



# **Virginia Department of Environmental Quality Office of Pollution Prevention**

---

**2022 Pollution Prevention Annual Report**

**Released December 2022**



## Contents

From the Director _____	1
Virginia Environmental Excellence Program _____	2
Virginia Green Travel _____	5
Governor’s Environmental Excellence Awards _____	8
DEQ Leading the Greening of State Government _____	12
Resources _____	14

# FROM THE DIRECTOR

In my first year with the Department of Environmental Quality (DEQ), I've recognized the value of the work of the Office of Pollution Prevention (OPP). Encouraging Virginia's businesses, institutions and communities to implement proactive environmental strategies benefits all. Pollution prevention (P2) strategies focus on eliminating or reducing the use, generation or release of environmental wastes at their source. To encourage this, OPP hosts a number of programs and initiatives that work to minimize environmental footprints through actions that often exceed regulatory requirements while enhancing bottom lines. OPP coordinates incentive programs and assistance, as well as internal programs that allow DEQ to lead by example.

A few of the program's accomplishments from 2022 are:

- Partnering with DEQ's Piedmont Regional Office to assist a company with its return to regulatory compliance by offering environmental management system and pollution prevention support.
- Coordinating and participating in two webinars featuring Virginia companies Smithfield Foods and Tyson and their efforts to move toward environmental sustainability.
- Supporting Governor Glenn Youngkin's Executive Order 17, Recognizing the Value of Recycling and Waste Reduction (EO 17), which, among other things, seeks to increase awareness of the importance of recycling and reducing food waste. OPP is coordinating with agencies and businesses across the state to determine how best to donate, recycle and compost food in an effort to minimize food waste and divert it from landfills.

Governor Youngkin's support of environmental initiatives, especially those included in EO 17, provide a path forward for Virginia. The administration's commitment to improving recycling and reducing food waste emphasizes the importance of pollution prevention. Protecting Virginia's natural resources benefits businesses, institutions, communities and our residents. OPP will continue to support these initiatives and engage Virginians through programs that enhance the environment.

Mike Rolband

Director, Virginia Department of Environmental Quality



# VIRGINIA ENVIRONMENTAL EXCELLENCE PROGRAM



## BACKGROUND

*The Virginia Environmental Excellence Program (VEEP) recognizes facilities that have demonstrated a commitment to enhanced environmental performance and encourages innovation in environmental performance.*

*Since 2000, DEQ has promoted the non-regulatory VEEP as a mechanism to encourage “beyond-compliance” environmental results. VEEP provides recognition and incentives to facilities meeting the program requirements. There are two separate and distinct VEEP tracks: Sustainability Partners (SP) and the Environmental Management System (EMS) track.*

*VEEP SP is designed to encourage organizations to make environmental sustainability part of their culture through leadership, innovation and continual improvement and provides recognition to members. An EMS is not a requirement to be an SP.*

*The VEEP EMS track has three levels of participation, all supplying recognition and other benefits such as permit fee discounts, a single point of contact at DEQ and, in some cases, the opportunity for regulatory flexibility. Each level of the EMS track builds on the previous level, requiring a more robust system to identify and address environmental risks. The three levels of participation for the VEEP EMS track are:*

- **E2 (Environmental Enterprise)** for facilities that have made significant progress toward the development of an EMS, have made a commitment to pollution prevention and have a record of sustained compliance with environmental regulations.
- **E3 (Exemplary Environmental Enterprise)** for facilities that have exceeded the E2 requirements and have a fully implemented EMS.
- **E4 (Extraordinary Environmental Enterprise)** for facilities that have exceeded the E3 requirements, have completed at least one full cycle of an EMS as verified by a third-party auditor, and have demonstrated a commitment to continuous and sustainable environmental progress and community involvement.

