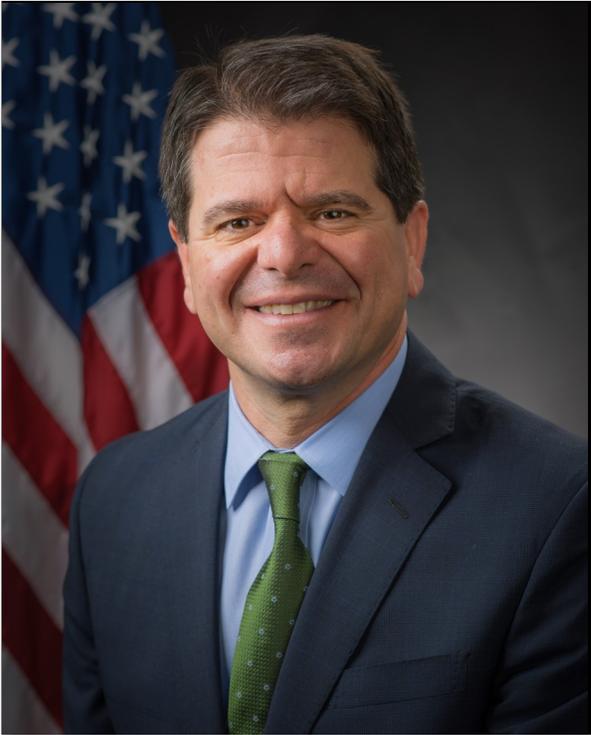


A MESSAGE FROM THE REGIONAL ADMINISTRATOR



In 2019, EPA's Mid-Atlantic Region made significant strides in protecting public health and the environment, thanks to the dedication and talents of our employees and the strong relationships we fostered with partners in our states and communities.

The achievements reflected in the pages ahead are highlights of the work we do every day to fulfill our most fundamental responsibility – promoting cleaner air, land and water in our Region.

We met the diverse environmental challenges of a Region with the nation's largest estuary, rural expanses, and major cities and agricultural centers – all while realigning our divisions and offices this year to increase our effectiveness.

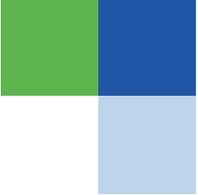
For example, our Air and Radiation Division finalized 39 state plans for reducing air pollution in areas not meeting national health-based ambient air quality standards. The Office of Communities, Tribes, and Environmental Assessment successfully convened and led an Environmental Tribal Summit engaging six newly, federally-recognized tribes in the Region.

The Land, Chemicals and Redevelopment Division helped EPA kick-off National Children's Health Month on October 1 with the Mid-Atlantic Lead Forum in Hunt Valley, Maryland. The forum was a collaborative step in combined efforts to reduce childhood lead exposure, especially in communities with populations vulnerable to lead exposure.

The Water Division, Chesapeake Bay Program Office, and Laboratory Services and Applied Science Division worked with state agencies and partners to improve water quality in the Mid-Atlantic Region. The Chesapeake Bay Program is observing the highest rate of attainment with water quality standards in more than 30 years. And EPA's field scientists worked side-by-side with their state peers to survey Regional water bodies as part of the National Rivers and Streams Assessment.

We also launched the first *Healthy Farms, Clean Water Agricultural Exhibit* at Pennsylvania's Ag Progress Days event near State College. The exhibit featured educational panels, videos and even a trivia wheel that highlighted ways the Region works with farmers and local agricultural partners to fund conservation practices that are good for the farm, drinking water, local streams and the Chesapeake Bay.

I had the opportunity to join EPA Administrator Andrew Wheeler in the small community of Minden, West Virginia to announce that EPA was adding the Shaffer Equipment/Arbuckle Creek Area Site in Minden to the National Priorities List (NPL). The site is one of six sites in the nation added in May 2019 to the NPL. Adding sites to the NPL provides EPA access to additional funds needed to commence remedial investigative work leading to Superfund cleanup.



A MESSAGE FROM THE REGIONAL ADMINISTRATOR

Our Superfund and Emergency Management Division (SEMD) served as the agency's lead Region for Superfund and Homeland Security. In this role, SEMD was instrumental in guiding the agency in developing recommendations on how better to support underserved populations for Superfund cleanups in their communities.

Our newly-established Enforcement and Compliance Division completed more than 1,600 compliance evaluations, settled 112 administrative enforcement actions, and negotiated more than 12 judicial settlements. Collectively, more than \$36 million of actions were completed to ensure facilities were back into compliance.

As we celebrate the 50th Anniversary of our Agency in 2020, we commit to building on these examples of success and continuing the work with our partners to ensure protections our residents need and deserve.



Cosmo Servidio,
Regional Administrator,
Region 3

TABLE OF CONTENTS



LAND

Pages 1-4



WATER

Pages 5-12



AIR

Pages 13-15



COMPLIANCE

Pages 16-19



PARTNERSHIPS

Pages 20-24

West Virginia Site 1 of 6 Nationwide Added to Superfund Cleanup List

The Shaffer Equipment/Arbuckle Creek Area Site in Minden, West Virginia, was one of six sites in the nation added in May 2019 to the National Priorities List (NPL). Adding sites to the NPL provides EPA access to additional funds needed to commence remedial investigative work leading to Superfund cleanup. EPA Administrator Andrew Wheeler, EPA Regional Administrator Cosmo Servidio, U.S. Senator Shelley Moore Capito and West Virginia Governor Jim Justice were at the site for the May 15 national announcement of new additions to the NPL. Since the site was added to the NPL, EPA's Mid-Atlantic Region has

conducted several public availability sessions, prepared and distributed community update fact sheets, has initiated a Removal Action to remediate an area of contaminated soil, completed repairs to a previously constructed remedy, and commenced Remedial Investigation fieldwork. EPA continues to work with the West Virginia Department of Environmental Protection, the Agency for Toxic Substances and Disease Registry (ATSDR), and environmental engineering contractor, Tetra Tech to complete the site Remedial Investigation.

Opportunity Knocks

In 2019, EPA's Mid-Atlantic Region

employed its Resource Conservation and Recovery Act (RCRA) 7003 authority in a unique and innovative approach to expedite redevelopment of a property in a designated Opportunity Zone in Philadelphia. Opportunity Zones are census tracts of low-income and distressed communities designated by state governors and certified by the Department of Treasury. These are areas where new investors under certain conditions, may be eligible to defer or eliminate federal taxes on capital gains as well as receive preference points when applying for grants to be used on projects in Opportunity Zones. The Plymouth Group approached the Region in September, and in October entered into four Administrative Orders on Consent to perform a cleanup of the "Budd Site," located in the Nicetown section of Philadelphia on a tract of land identified as an Opportunity Zone. Under the EPA's oversight the Plymouth Group will conduct a phased approach to clean up and redevelop this 35-acre site for mixed use, including entertainment venues and eventually housing developments. The Plymouth Group has already selected its cleanup contractors and tentatively plans to break ground Spring 2020.



