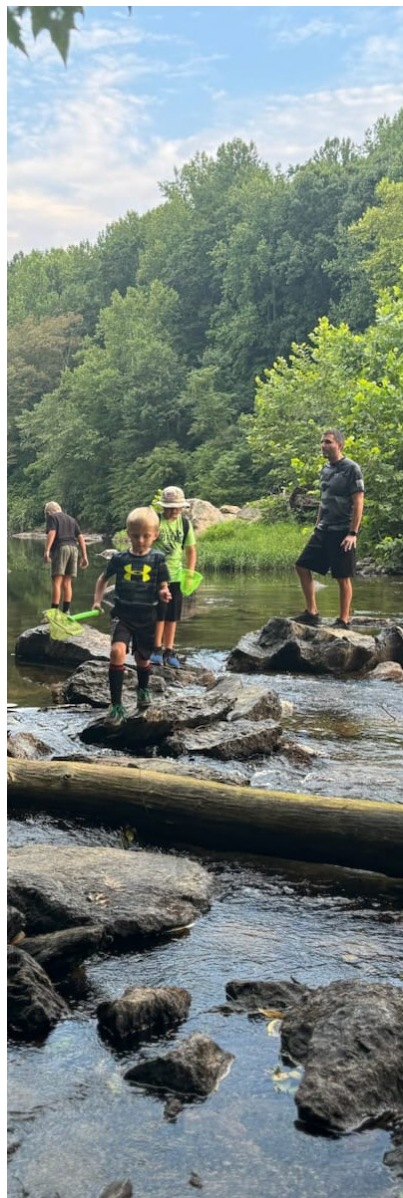


#### AFTER



*Giles*  
VIRGINIA'S  
MOUNTAIN  
PLAYGROUND®





## SILVER

### Historic Germanna

#### SIEGEN FOREST TRACT & GERMANNA FORD BOAT LAUNCH

Historic Germanna's 164-acre open space easement safeguards the historically significant Germanna Ford area along the Rapidan River, a key site during early European settlement and the Civil War, while also improving year-round public access to the river. Held by the Virginia Department of Historic Resources, the easement ensures the site's long-term preservation and protection.

Partnerships among environmental groups, historic preservation

organizations, government entities, and community stakeholders ensure the protection of this cultural and ecological landmark while promoting public engagement and education.

Because of the proximity to water, diversity of plant life, and complex structure, riparian forests like those of the Siegen Forest provide critical habitat to hundreds of wildlife species. These areas are especially important to migratory birds, providing a place to rest and feed during their long journey. The Siegen Forest Tract is now accessible to the public 365 days a year. ■





## SILVER

### The Mariners' Museum & Park

#### MARINERS' ENVIRONMENTAL INITIATIVE

The Mariners' Environmental Initiative engages students and educators through high-quality environmental education programming at no cost, while increasing environmental literacy and empowering students to embrace an active role as environmental stewards. During the pandemic, many local environmental education providers closed their doors or significantly reduced their outreach efforts. The cost of these experiences, coupled with the additional strain from a lack of personnel to transport students to these experiences, made it difficult to provide environmental education.

In 2020, the Museum began to assess how Mariners' Park could best serve students, the largest and most important segment served, and in turn, the broader community. The project was initially funded through a Chesapeake Bay Watershed Education and Training Program Grant. This three-year project was the beginning of a transformative effort among community partners from private, public, higher education, and nonprofit organizations to improve learning outcomes among students and to encourage the next generation of environmental stewards.



The Mariners' Environmental Initiative was thoughtfully designed to improve the health and sustainability of Mariners' Lake and the broader Chesapeake Bay Watershed through engagement with 9th-grade students through hands-on, nature-based learning experiences. This initiative not only aids in restoring the local ecosystem but also allows students to witness the positive, tangible effects of their actions, emphasizing the importance and power of community-based environmental restoration efforts.

The Mariners' Environmental Initiative offers a unique, equitable approach to environmental education, addressing gaps in access for underserved students on the Virginia Peninsula by providing barrier-free access, place-based learning, and student leadership.■



## BRONZE

### Arlington County Solid Waste Bureau

#### ON-STREET FOOD SCRAPS COLLECTION FOR MULTI-FAMILY BUILDING RESIDENTS

Arlington County's Solid Waste Bureau (SWB) launched an On-Street Food Scraps Collection for Multi-family Building Residents program to reduce the amount of food waste in the trash stream. The program focuses on residents with limited access to food waste diversion by creating a system that allows residents in apartment buildings and condos to compost.