*OPP administers VEEP, which includes reviewing applications and renewals, performing site visits, coordinating compliance reviews, organizing recognition events and providing educational resources. In 2022, OPP staff reviewed approximately 45 applications for new and renewing VEEP members, including eight SP applications.*

## 2022 VEEP HIGHLIGHTS:

OPP works continuously to support, promote and improve VEEP and its goals. This includes keeping current program participants up-to-date as well as reaching out to potential new members. The process of joining VEEP and meeting program requirements has been eased through increased automation. This automation makes program interactions simpler for external users and increases DEQ staff access to program results.

## Pollution Prevention Resources

OPP continues to highlight successful P2 actions that show real world examples and identify effective technologies and techniques. OPP maintains a [series of case studies](#) with a value to many sectors. Additional P2 resources and efforts include:

- VEEP staff provide facility-specific P2 guidance to facilities by request and during program-related site visits. For example, this year OPP was asked by DEQ’s Piedmont Regional Office to assist a company that encountered compliance-related issues. OPP supplied information on the value of EMS, including how the system can be used to maintain compliance, reduce regulatory requirements and improve environmental performance.

# VIRGINIA ENVIRONMENTAL EXCELLENCE PROGRAM

- OPP hosted two webinars to provide educational opportunities on P2:
  - [Examples of Continuous Improvement - Efficiency and EMS Implementation](#)  
On May 12, OPP hosted a webinar featuring Smithfield Foods. The company discussed environmental efforts in various media tied to sustainability and greenhouse gas emissions goals. OPP staff highlighted the many ways to embody continuous improvement into an EMS.
  - [The State of Environmental Sustainability in Virginia](#)  
On Aug. 25, OPP hosted a webinar during which Tyson Foods presented an overview of their corporate sustainability efforts and OPP provided an update on its programs and activities.

## VEEP Member Highlights

OPP supports the programs of VEEP members and helps members celebrate their successes. Throughout the year, OPP participates in events and provides recognition materials to VEEP members.

- **Virginia Department of Corrections (VADOC):** VADOC was a charter member of VEEP SP, joining when the program started in 2012. VADOC is the only charter member that has continuously remained in the program. In 2022, VADOC renewed its participation in VEEP SP for the 11<sup>th</sup> year. Many VADOC facilities also participate in the VEEP EMS Track. To support the continual development of their EMS, OPP staff provided a general overview of VEEP at a quarterly meeting for all VADOC facilities.
- **Worthen Industries, UPACO Adhesives Division (UPACO):** UPACO transitioned from the E3 to the E4 level of VEEP's EMS track. OPP staff conducted a non-regulatory site visit where the facility shared pollution prevention best practices and discussed impediments to environmental performance with OPP. On Aug. 2, DEQ's Piedmont Regional Office Director Jerome Brooks welcomed UPACO to VEEP's E4 level with a ceremony attended by all facility personnel.

## Annual Permit Fee Discounts for VEEP Facilities

When legislation establishing annual permit fees for facilities was put in place, the Virginia General Assembly acknowledged that VEEP members "go beyond" compliance and determined that their improved environmental performance merited the following permit fee discounts:

- Hazardous waste (potentially 5% for E2 facilities and 10% for E3 and E4 facilities)
- Solid waste (potentially 10% for E2 facilities and 20% for E3 and E4 facilities)
- Water (potentially 2% for E2 and 5% for E3 and E4 facilities)

The total discounts available for each media is capped at a fixed level and the discount received will drop if the total is exceeded. In 2021, VEEP members saved approximately \$106,552 on annual permit fees.






VEEP's newest E4 member, Worthen Industries, UPACO Adhesives Division in Richmond, maintains an on-site garden. A portion of the food grown is donated to local groups.

# VIRGINIA ENVIRONMENTAL EXCELLENCE PROGRAM

## Environmental Results

To remain in VEEP's EMS track, members must submit an annual progress report that includes detailed metrics. When applying for and renewing participation, facilities select from a list of more than 41 environmental indicators that they then use as the basis of their VEEP annual reporting. Members report results in both actual and normalized quantities (i.e., results based on product, number of employees, etc.). Normalized results allow facilities to better compare year-to-year performance. In their annual application, VEEP SP members also include quantifiable results using the same 41 indicators.