Top: EPA Administrator Wheeler on a tour of the Shaffer Equipment/Arbuckle Creek Area Site before announcing the Site as one of six sites in the nation added in May 2019 to the National Priorities List.

Bottom: "Brownfields Check" – City of Philadelphia Brownfield Opportunity Zone event.

Advancing Redevelopment

EPA's Mid-Atlantic Region continues to advance the redevelopment of formerly contaminated properties. In 2019, communities reported Brownfields redevelopment on sites that created more than 300 jobs and leveraged more than \$124 million in private investment. For example, the Business Development Corporation of the Northern Panhandle - Pietro Fiorentini opened the Three Springs Business Park in Weirton, West Virginia. The business park has leveraged \$4.4 million in other public investments, \$21 million in private investments for manufacturing, and \$10 million in commercial and hospitality. The Business Park has created 195 jobs and preserved 141 jobs, while 651 new jobs are projected.

To maintain the momentum of Brownfields redevelopment, the Region's Land, Chemicals and Redevelopment Division ramped up training and outreach, which significantly increased the number of fundable projects submitted and awarded for EPA Brownfields funding in 2019. Likewise, the Region continues to see gains in the redevelopment of RCRA Corrective Action facilities.

Notable examples include: the construction of a rail yard at the former General Chemical Plant in Claymont, Delaware; a fitness center at the former PEMCO facility in Baltimore, Maryland; a baseball stadium in Huntington, West Virginia; and a residential



Before



After



Before



After

Top Left and Right: These before and after images showcase the restoration of the 1920 Roxian Theatre in McKees Rocks, PA. The North Side Industrial Development Co. received an \$11,000 EPA Brownfields Assessment Grant for Phase I environmental assessment and asbestos inspection. **Bottom Left and Right:** These before and after images show the ISG Tecumseh Redevelopment Site, formerly Bethlehem Steel. This RCRA Corrective Action Site is located in Bethlehem, PA. Redevelopment continues at the former Bethlehem Steel site.

community development at Ametek facility in Sellersville, Pennsylvania.

Reducing Food Waste

EPA's Mid-Atlantic Region is a leader in Sustainable Materials Management (SMM) to achieve

the EPA-USDA goal of reducing food waste by 50 percent by the year 2030. The Region has a total of 58 new and active participants in the SMM Challenges, representing a 3.8 percent increase from 2018. This additional SMM commitment to reducing

food waste may result in the diversion of more than 146,000 tons of food waste from landfills and over 100,000 tons of food waste recycled. This is equivalent to removing annual carbon dioxide emissions from over 13,775 passenger vehicles and the donation of more than 46,000 tons of food resulting in over 77 million meals served to those in need.

Cleanup Completed at PA Landfill

The Strasburg Landfill in Newlin Township, Pennsylvania, was deleted from the Superfund NPL— a milestone indicating to the community that cleanup is complete, and the site is protective of human health and the environment. In addition, the Novak Sanitary Landfill in South Whitehall Township, Pennsylvania, was partially deleted from the NPL.

Below: Images of the Strasburg Landfill Site.



ACCOMPLISHMENTS

- The Office of Communities, Tribes and Environmental Assessment (OCTEA) in EPA's Mid-Atlantic Region is actively promoting redevelopment in designated Opportunity Zones, preparing fact sheets, maps, public health data, an internal information sharing process, and a list of federal grants available for opportunity zone projects. In 2019, OCTEA participated in nearly two dozen meetings and events to help attract entities interested in Opportunity Zone development projects. Opportunity Zones are census tracts of low-income and distressed communities designated by state governors and certified by the Department of Treasury. These are areas where new investors under certain conditions, may be eligible to defer or eliminate federal taxes on capital gains as well as receive preference points when applying for grants to be used on projects in Opportunity Zones.
- EPA's Mid-Atlantic Region assumed the role of Lead Region for the Office of Chemical Safety and Pollution Prevention in early August 2019 for the implementation of the Federal Insecticide, Fungicide, and Rodenticide Act, Toxic Substances Control Act, and Pollution Prevention, which allows the Region to be at the forefront of national policy and emerging issues in these areas.
- Employing EPA's Lean Management System, the Region's Land, Chemicals, and Redevelopment Division (LCRD) and the Office of Regional Counsel reduced to six months (from more than two years) the time it takes to process "Environmental Covenants" under the Resource Conservation and Recovery Act's Corrective Action Program – exceeding its annual goal for Sites

ACCOMPLISHMENTS *Continued*

Ready for Anticipated Use by 45 percent.

- EPA's Mid-Atlantic Region successfully implemented Renovation, Repair and Painting (RRP) Rule pilot outreach projects in Lancaster and Philadelphia, Pennsylvania. The effort served as a model for outreach and compliance assistance for the RRP Rule, resulting in a 9 percent increase in certified firms and 33 percent increase in certified renovators.
- The Brownfields Geographic Information System project team in the Region's Land, Chemicals, and Redevelopment Division conducted analysis of Brownfields data against Leaking Underground Storage Tank and RCRA Corrective Action sites, Opportunity Zones and other data indicators to inform strategic planning on program expansion and process improvements, gaining insight on the 744 Opportunity Zones in the Region.

- The Region led a national Information Collection Request (ICR) on Anaerobic Digestion facilities that process food waste in the U.S., publishing the second in a series of three reports in September 2019, Anaerobic Digestion Facilities Processing Food Waste in the United States in 2016, and building upon a much-needed infrastructure for food waste diversion from landfills.
- EPA's Mid-Atlantic Region served as the Agency's lead region for Superfund and Homeland Security. In this role, the Region worked with EPA Headquarters on important Homeland Security and Superfund issues, including participation in Superfund Task Force recommendations and implementation.



EPA

Anaerobic Digestion Facilities Processing Food Waste in the United States (2016)

Survey Results
September 2019
EPA/903/S-19/001

Top: This photo is from a Healthy Homes Fair held with our federal partners from ATSDR. The event took place in Philadelphia. **Middle:** Image of the FY19 R3 Brownfields Results Infographic. **Bottom:** This is an image of the Region's Second Annual Anaerobic Digestion Report.