The program provides 14 collection sites located in high-density multi-family areas that are conveniently spread around the County. The collection sites are equipped with smart collection bins that remotely indicate container fullness levels and display container locations for users



through an online tool. This technology benefits both residents and collection staff. Residents can check the available capacity before heading to a bin, ensuring there is sufficient space for their food waste. Collection staff can optimize pickups by reducing unnecessary stops.

SWB paired its food waste collection efforts with a program to educate residents about avoiding food waste, enabling them to address the source of wasted food. In less than six months, the County was able to divert almost 19 tons of food waste, reducing methane emissions and creating a nutrient-rich soil amendment.■

## BRONZE

### Fairfax County Park Authority Farmers Market Program

#### FOOD SCRAPS COLLECTION AT THE FARMERS MARKETS



The Fairfax County Park Authority Farmers Market Program runs its Food Scrap Collection at the Farmers Markets. In 2020 the Department of Public Works and Environmental Services began a pilot program, allowing the public to drop off food waste at locations at two farmers markets. Since then, the program has grown to all 10 farmers market locations, providing an opportunity for even more County residents to divert food waste to composting. Of the participants who are now composting food waste, 48% had never composted their food waste before this opportunity. In addition, three quarters of the participants said they were likely to



continue participating in the program by continuing to bring food waste to collection points.

In the last year, over 70 tons of food waste has been collected. Fairfax is the most populous County in Virginia, and the Farmer Market collection sites provide a cost-efficient way of providing compost collection. The program has been funded through 2028 with funds coming from the plastic bag tax revenue fund.■



## BRONZE

### Marstel-Day with Partners New River Land Trust & The Nature Conservancy

#### EASTERN DIVIDE CONSERVATION PLAN & PARTNERSHIP

Marstel-Day, in coordination with The Nature Conservancy (TNC) and the New River Land Trust (NRLT), developed the Eastern Divide Partnership GIS Strategic Conservation Plan using a data-driven framework for prioritizing conservation efforts. Through GIS analysis, the project evaluated critical factors including biodiversity, water quality, forest resilience, scenic viewsheds, and agricultural value throughout the study area.

Marstel-Day led all technical development, while NRLT and TNC served as advisors for the plan and GIS tool development, providing guidance and expertise that shaped the effort. Engagement from the partners was critical in shaping this stakeholder-driven model. Partners also led

direct engagement with a larger group of Eastern Divide conservation partners that reviewed the project.

NRLT and TNC currently lead implementation of the Eastern Divide Conservation Partnership, which leverages this plan and tool for improved conservation decision-making. The project aims to enhance ecological resilience, climate adaptation, and landscape connectivity.

This effort demonstrates the value of multi-criteria conservation planning to ensure long-term sustainability and resilience in managing natural landscapes given limited resources.■

MARSTEL  DAY



## HONORABLE MENTIONS

### Henrico Dept. of Public Works, Environmental Services Div., Vector Surveillance & Control

#### MOSQUITO ELEMENTARY OUTREACH PROGRAM



Henrico Department of Public Works Environmental Services Division's Vector Surveillance and Control group initiated the Mosquito Elementary Outreach Program to engage

the County's youngest residents in its efforts to control mosquitos. The program is designed to educate students in grades K-2 on how to control mosquitos in their own yards. The program focuses on controlling mosquitos without the use of chemicals, which can be devastating to other insect species, including pollinators. By including information on anatomy, life cycle, and habitats into the program, it aligns with the Virginia Standards of Learning objectives for those grade levels, adding value to schools.■



### Rappahannock Regional Solid Waste Management Board

#### COMPOST OUTREACH PROGRAM



Stafford County's Rappahannock Regional Solid Waste Management Board (R-Board) developed an outreach program focused on composting. The program aims to educate residents on proper composting techniques and to encourage more households to compost.

The program offers composting classes and Mini-Compost-A-Thon events, where participants learn about backyard composting from a Master Gardener and receive complimentary compost bins and starter kits. In the program's two years, over 1,500 residents have participated. By providing information and tools, the program helps residents successfully compost at home and reduces the amount of food and yard waste being landfilled.■



### What About the Turtles

#### TANYA'S TURTLE PROJECT



Tanya's Turtle Project, coordinated by the non-profit What About the Turtles, collaborates with construction contractors to remove turtles that become trapped by perimeter silt fencing. Silt fencing, which often encloses an entire area to reduce runoff from construction sites, can trap turtles in these work zones.

These efforts focus on safely relocating the animals to nearby areas of suitable habitats while minimizing harm. Beyond rescue operations, the project is dedicated to public education, raising awareness about the challenges faced by long-lived reptiles like turtles, and the critical need for conservation. Through presentations, training sessions, and outreach materials, the project engages the community to inspire action and foster a deeper understanding of the importance of protecting native wildlife.■