VEEP EMS track members reported saving \$50.5 million through environmental efforts in 2021. Other environmental results are listed below.

Aggregate Annual VEEP Results*		
		
<b>Recycled water use increased by 224,135,883 gallons</b>	<b>Greenhouse gas emissions reduced by 6,225 tons</b>	<b>Amount of waste recycled increased by 5,258 tons</b>
This is enough water for approximately 2,050 families for one year.**	The equivalent of removing over 1,200 cars from the road for one year.***	Equivalent to 170 times the weight of the Statue of Liberty.****

\*Results reported in 2022 are based on calendar year 2021 accomplishments. The overall program results as presented above should only be considered a general indication of VEEP facility performance because: (1) the program is voluntary and data is submitted by the facilities; (2) many facilities still have limited experience tracking environmental results data; and (3) the aggregate results are a snapshot from one year and may not reflect overall reduction trends.

\*\* EPA WaterSense – The average American family uses more than 300 gallons of water per day at home.

\*\*\* EPA Greenhouse Gases Equivalencies Calculator – 4.67 metric tons (5.14 US tons) CO<sub>2</sub>e/vehicle/year.

\*\*\*\* The Statue of Liberty weighs 31 tons.

# VIRGINIA GREEN TRAVEL

## BACKGROUND

*Virginia Green is the Commonwealth's voluntary initiative to promote P2 practices across all sectors of the tourism industry. Participating tourism businesses and organizations voluntarily commit to engage in P2 practices in the areas of waste reduction, water and energy conservation, and in the support of green events and meetings. OPP oversees development of all programmatic guidance and requirements for membership. Coordination of the application review process, marketing and promotion is done by DEQ's partners, the Virginia Green Travel Alliance (VGTA), the Virginia Tourism Corporation (VTC), Virginia State Parks and the Virginia Restaurant, Lodging and Travel Association.*



*VGTA, a fully-accredited 501(c)(3) nonprofit organization, was created in 2014 to help promote Virginia Green and its partners. The VGTA processes all Virginia Green certification applications, promotes program partners on the VGTA website and social media outlets, and administers outreach efforts.*

*Run by the VGTA, the certification process is fee-based and includes two levels of participation. The fee structure was developed with input from tourism partners to ensure the program's accessibility to the entire travel and tourism sector, while providing the VGTA with funding to offset the cost of processing applications. The Virginia Green Commitment Level, the entry level, requires that a tourism business certify it has made commitments to implement sustainable practices. Many businesses choose to start at the Commitment Level and work toward being Fully-Certified. Fully-Certified Virginia Green Partners have implemented a required number of sustainable practices in various categories such as recycling and waste reduction, water and energy conservation, and green event management. Fully-Certified partners undergo an application review that may require the submittal of photographs and other documentation of the green programs they have implemented.*

*To help connect members to green products, the Virginia Green Suppliers Network (VGSN) is maintained as a fee-based online directory of green service providers. The directory lists almost 50 suppliers providing green services ranging from composting to transportation. The VGTA oversees the registration process and maintains the online listing of suppliers. VGSN members, in addition to selling green products and services, are required to commit to reducing environmental impacts.*

## 2022 VIRGINIA GREEN HIGHLIGHTS:

OPP has maintained an active role in Virginia Green by continuing to provide technical resources and oversight of the certification standards. In addition, OPP is expanding its ability to provide technical assistance to individual tourism businesses when possible.

### Virginia Green Program Updates

OPP supported the VGTA's transition to a new website and certification process. To increase the efficiency for both members and staff, an online membership management system was developed to process certifications. The new online system allows potential members to create listings with their logo, contact, website and a description of their environmental commitments. This information is available in the [Virginia Green Travel Business Directory](#), which connects members to customers. In addition to the new listings on the VGTA website, members will still be identified as Virginia Green members on the [Virginia is for Lovers Travel Green website](#). The new system also reduces the time it takes to process applications and automatically provides members with an individualized Virginia Green certificate.