EPA Administrator Wheeler Participates in the Annual Chesapeake Bay Executive Council Meeting

"We have made significant progress, but there is still much more to realize the full potential of our Chesapeake Bay watershed. EPA will continue to provide support to each of the jurisdictions to help them achieve their goals. Along with our federal partners, we are providing financial and technical assistance for a host of restoration activities, from upgrading wastewater treatment plants to stormwater management to conservation practices on our farms.

In February, EPA awarded the City of Baltimore a \$200 million Water Infrastructure Finance Innovation Act (WIFIA) loan. I was there in person to make the announcement. This loan will help the city modernize its wastewater infrastructure and prevent sewage and polluted runoff from entering the Bay.

We are also working closely with farmers to achieve clean water and a thriving agriculture economy.

Our partnership is strong and our efforts are paying off. We have more education to do, more practices to put in place, and more stakeholders to engage in these efforts."

EPA Administrator Andrew Wheeler speaking at the Chesapeake Bay Executive Council meeting Sept. 5, 2019 at Oxon Hill Manor, Oxon Hill, Maryland. The Executive Council

consists of the governors of the six watershed states, the mayor of the District of Columbia, the chair of the Chesapeake Bay Commission and the

administrator of the EPA. The Executive Council establishes the policy direction for the restoration and protection of the Chesapeake Bay.



The above photos are from the Sept. 5 Chesapeake Bay Executive Council Meeting. In attendance were EPA Administrator Andrew Wheeler, Regional Administrator Cosmo Servidio, and our Bay partners.

Helping to Ensure Safe Drinking Water

Drinking water samples are tested by state, local, or private laboratories to ensure that the water meets applicable federal and state requirements and is safe for the public to drink. EPA ensures that the labs are properly certified to do the work.

The Safe Drinking Water Act (SDWA) Laboratory Certification Program requires laboratories that conduct drinking water testing to be assessed once every three years to verify that they have the necessary capabilities and capacity to adequately meet the SDWA's requirements. The EPA Mid-Atlantic Region's laboratory manages the SDWA certification program in the Region and has developed a training program for EPA staff that conduct the laboratory assessments to

determine if a particular lab can be certified under the SDWA.

The training includes hands-on laboratory experience, compilation of methods and laboratory requirements, checklists and resource tools, and hands-on experience in auditing.

The training program has been used for the past two years and each analyst who has attended the training has successfully passed the mandatory performance test on the first try. The program has been shared with state laboratory managers for implementation in their labs.

A River Runs Through it...

Scientists in the Region's Field Services Branch (FSB) can often be found up to their hips in streams somewhere in the Mid-Atlantic - not fly-fishing, but rather evaluating the health of aquatic resources. This past year, FSB

scientists led federal, state and local stakeholders on the completion of a two-year collaborative survey of regional water bodies as part of the National Rivers and Streams Assessment (NRSA).

The goals of the NRSA are to determine the degree to which rivers and streams support healthy biological ecosystems and the extent of major stressors that affect them. The survey supports a longer-term goal: to determine whether our rivers and streams are getting cleaner and how we might best invest in protecting and restoring them.

The EPA Mid-Atlantic team's contributions include refinement and development of methods, national instruction in train-the-trainer events, regional training of state biologists, quality assurance through Site Assistance Visits to



Left: This image shows drinking water being tested in a laboratory. **Right:** EPA assessing the health of our rivers and streams.

each team, and reference site sampling throughout the Mid-Atlantic. Our scientists work side-by-side in the field with peers from each of the Region's states and river basin commissions.

Farmers and Environment Benefit from EPA Funding

EPA funding for farm improvement projects in two Pennsylvania counties is contributing to healthy farms and clean water.

EPA worked with the Pennsylvania Infrastructure Investment Authority (PENNVEST) to provide \$11.2 million to improve farm operations and

local water quality throughout Chester and Lancaster counties.

The funding was provided by EPA's Clean Water State Revolving Fund through PENNVEST to the Chester County Conservation District and Team Ag, Inc., an agriculture consulting company.

One of the beneficiaries was Elmer Kauffman, an Amish dairy farmer with a herd of 100 cows in Honey Brook, Chester County. He received \$363,000 in funds to make improvements on his operation, including a concrete manure storage structure,

streambank fencing to keep his cows out of the stream, a stream crossing for his cows, and barnyard roof runoff controls.

The new storage structure collects manure from the cows, wastewater from the site's milk house and runoff from areas of heavy use on the farm.

These practices are helping to improve the efficiency of his farm operations and protect local waterways that eventually lead to the Chesapeake Bay. "The cleanliness of my herd is noticeably better," said Mr. Kauffman.



Left: Despite record rainfall, underwater grasses in the Chesapeake Bay and its tidal waters showed strong growth. (Photo: Chesapeake Bay Program). **Right:** Chesapeake Bay Program Director Dana Aunkst and colleagues spoke to nearly 50 members of a continuing education group at the University of Maryland Extension, Howard County office about progress in cleaning up the Chesapeake Bay and local waters.

State-Federal Cooperation Leads to Muddy Creek Improvements

In May 2019, officials from EPA's Mid-Atlantic Region, West Virginia and other partner agencies marked early success in reviving a 3.4 mile stretch of Muddy Creek in Preston County to bring fish back to its waters. This stretch of the creek did not support aquatic life due to the acidity of the water from historic acid mine drainage (AMD) issues.

The West Virginia Department of Environmental Protection issued a watershed-based permit to address several AMD outfalls in the area. The Region's Water Division worked with the state to develop a first-of-its-kind permit in West Virginia to neutralize acidity, reduce metals and improve water quality. This state-federal cooperation serves as an example of what can be accomplished when working together and using common sense approaches. EPA also provided more than \$225,000 in Clean Water Act Section 319 funding for Muddy Creek improvements.

EPA's Healthy Farms, Clean Water Exhibit Expands Dialogue with Agricultural Community

In August 2019, EPA's Mid-Atlantic Region launched the first Healthy Farms, Clean Water Agricultural Exhibit at Pennsylvania's Ag Progress Days event near State College, PA.

The exhibit featured educational panels, videos and even a trivia wheel that highlighted ways the



Top: Chesapeake Bay Program Director Dana Aunkst joined the Alliance for the Chesapeake Bay and partners to plant streamside trees to benefit the West Branch Conococheague Creek, a Class A wild trout stream in Franklin County, Pennsylvania. *(Photo: Transource Energy)*. **Bottom:** Treatment plant helping to clean the waters of Muddy Creek in Preston County, WV. *(Photo: WVDEP)*.

Region works with farmers and local agricultural partners to fund conservation practices that are good for the farm, drinking water, local streams and the Chesapeake Bay.