# VIRGINIA GREEN TRAVEL

## Virginia Green Resources

OPP is working with the VGTA and other partners to develop branded materials to promote the implementation of pollution prevention initiatives. OPP looks for opportunities where providing additional resources would ease the implementation of green practices. OPP continues to promote Virginia Green's Skip the Straw campaign with [downloadable](#) table cards and tents that thank patrons for not using straws and explains how their choice helps the environment.

## Brewery Outreach

Beginning in 2020, the OPP has focused outreach efforts on breweries. This outreach aims to increase recognition of green breweries in Virginia and highlight breweries implementing practices that reduce pollution while reducing costs. OPP has partnered with the VGTA to visit breweries to better document best management practices and provide feedback on improving environmental performance. These visits include Elation Brewing, The Veil Brewing Co., Smartmouth Brewing Co. and Stable Craft Brewing. [Stable Craft Brewing is also the newest Pollution Prevention Case Study](#) featured on the OPP's website.

Murphy & Rude Malting Co. has also been visited. Visiting a brewery supplier helped improve understanding of supply chain logistics, bulk delivery restraints and packaging issues.

OPP is working with the Virginia Green Travel Alliance and the Association of Energy Engineers to identify energy improvement and savings opportunities for these types of facilities.

## Annual Virginia Green Conference and Green Travel Star Awards Ceremony

The ninth annual Virginia Green Travel Conference and Travel Star Awards Ceremony was held in Richmond April 25-26. The event focused on building back greener from the challenges of the past few years. Tourism professionals from across the Commonwealth gathered to discuss sustainable solutions that protect Virginia's environment while also being profitable for tourism businesses. Virginia Green Travel partners are ready to help lead the way to a stronger and greener tourism industry. The conference's keynote speaker, Michael Hallmark with Future Cities, gave attendees a glimpse of the future with his discussion about an "eco-district" development project designed to the highest levels of sustainability and resiliency. OPP staff participated in conference planning and moderated or presented at two conference sessions:

- *The Commonwealth Goes Green*: This presentation highlighted how various state entities are reducing their waste and using the Commonwealth's resources efficiently. In addition to OPP discussing DEQ's greening efforts there were representatives from Virginia State Parks, the Science Museum of Virginia, and the Sustainability Coordinator from Aramark at James Madison University.



Justin Anderson of The Veil Brewing Co. explains the company's brewing process to members of the OPP and Virginia Green site visit team.





# VIRGINIA GREEN TRAVEL

- *Sustainability in Virginia Breweries:* Breweries and vendors discussed opportunities for green practices in the brewing industry ranging from replacing single-use plastics to reusing food waste.

During the conference, the Virginia Green Travel Star award winners were announced. This year, nine Virginia tourism operations received the program's highest award level, the Virginia Green Travel Star Award. Eleven additional tourism businesses were recognized with a Virginia Green Travel Leader Award for their continued environmental stewardship, and five individuals received the Green Team All-Star Award for their efforts to lead their organization's green efforts. Additionally, three of the award winners were also recognized with Virginia Green Travel People's Choice Awards. All 2022 Virginia Green Travel Award winners were invited to participate in the People's Choice Awards, which allowed winners to run social media campaigns highlighting their Virginia Green participation.

Planning is underway for the 2023 conference and awards in Virginia Beach. The awards application will continue to emphasize providing data to document the benefits of the programs being implemented.



Virginia Green Travel Star Green Team All-Star winners were featured on NBC 12 after Andrew Freiden, the station's meteorologist, presented the awards to winners.

## HIGHLIGHTS FROM THE VIRGINIA GREEN TRAVEL AWARDS



**Stable Craft Brewing**  
*Green Brewery of the Year*

Stable Craft's restaurant and banquet operations have zero food waste due to their Bokashi fermentation composting system that composted 5.8 tons of food waste in 2021 to use as fertilizer on the property. 1,100 trees have been planted on the property for erosion control and air quality. In addition to the brewery growing its own hops, herbs and peaches, they have chickens for eggs.