At the three-day Ag Progress Days event, approximately 500 members of the public and

agricultural community visited the exhibit and discussed how EPA is working with farmers to improve farm efficiency and protect the environment.

Also at the event, Regional Administrator Cosmo Servidio joined the American Dairy Association North East

in presenting an annual Environmental Stewardship Award to dairy farmer Dave Graybill, who operates Red Sunset Farms in Mifflintown, Pennsylvania. More than 50 dairy farmers and members of the agricultural community attended the awards event.

The exhibit – a product of the EPA Mid-Atlantic Region Agriculture Workgroup – allows EPA to participate in agricultural events throughout the Region such as state fairs, farm shows and technical field days to expand open discussion between EPA and the agricultural community, recognize farmers for environmental stewardship, and find ways to effectively work together to achieve well-managed farms and clean water.

Replacing Lead Service Lines in Pittsburgh

The Pittsburgh Water and Sewer Authority received an EPA-funded \$35.4 million Drinking Water State Revolving Fund (DWSRF) loan and \$13.7 million in “principal forgiveness” through the Pennsylvania Infrastructure Investment Authority (PENNVEST) for an infrastructure project that will replace 2,800 private lead service lines in the city.

The DWSRF program is a federal-state partnership to help ensure safe drinking water. Created by the 1996 Amendments

to the SDWA, the program provides financial support to water systems and to state safe water programs.

Improving Water Quality, Reducing Costs Through Technical Assistance

The Water Division’s Sustainability Team is working to improve

permit compliance and local water quality by providing free, on-site technical assistance to small water and wastewater facilities. The Region reconvened a Technical Network and offered partners funding for equipment to enhance operations, improve effluent quality, and save energy.



Top: EPA’s Walter Higgins, with the help of the Norristown Borough Sewer Authority (PA) electrician, temporarily installing a power logger on an aging and inefficient aeration blower. **Bottom:** Cathy Libertz (right), Director of the Water Division, with a member of the Montgomery County Conservation District. They are observing a basin naturalization, swale, and rain garden in an effort to protect source water.

In addition to referrals from partners, the Team is utilizing the Region's Enforcement Tracking Tool to identify noncompliant systems. The Team works with the State Revolving Loan Fund program to assist systems that need a capital project to return to compliance in a timely manner.

The City of Cumberland, Maryland, is one of the communities benefitting from the Team's involvement. As a follow-up to an EPA energy audit, the Cumberland Wastewater Treatment Plant is beginning a \$1.2 million capital project to optimize the operation of the secondary treatment units. The energy reduction project is expected to save the facility \$130,600 per year. During an on-site visit, the Mid-Atlantic Region connected the City with the Potomac Edison Electric Company, resulting in an anticipated rebate of approximately \$200,000.

Other Team outcomes in 2019 include:

- 22 treatment plant site assessments
- 12 classroom courses for treatment plant operators
- 4 optimization/technical assistance presentations at conferences

See photo of the Cumberland, Maryland Wastewater Treatment Plant on page 10 under Accomplishments.



Left: This photo shows an EPA bio assessment on the health of an aquatic ecosystem. **Right:** EPA Deputy Regional Administrator Diana Esher, joins local and state partners at the smartpond stormwater management technology announcement in Fruitland, MD.

ACCOMPLISHMENTS

- EPA's Mid-Atlantic Region awarded \$275 million from its State Revolving Funds (SRFs) in 2019 - \$170 million from the Clean Water SRF and \$105 million from the Drinking Water SRF. The SRF awards further capitalize the states' Funds which provide low interest loans for the construction of infrastructure projects for drinking water, wastewater, stormwater, nonpoint source, and estuary projects. The funded projects are vital to protect and improve

water quality in our rivers, lakes, and streams for drinking water, recreation, and natural habitat. By ensuring that the grants are timely awarded, the Region supports the states' efforts in the expeditious use of these funds to high priority projects.

- More than 91,500 acres of underwater grasses were recently mapped in the Chesapeake Bay – a number likely closer to a 30-year high of 109,000 acres considering areas

ACCOMPLISHMENTS *Continued*

that were not fully mapped due to bad weather and other factors. The results indicate that the grasses, also known as Submerged Aquatic Vegetation, or SAV, were resilient in the face of record rainfalls.

- The Chesapeake Bay Program is observing the highest rate of attainment with water quality standards in more than 30 years.
- The EPA Mid-Atlantic Region's legal team provided extensive contracts counseling for water protection related issues including: requests for proposals associated with the Conowingo Dam Watershed Implementation Plan (WIP); to help meet Agency goals for the Chesapeake Bay Total Maximum Daily Loads (TMDL); grants support for addressing Pennsylvania's unliquidated obligations; and legal review of each jurisdiction's draft WIPs.
- The most recent winter blue crab dredge survey estimated that the Chesapeake Bay is home



Above: Cumberland, Maryland Wastewater Treatment Plant beginning \$1.2 million capital project. *(Photo: Maryland Department of the Environment).*

to 594 million blue crabs, a 60 percent increase over the previous year. The survey showed that the Bay's total adult female blue crab population has increased nearly 30 percent to 191 million.

- EPA's Mid-Atlantic Region approved 13 TMDLs

in 2019 – seven in Maryland, one in Pennsylvania, and six in Virginia - as well as one Alternative TMDL in Virginia. The TMDL process serves as a link between water quality standards and the implementation of control actions designed

ACCOMPLISHMENTS *Continued*

to attain those standards. The Region also approved 303(d) lists of impaired waters in 2019 for the District of Columbia, Delaware, Maryland, Virginia and West Virginia.

- In 2019, the Region incorporated tribal consultation into its TMDLs, 303(d) Lists, and Water Quality Standards (WQS) review processes for the first time. WQS, 303(d) lists, and TMDLs are foundational components of water quality protection under the Clean Water Act. Seven tribes in Virginia are now federally recognized, and consultation has successfully been completed on one 303 (d) list approval and one pending WQS approval.
- The Chesapeake Bay Program Office developed a new web product – Chesapeake Decisions – to assist in implementing its Strategy Review System that helps ensure effective and efficient partnership oversight of progress toward achieving the 31

outcomes in the Chesapeake Bay Watershed Agreement.

- In 2019, the Manokin River, located in Tangier Sound off the Eastern Shore of Maryland, became the 10th and final tributary to be selected by the

Chesapeake Bay Program for large-scale oyster restoration. Two of the tributaries have already reached their restoration target. The Chesapeake Bay Watershed Agreement calls for the restoration of the native oyster population in 10 tributaries by 2025.