**Virginia Living Museum**  
*Innovative Green Project*

The Virginia Living Museum education staff worked with local high school volunteers to construct a 30-foot-long floating wetland with 12 native species. The floating wetland is located in Deer Park Lake by a major intersection and removes pollutants from the water column, provides wildlife habitat and catches litter flowing out of the lake.

# GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARDS

## BACKGROUND

The Governor's Environmental Excellence Awards recognize successful and innovative efforts that improve Virginia's environment. The awards program is run annually by DEQ in partnership with the Department of Conservation and Recreation. There are five broad categories of awards: Sustainability, Environmental Project, Land Conservation, Implementation of the Virginia Outdoors Plan and Greening of Government. The Greening of Government category was added this year to recognize entities of the Commonwealth of Virginia for sustainable initiatives focusing on waste reduction and recycling. After two years of virtual ceremonies, the 2022 winners were announced on March 29 to an audience of more than 100 people during the opening luncheon at the Environment Virginia Symposium.



## GOLD MEDAL WINNERS

### Catawba Hospital Greening of Government

Catawba Hospital is a mental health facility in Roanoke that formed a "Green Team" to facilitate the transition from disposable items to reusable food service ware. The hospital had to identify reusable alternatives that would not pose a safety threat to staff and patients. One solution was the switch to silicone cups from disposable foam cups, which annually save the agency \$7,207 and decrease waste by a ton. An anaerobic digester diverts 55 tons of food waste from the landfill and eliminates the need for 10,400 trash bags annually. From July to November 2021, the facility reduced total waste generated by more than 28% and is well on its way to achieving its goal of being a zero-waste facility.



### City of Harrisonburg Department of Public Works - Urban Forestry Harrisonburg Urban Forestry Program Sustainability Program

In 2017, the city of Harrisonburg's Urban Forestry Program discovered the invasive emerald ash borer beetle, which consumes and kills ash trees. Since then, staff have removed more than 1,000 ash trees and have planted over 1,400 native trees. Annually, 300 to 500 of the trees Urban Forestry plants are grown in local greenhouses. The urban forests of Harrisonburg reduce and filter stormwater runoff, remove contaminants from the air, sequester carbon and decrease the city's heat-island effect. Urban Forestry partners with Urban Wood to keep felled trees out of landfills and instead uses the wood to create park benches, bridges, furniture, firewood or mulch that are used throughout the Harrisonburg community.



### Coastal Virginia Ecotourism Alliance Virginia Water Trail Implementation of the Virginia Outdoors Plan

In 2017, the Virginia Coastal Zone Management Program (CZM) supported the development of the Virginia Water Trails, which is managed by the Coastal Virginia Ecotourism Alliance (CVEA). The CVEA connects individuals to world-class ecotourism destinations. CVEA created the [Virginia](#)



# GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARDS

[Water Trails website](#), which provides a platform for each region to share its unique water experiences with visitors and residents. The certification program trains future guides about the wildlife of Virginia, increases outdoor recreation opportunities, and promotes economic development throughout the Virginia coastal region. An economic study found that ecotourism in the Middle Peninsula alone created 442 jobs and generated \$1.6 million in annual state and local tax revenue.

## Fauquier County

### Upper Rappahannock River Water Trail

#### Implementation of the Virginia Outdoors Plan

This project established the Upper Rappahannock River Water Trail, the first public access to the Rappahannock in Fauquier County. Friends of the Rappahannock River (FOR) and the James Marshall Soil and Water Conservation District created three public canoe launch sites on the scenic river: Riverside Preserve, Rector Track and Rogers Ford. Riverside Preserve and Rector Track are in permanent conservation easements with the Virginia Outdoors Foundation, which protect historic and environmental resources of the areas. Two riparian buffers were restored that will be maintained for invasive plants and protected for wildlife habitat.