Lucinda Power, Acting Chief of the Chesapeake Bay Program's Science, Analysis & Implementation Branch, won the 2019 Glen Witmer Award – the region's highest honor – for her leadership work on key Bay restoration initiatives.

Three Mid-Atlantic areas officially improve air quality, further protecting public health

EPA and the states in the Mid-Atlantic Region collaborate to improve air quality by striving to meet the National Ambient Air Quality Standards (NAAQS) for each criteria pollutant, and to protect human health. Hundreds of hours of intense collaboration with our state partners over the past year have resulted in the EPA Mid-Atlantic Region redesignating three geographical areas from “non-attainment” to “attainment” of health-based air quality standards. The EPA Mid-Atlantic Region’s Air and Radiation Division and state partners worked on the development and approval of

individual plans to redesignate into attainment of the NAAQS, the Washington, DC area (for ozone) and two areas in Pennsylvania (for particulate matter). Now, not only does air quality in these areas meet federal standards, but all three plans outline how each, respectively, will continue to meet those standards for at least the following decade.

State indoor radon grants are making a difference

EPA provides indoor radon grants to state health and/or environmental departments to run their radon programs. Some of this funding goes toward education and technical support in working with building contractors who

incorporate radon mitigation systems in homes during the building phase, in high risk radon areas. Because of these state indoor radon grants, this past year more than 2,700 new homes in the Mid-Atlantic Region were built with radon resistant construction concepts. By “building better,” both builders and contractors provide a public health service – helping to reduce buyers’ risk of lung cancer from exposure to radon gas indoors.

Applying in-house accounting expertise to remain at the forefront of Title V fee audits

The EPA Mid-Atlantic Region’s Air and Radiation Division took swift and comprehensive action when

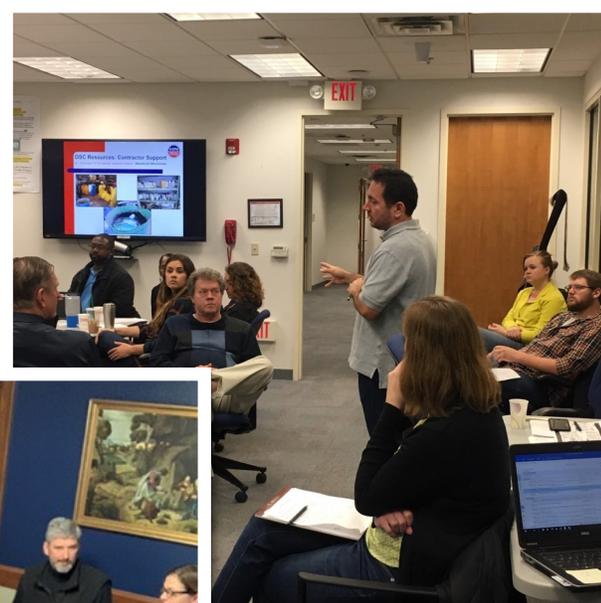


Left: EPA’s Burn Wise Program participating at an expo educating attendees on the importance of burning wood the right way, in an effort protect human health and the environment. **Top Right, Bottom Right, and Middle:** EPA in the field seeing air monitoring in action alongside our partnering state and local agencies.

the EPA Inspector General identified a need for the Agency to increase its oversight of the proper use of state-generated air permit fees as part of the Title V programs. The Title V program is responsible for issuing and monitoring operating permits to major sources of air pollutants, and certain other sources. The Mid-Atlantic Region strategically employed in-house accounting expertise to perform two full accounting audits of Title V programs. Through accounting audits that involved data collection and analysis, meetings with state partners, and report development, the Region identified discrepancies that included improper use of air permits fees. In one instance, the Region was able to apply this information to help a state air program recover \$1 million.

Tackling risk exposure modeling to address ethylene oxide emissions at high risk sources

When questions related to the risks posed by the flammable, odorless gas called ethylene oxide were presented, the EPA Mid-Atlantic Region's Air & Radiation Division took action. This action included working with state partners to swiftly develop targeted risk exposure modeling of this gas from three high risk facilities in West Virginia. The need for this vigorous, revised modeling effort was evident after the 2014 National Air Toxics Assessment (NATA), followed by a 2017 revision to NATA, were



Top and Bottom: These images were taken from the Air and Radiation Division's day of training at the Continuity of Operations building. Training focused on response planning, equipment, and the Regional Response Corps. **Middle:** Meeting with an energy team in Shamokin, PA. EPA presented information on Energy Star for Houses of Worship.

deemed biased due to complex factors including geography of data points. When our state partners requested EPA revisit the data, the Region tackled the issue by incorporating unique meteorological considerations into the modeling to better characterize emissions.

Responding to fire, explosions at Philadelphia refinery

At approximately 4 a.m. on Friday, June 21, 2019, there was a release of harmful vapor in the Philadelphia Energy Solutions (PES) Refinery in southwest Philadelphia. The vapor found an ignition source, causing a fire and multiple explosions that threatened the air quality in the surrounding community.

The EPA Mid-Atlantic Region's Preparedness and Response Branch played an important support role in responding to the incident by working closely with key staff within the PES Refinery site, the city's Office of Emergency Management, Air Management Services and the Philadelphia Fire Department HazMat Unit.

The Region's response effort with other participants demonstrated the vital importance of maintaining robust external partnerships in responding to this and other emergencies. EPA's response support drew on the expertise of the Agency's premier air sampling and air monitoring team, the Region's Duty Officer and On-Scene Coordinator, staff

in the National Response Center, Community Involvement Coordinators, Risk Management

Coordinators, and the Environmental Response Team.

ACCOMPLISHMENTS

- The Mid-Atlantic Region reviewed 131 Clean Air Act Title V Permits from state and local agencies within the 30-day review time. To regulate emissions, all major sources of air pollution are required to have a Title V operating permit. These permits are intended to enhance environmental compliance by detailing for each covered facility all of the emission control requirements to which it is subject.
- The Mid-Atlantic Region conducted three technical systems audits (TSAs). These TSAs consisted of an onsite review and inspection of a monitoring organization's ambient air monitoring program to assess its compliance with established regulations governing the collection, analysis, validation, and reporting of ambient air quality data. Findings from these audits indicated a substantial improvement from prior audits among air agencies along with improved data quality.
- In 2019, the Air and Radiation Division finalized 39 State Implementation Plans for air quality in the Mid-Atlantic area. EPA staff incorporated a new process under the ELMs system that ensured more expediency in tracking these plans from draft to final rule making.

Getting Potential Responsible Parties to Pay for Environmental Cleanups

EPA prefers to reach settlement agreements with potentially responsible parties to clean up Superfund sites rather than issuing unilateral orders or paying for the cleanups and recovering costs later.

Settlement agreements under the Comprehensive Environmental Response, Compensation, and Liability Act must be within the public interest and consistent with the National Contingency Plan.

For 2019, EPA's Mid-Atlantic Region reached settlement agreements at five sites yielding combined \$78.million:

settlement totals of more than \$78.3 million:

- Atlantic Wood Industries (\$55.3 million)
- Lower Darby Clearview Landfill (\$8.4 million)
- Avtex Fibers (\$4.33 million)
- Sharon Steel Farrell Works (\$9.6 million)
- Sharon Steel Fairmont Coke Works (\$250,000)

Settlement for Lower Darby Creek Area Site recovers cleanup funding

EPA's Mid-Atlantic Region and the City of Philadelphia Redevelopment Authority entered into a Consent Decree

under which the City and the Redevelopment Authority will pay EPA \$8.4 million in past and future costs related to the Clearview Landfill portion of the site.

The settlement funds have been placed in a special account to help pay for the cleanup, which is currently underway.

Antero Resources Corp. Settles Clean Water Act Wetlands Case

In May, a federal district court approved a federal-state consent decree with Antero Resources Corporation, resolving alleged Clean Water Act violations at 32 sites in West Virginia where Antero constructed facilities and structures associated with Marcellus Shale natural gas extraction operations.



Left: EPA Remedial Project Manager Josh Barber gives a tour to local, state, and federal partners on the cleanup progress at the Lower Darby Creek Area Site. **Right:** This image shows recent cleanup activities at the Lower Darby Creek Area Site.

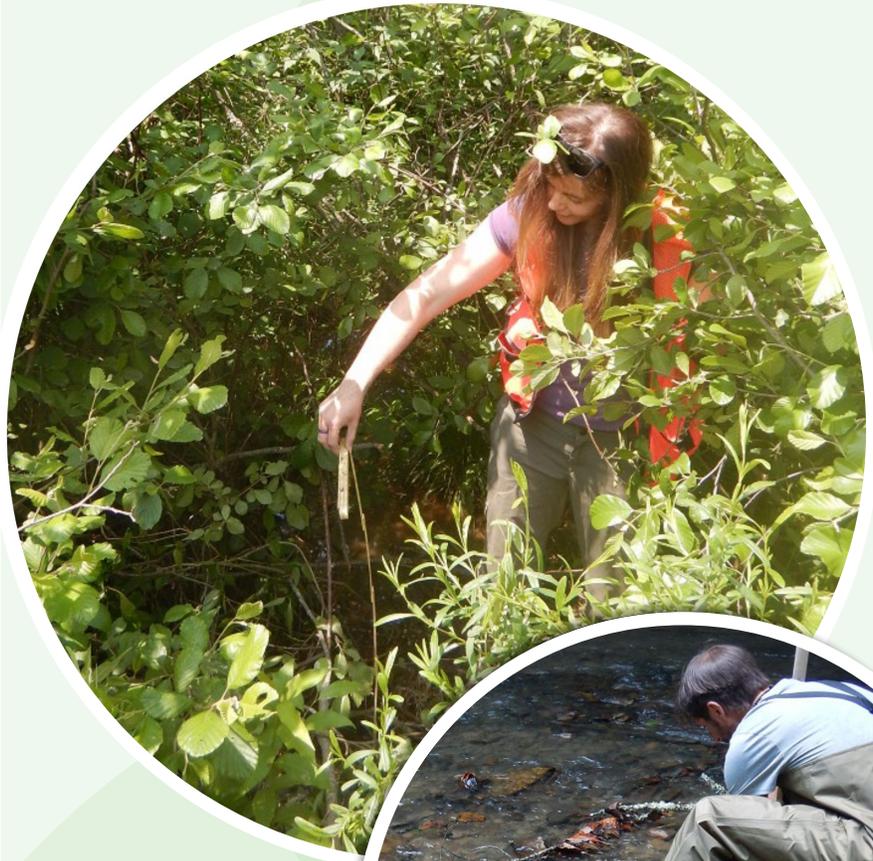
The alleged violations included stream impoundments; filling wetlands and streams, and deposit of dredged and fill material into wetlands -- impacting nearly 20,000 feet of streams and over four acres of wetlands.

Antero disclosed violations at 15 of these sites through a self-audit that was part of the settlement agreement. As part of the settlement, Antero agreed to pay a \$3.15 million penalty, and perform \$8 million in wetlands and stream restoration and mitigation work.

EPA settlement with Chambersburg chemical manufacturer enforces pesticide safeguards

In an October administrative settlement, AFCO C&S, LLC, a chemical manufacturer in Chambersburg, Pennsylvania, agreed to pay a \$1,489,000 penalty to settle alleged violations of federal pesticide regulations involving products used in the cleaning and sanitizing of food and beverage processing facilities.

EPA cited AFCO for violating the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), a federal law requiring the registration of pesticide products and pesticide production facilities, and the proper labeling of pesticides. FIFRA's requirements protect public health and the environment by ensuring the safe production, handling and application of pesticides; and by preventing false, misleading, or unverifiable



Top: Enforcement and Compliance Assurance Division (ECAD) inspectors measure depth of fill material placed in wetland from the natural wetland elevation to determine how much material needs to be removed to restore Waters of the United States. **Bottom:** Collecting samples during an inspection to evaluate the quality of stream habitat following the removal of unpermitted dams.

product claims.

Landmark agreement to reduce Volatile Organic Compounds (VOC) emissions

When EPA learned that a

company that processes and ships natural gas and crude oil, MPLX, MarkWest Liberty, was in violation of the Clean Air Act due to unacceptable VOC emissions, EPA's enforcement team acted.

EPA's end product was a consent decree with the company that will reduce VOC emissions at 20 gas processing plants in Pennsylvania, West Virginia, Kentucky and Texas.

This landmark settlement requires the company to upgrade controls, correct permits, and implement leak detection and repair programs. Thousands of tons of VOCs are emitted annually due to noncompliance with the Clean Air Act, which is why this settlement has far-reaching impacts.

Looking to the future, MPLX MarkWest has agreed to conduct a supplemental environmental project to monitor VOCs upwind and downwind of plants in Pennsylvania, West Virginia, Kentucky and Texas -- a true testament to the good that is gained when federal government works with stakeholders to develop sustainable solutions.