## George Mason University

### Mason Sustainability Council's Circular Economy and Zero Waste Task Force

#### Greening of Government

George Mason University's Sustainability Council created the Circular Economy and Zero Waste Task Force (CEZW TF) to address the Plastic Pollution and Solid Waste Reduction initiative. The CEZW TF created an extensive purchasing guide of compostable food service items. The CEZW TF also piloted a new front-of-house composting program, communicated green purchasing requirements with the university's fiscal services division, and engaged all campus food vendors in transitioning their plastic items to certified compostables. From April to October 2021, Mason Dining eliminated nearly 100,000 pounds of single-use plastic items and diverted over 556,000 pounds of material from the landfill.



## University of Virginia

### Waste Minimization

#### Greening of Government

The University of Virginia's Office for Sustainability spearheaded the institution's single-use plastic reduction efforts and formed a diverse working group in April 2021 of more than 40 employees from the UVA community. The group established a plastic-use reduction implementation plan and developed a communications strategy to increase awareness and understanding of the requirements and goals of the initiative. UVA provided training to the community about reducing waste and developed multiple helpful resources, including a list of certified compostable alternatives in their Zero Waste Guide and a Waste Reduction website. Since July 2021, UVA has successfully facilitated its ongoing transition from single-use plastics to reusable and compostable items.



# GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARDS

## SILVER MEDAL WINNERS

### City of Petersburg

#### Appomattox River Trail University Boulevard Overlook and Trailhead Implementation of the Virginia Outdoors Plan

The 25-mile-long Appomattox River Trail will connect communities from Chesterfield County to Prince George County. The city of Petersburg and Friends of the Lower Appomattox River (FOLAR) completed the University Boulevard Overlook and Trailhead to connect downtown Petersburg to this trail network. The trail links the river overlook with two pedestrian bridges that cross over the Battersea Dam. The project included installing wayfinding signage, planting 150 native species plants and removing invasive plants. The University Boulevard Overlook and Trailhead also promotes economic growth and tourism in downtown Petersburg.



### Virginia Tech

#### Plastic Pollution and Solid Waste Reduction Campus-Wide Working Group Greening of Government

Virginia Tech began their Plastic Pollution and Waste Reduction initiative in 2021. A working group of 18 campus leaders focused on leveraging VT's existing sustainability commitments and programs to achieve its Climate Action Commitment to be a Zero Waste Campus by 2030. VT Dining Services discontinued the use of polystyrene containers, and students piloted the first water refill station, with 260 stations having been installed since. The group has swapped over 172,000 plastic straws with compostable ones.



### The College of William and Mary

#### Institutionalized Composting Greening of Government

Since 2010, The College of William and Mary composts pre- and post-consumer food waste and compostable cutlery in dining halls and at select drop-off locations throughout the campus. These efforts, coupled with campus dining halls previously discontinuing the use of single-use plastics and supplying reusable to-go containers, prepared the college well to meet the requirements of the Plastic Pollution and Solid Waste Reduction initiative. From 2017 to 2020, composting at William & Mary diverted 657 tons of food waste from the landfill, over 5% of the total waste generated by the university.



## BRONZE MEDAL WINNERS

### Arlington-Fairfax Chapter Inc., Izaak Walton League of America

#### Environmental Management System Sustainability Program

The Arlington-Fairfax Chapter of the Izaak Walton League of America (IWLA) owns a recreational park in Centreville. The chapter exceeds the required phosphorus removal rates from park stormwater by utilizing a dry swale drainage system. With its EMS, the chapter minimizes waste by using biodegradable targets in its shooting ranges. The chapter has conducted two intensive lead collection and recycling efforts, recovering 200,000 pounds of lead in 2017 and over 250,000 pounds in 2020. The chapter has earned over \$500,000 by reclaiming, recycling and reusing.



# GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARDS

## Chesterfield County

### North Courthouse Library Neighborhood Connector Trail Implementation of the Virginia Outdoors Plan

The North Courthouse Trail was constructed by Chesterfield County's Transportation Department in spring 2020. The trail has seen significant use by families, firefighters and library visitors. The trail was rerouted to ensure that its path did not negatively impact sensitive wetlands. The success of Chesterfield's first library trail provides a framework for other county libraries to create trails.



## Defense Supply Center Richmond Fuel Reduction Program Environmental Program

The Defense Supply Center is an aviation demand and supply-chain manager. All the buildings on the complex were heated using fuel oil that was stored in tanks, which released large amounts of carbon dioxide when burned and also created potential environmental hazards. In 2019, 21 facility buildings were converted from fuel oil boilers to natural gas, which annually reduced fuel oil use by 85% and the carbon dioxide it emitted by 30%.



## Virginia Tech - Office of Sustainability Student Internship Program Sustainability Program

Virginia Tech's Office of Sustainability assigns student interns to projects that fall into three categories: technical partner projects, outreach and education, and large university-wide campaigns. From August 2020 to May 2021, interns collected and donated 339 pounds of food, created a proposal to install three electric vehicle charging stations on campus, and planted 6,000 trees. The work of the interns has also contributed to the decrease in VT's emissions, generated solid waste and energy use since 2014.



## HONORABLE MENTION

### Hitachi Energy USA Inc. Paint Line Process Improvement Project Environmental Program

Hitachi Energy in South Boston renovated its paint line system and developed a process that uses paints that have significantly less volatile organic compounds (VOCs), which decreased the amount of hazardous waste produced by 25,000 pounds in a year.



### Smith Creek Watershed Partnership / C/O Ridge to Reefs Inc. Yancey Bioreactor Environmental Program

Smith Creek Watershed Partnership and Ridge to Reefs installed the Yancey Bioreactor on Yancey Smith Creek Headwaters Farm to filter legacy nitrates out of a spring that feeds into Smith Creek.



# DEQ LEADING THE GREENING OF STATE GOVERNMENT

## LEADING BY EXAMPLE:

*DEQ embraces its role as a leader in the greening of state government. By continually looking for ways to reduce its own environmental footprint, the agency can encourage others to do the same. Continuous environmental improvement is part of day-to-day decision making. From the programs OPP runs to the way DEQ does business, protecting and enhancing Virginia's environment is its core mission. OPP leads by example, creates tools for others to use and actively seeks to provide technical assistance to agencies interested in implementing similar efforts. DEQ uses an EMS to evaluate the environmental impacts of its operations in order to increase recycling and waste diversion. By understanding its own environmental impacts, the agency is better equipped to provide outreach to encourage state employees to reduce waste, recycle and increase sustainability efforts.*

## DEQ'S ENVIRONMENTAL MANAGEMENT SYSTEM

### Background

*Implementation of DEQ's EMS is ongoing, with the goal of not only reducing DEQ's environmental footprint, but also engaging employees in the day-to-day awareness and decision making that is a cornerstone of environmental management. DEQ is leading by example as it strives to continually improve the EMS and environmental awareness at its facilities across the state.*

*The EMS team works to enhance environmentally sound practices, increase environmental awareness through annual training, increase communication of mutually beneficial knowledge and encourage innovative environmental solutions. These efforts go hand-in-hand with the agency's mission of protecting and enhancing Virginia's environment and promoting the health and well-being of the residents of the Commonwealth.*

### Objectives and Targets

Since 2014, the EMS team has implemented numerous objectives and targets to address risks identified by annual reviews of the agency's environmental aspects and impacts. Fifteen of the 16 objectives and targets implemented to date have been completed. Some of those goals have been met but the objectives are ongoing in order to continually improve efforts like reducing energy use and paper use. The EMS team will continue to implement action plans to reach these goals.