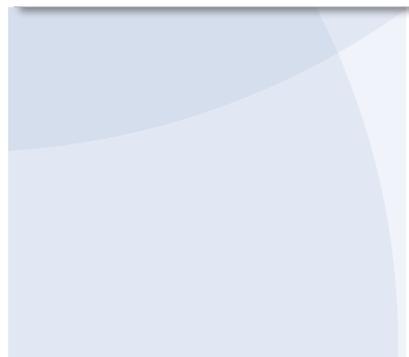
DoD, Navy Agree to Pay Nearly \$64 M in Settlement of Cleanup Liability at Atlantic Wood Industries (AWI) Superfund Site in Portsmouth, Va.

In a federal-state settlement finalized in March, the U.S. Department of Defense (DoD) and the Department of the Navy agreed to pay nearly \$64 million to resolve their potential liability for cleanup costs at the AWI site Superfund Site in Portsmouth, Virginia.

In the consent decree with the United States and Commonwealth of Virginia, DoD and the Navy

and \$8.5 million to Virginia for past and future cleanup costs and pay Virginia \$91,000 for natural resource damages. As part of the settlement, DoD and the Navy

will fund a \$1.5 million oyster restoration project to be implemented by Virginia in the Elizabeth River. Under the settlement, the site owner and



Top: Enforcement and Compliance Assurance Division (ECAD) inspector testing for Volatile Organic Compounds in a regulated facility. **Middle:** ECAD inspections ensure that items such as this large collection of drums and containers are properly labeled and stored to ensure both the safety of facilities' employees and the health and safety of the surrounding communities. **Bottom:** EPA and Virginia enter a Consent Decree to address cleanup costs at the AWI site.

operators, Atlantic Wood Industries and Atlantic Metrocast, will pay EPA and Virginia \$250,000.

The AWI site, the former location of a wood treating facility, includes 50 acres and more than 30 acres of river sediments. The cleanup plan includes construction of an offshore sheet pile wall; dredging with consolidation and capping of contaminated sediment; excavation or on-site treatment of contaminated soils; monitoring natural attenuation of ground water and natural recovery of contaminated sediments; and land-use controls.

Region Settles with American Refining Group over Clean Air Act Violations

In October 2019, the EPA Mid-Atlantic Region settled alleged Clean Air Act violations by American Refining Group, Inc. (ARG) at ARG's petroleum refinery in Bradford, Pennsylvania. In an administrative consent agreement, ARG agreed to pay a \$350,000 penalty along with \$4.5 million in equipment improvements that were completed prior to the final settlement.

These improvements will substantially reduce air emissions from the facility. EPA cited ARG for several violations, including noncompliance with several terms of the refinery's operating permit that was issued by the Pennsylvania Department of Environmental Protection. This settlement considered ARG's prior compliance efforts, including the

ACCOMPLISHMENTS

- The EPA Mid-Atlantic Region's enforcement accomplishments in 2019 included: completing more than 1,600 compliance evaluations; settling more than 100 administrative enforcement actions; and negotiating more than 12 judicial settlements. Collectively, more than \$36 million of actions were completed to ensure facilities were back into compliance. Actions reduced, eliminated or prevented the release of more than 16.6 million pounds of air emissions and water pollution, cleaned up more than 400,000 cubic yards of soil and water, and prevented the release of more than 5,000 pounds of hazardous waste and more than 9 million gallons of oil/gasoline products.
- The EPA Mid-Atlantic Region drafted enforcement Memoranda of Agreements (MOAs) with its states to more effectively carry out shared responsibilities in assuring compliance with environmental laws. MOAs define roles and responsibilities and outline the terms of the EPA/State relationship in the implementation of enforcement related policies, programs, and projects. This effort complements EPA's collaboration with the Environmental Council of the States.
- EPA's Mid-Atlantic Region successfully defended in West Virginia federal district court, EPA's position denying a \$2.6 million claim against the Superfund by August Mack Environmental Inc. The matter was a case of first impression involving numerous novel and difficult issues including preauthorization under Superfund and the Paperwork Reduction Act.
- In October 2019, the EPA Mid-Atlantic Region hosted a meeting of senior environmental lawyers from all six Mid-Atlantic Region jurisdictions, discussing: significant state and federal legal developments; federal/state cooperation and collaboration; Clean Air Act and Clean Water Act regulatory matters; and cleanup issues and roundtable discussions on law/policy and practice/management matters.

replacement of a coal-fired boiler and an associated fuel gas recovery system. The new \$4.5 million boiler may reduce

sulfur dioxide emissions by 567 tons per year and emissions of particulate matter by 9 tons per year.

Milestone Reached in Federal Geographic Lead Initiative

The Land, Chemicals and Redevelopment Division sponsored the Mid-Atlantic Lead Forum in October 2019 in Hunt Valley, Maryland – the first milestone in the Region's Federal Geographic Initiative to Reduce Childhood Lead Exposure. The forum, in support of the National Lead Initiative and the December 2018 Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts, was a collaborative step in combined efforts to reduce childhood lead exposure, especially in communities with populations

vulnerable to lead exposure. The forum brought together federal and state entities and city and community representatives from select cities in EPA's Mid-Atlantic Region, catapulting the next phase of this effort. Through continued engagement with the partner cities, as well as relationships with additional cities to reduce childhood lead exposure, the Mid-Atlantic Region is able to have a greater impact on communities with lead exposure issues.

Nature Preserve Opens at former Superfund Site

Commemorating the 20th Anniversary of the Superfund

Redevelopment Initiative, the EPA Mid-Atlantic Region's Superfund Redevelopment Team presented an Excellence in Site Reuse Award to the Heritage Conservancy for its work in opening the Croydon Woods Nature Preserve at the Croydon TCE Superfund Site in Bucks County, Pennsylvania.

Regional Administrator Cosmo Servidio also presented SRI certificates of appreciation to the Pennsylvania Department of Conservation and Natural Resources, Keystone Elementary School, and the Bucks County Commissioner for their support in the redevelopment effort.



Top Left and Right: EPA Administrator Andrew Wheeler joins Regional staff at Mid-Atlantic Lead Forum.

Bottom Left and Right: Regional Administrator Cosmo Servidio presenting an EPA Reuse award to a Nature Preserve at a redeveloped Superfund site. EPA was joined by our local and state partners.

Watson Johnson Landfill Cap Completed

The Region's Superfund and Emergency Management Division celebrated the 2nd Anniversary of the Superfund Task Force by highlighting the collaborative relationship between EPA, the Pennsylvania Department of Environmental Protection, Richland Township, and the Quakertown community at the Watson Johnson Landfill Superfund Site. In 2019, the team completed an important step in the cleanup process with the completion of a protective landfill cap at the site.