In addition to these objectives and targets, the agency and its regional office EMS teams also coordinate awareness events for Earth Day every April and America Recycles Day every November. Since 2020, these awareness events have been virtual, but still serve as a crucial way to engage with DEQ staff on the importance of protecting the environment through actions at home as well as at work. The EMS team looks forward to planning in-person events in 2023. In addition to these two events, the EMS team provides an annual EMS awareness training to all employees about the agency's priorities and progress on environmental goals. Increasing environmental awareness is an important part of encouraging employees to assess the daily decisions they make that impact the environment.



The image above is from an email and intranet story celebrating Earth Week.

# DEQ LEADING THE GREENING OF STATE GOVERNMENT

## RECOGNIZING THE VALUE OF RECYCLING AND WASTE REDUCTION

With the signing of Governor Youngkin's Executive Order 17 (EO 17) on April 7, 2022, DEQ's green government efforts shifted to providing technical assistance to state agencies and institutions. OPP worked with the DEQ Communications staff to develop signage that could be shared with all state agencies on the value of recycling to meet one of EO 17's requirements. OPP is also working to support the implementation of EO 17 by improving guidance on developing recycling plans, researching opportunities to attract businesses that use post-consumer recycled content and developing a survey for large-scale suppliers of food.

In addition to facilitating implementation of EO 17, OPP has been working to help DEQ comply with the order and complete the requirements for recycling and awareness. DEQ will continue to look for opportunities to lead by example for other state agencies and provide guidance where possible.

**THE VALUE OF RECYCLING**

**Recycling ...**

- Conserves resources and protects the environment
- Can reduce carbon emissions compared to extracting virgin materials
- Reduces the amount of waste sent to landfills and incinerators
- Creates jobs and generates local and state tax revenues
- Is most beneficial when people "recycle right," so first make sure you check what can and cannot go in the bin

**HOW YOU CAN HELP**

**In stores:**

- Shop for products made with recycled materials
- Buy items with less packaging
- Bring your own bags
- Buy only what you need

**At home:**

- Ask to be removed from paper mailing lists
- Don't throw away anything that can be reused or repaired
- Donate unwanted electronics
- Print on both sides of paper and use recycled paper
- Compost food scraps and yard waste

The infographic features a blue recycling bin with a white recycling symbol, surrounded by various recyclable items like a brown paper bag, a white plastic jug, a blue water bottle, a red and white can, and a yellow lid. The background is green and white.

Signage developed and shared with state agencies to meet the requirements of EO 17.

# RESOURCES

## **General Information**

[www.deq.virginia.gov/get-involved/pollution-prevention](http://www.deq.virginia.gov/get-involved/pollution-prevention)

## **Virginia Green Tourism Program**

[www.deq.virginia.gov/get-involved/pollution-prevention/virginia-green](http://www.deq.virginia.gov/get-involved/pollution-prevention/virginia-green)

[www.virginia.org/green/](http://www.virginia.org/green/)

[www.virginiagreen.net](http://www.virginiagreen.net)

## **Governor's Environmental Excellence Awards Program**

[www.deq.virginia.gov/get-involved/pollution-prevention/governor-s-environmental-excellence-awards](http://www.deq.virginia.gov/get-involved/pollution-prevention/governor-s-environmental-excellence-awards)

## **Pollution Prevention Case Studies**

<http://www.deq.virginia.gov/get-involved/pollution-prevention/case-studies>

## **Virginia Environmental Excellence Program**

<http://www.deq.virginia.gov/get-involved/pollution-prevention/virginia-environmental-excellence-program>

## **Virginia Information Source for Energy**

[www.deq.virginia.gov/get-involved/pollution-prevention/virginia-information-source-for-energy](http://www.deq.virginia.gov/get-involved/pollution-prevention/virginia-information-source-for-energy)

## **Executive Order 17**

[www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/eo/EO-17-Recognizing-The-Value-of-Recycling-and-Waste-Reduction.pdf](http://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/eo/EO-17-Recognizing-The-Value-of-Recycling-and-Waste-Reduction.pdf)