EPA Supports States, D.C. in Bay Watershed Plans

EPA's Mid-Atlantic Region helped the six Chesapeake Bay watershed states and the District of Columbia take the next steps in their plans to improve local waters and restore the Chesapeake Bay.

In 2019, the Chesapeake Bay Program Office and the Water Division reviewed draft and final Watershed Implementation Plans submitted by the states and the District – the third and final set of plans to reach 2025 pollutant reduction targets. The EPA team identified strengths as well as potential for enhancements in the draft plans, and in December completed its evaluation of the final plans.

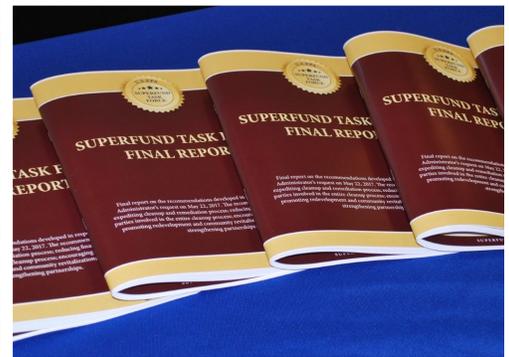
EPA and the Bay jurisdictions also provided nearly \$600,000 for three projects to further a separate Watershed Implementation Plan to account for pollutants no longer



Before



After



Top Left and Bottom Right: Regional Administrator Cosmo Servidio, alongside local and state partners, presented at the Superfund Task force Anniversary Celebration Event, highlighting the work at the Watson Johnson Landfill Superfund Site. The Superfund Task Force Final Report was publicly available at the event. **Top Right and Bottom Left:** These are before and after images of the landfill cap installation work at the Watson Johnson Landfill Superfund Site.

being trapped in the reservoir behind the Conowingo Dam. The projects will help develop the implementation plan, design a financing strategy, and track progress.

EPA and its federal partners continued to provide considerable financial and technical support to the Bay watershed jurisdictions to back their efforts – from agricultural best management practices to stormwater control.

Environmental Tribal Summit Convened

EPA's Mid-Atlantic Region recently saw the addition of seven federally-recognized Indian tribes: the Pamunkey Indian Tribe, Chickahominy, Eastern Chickahominy, Upper Mattaponi, Rappahannock, Nansemond and Monacan. To embrace the new relationship with our tribal partners, EPA convened an Environmental Tribal Summit with six of the seven tribes

participating.

The summit included an environmental Open House that involved 14 state, federal and academia organizations. The Region facilitated four meetings with the tribes to provide consultation on Virginia's impaired waters and a proposed remediation plan for a Superfund site. Two of the seven Indian tribes have already received General Assistance Program Grants of \$110,000 each.

Chemical Leak Stabilized

EPA worked with state, county and local partners in responding to a nitric acid release at the Bulk Chemicals, Inc. facility in Shoemakersville, Perry Township, Pennsylvania. The Preparedness and Response Branch of the Region's Superfund and Emergency Management Division conducted significant emergency response activities alongside state and local partners: the Shoemakersville Fire Company, Berks County Department of Emergency Services, and the Pennsylvania Department of Environmental Protection. The response team was able to stabilize conditions at the facility.

Engaging Partners in Improving Lands, Water

A glance at the project summaries is all you need to appreciate how the Chesapeake Bay Stewardship Fund is helping communities improve their local waters and lands – and ultimately the Bay:

- Assistance to seven townships in Pennsylvania with barnyard improvements, stream-side buffers and manure storage to manage agriculture runoff.

- Outdoor classroom construction in Prince George's County, Maryland, engaging teachers, students and building supervisors



Top: Regional Administrator Cosmo Servidio participates in the Environmental Tribal Summit. **Middle:** These images show EPA's response to a nitric acid release. **Bottom:** EPA and the National Fish and Wildlife Foundation announced nearly \$12.7 million in grants for local restoration projects in the Chesapeake Bay watershed.

in stormwater management.

- Eastern oyster restoration in the Western Branch of the Lynnhaven River in Virginia.

Throughout the list of 47 projects, you can see how the Stewardship Fund is engaging farmers, homeowners, churches, businesses and municipalities in efforts to improve water quality and restore habitat across the Chesapeake Bay watershed.

The Stewardship Fund is a partnership between EPA and the National Fish and Wildlife Foundation. EPA provided \$9.7 million of the nearly \$12.7 million awarded in 2019, attracting almost \$21 million in matching contributions.

The grants were announced in Baltimore County, where the Gunpowder Valley Conservancy received an award to expand its Clear Creeks Project. The \$200,000 grant will allow the group to provide discount funding for “Bay-Wise” practices that reduce stormwater, such as rain barrels, rain gardens and stream cleanup events.

Outreach to the Agriculture Community

EPA Regional Administrator Cosmo Servidio continued in 2019 to reach out to the agriculture community to hear from farmers about the successes and challenges to producing food and having a clean environment and to find ways to work effectively together.

In 2019, the Region reached out to over 1,400 members of the agricultural community through farmer roundtables, educational farm tours, field days, and meetings with leadership from agricultural organizations and federal/state agriculture

agencies.

Green Streets Grants Provide Avenues to Success

Green Streets, Green Towns, Green Jobs (G3) grants for 2019 were announced in a park-like setting along the Susquehanna



Top: Regional Administrator Cosmo Servidio and Kelly Shen, EPA's Regional Agriculture Advisor, participate in a community event on Agriculture. **Bottom:** Communities and organizations received nearly \$1 million in grants from the Chesapeake Bay Green Streets, Green Jobs, Green Towns (G3) program sponsored by EPA and the Chesapeake Bay Trust.

River in Marietta, Pennsylvania, where winning applicants talked about how their awards would help them control stormwater and otherwise improve their communities.

EPA and the Chesapeake Bay Trust have been providing the G3 grants for nine years, helping communities design and build projects that offer multiple environmental, economic and quality of life benefits. The funds – nearly \$9.4 million since the program's inception – have been matched locally by about 2-1.

The 2019 grants alone are expected to support more than 200 green jobs and reinforce one of EPA's top priorities – improving water infrastructure.

In Marietta, the town's mayor, Harold Kulman, described how grant-funded stormwater improvements will create jobs, beautify the downtown area and reduce pollution to the Susquehanna – the largest source of freshwater to the Chesapeake Bay.

Others related that in Baltimore, they're turning hard vacant lots into absorbent green spaces. In Martinsburg, West Virginia, they're designing green features to prevent flash flooding. And on the Eastern Shore in Cambridge, Maryland, they're redoing a parking area so that rain soaks in rather than runs off into sewers carrying pollutants into waterways.

EPA sampling team works with state, local governments to sample for PFAS

When the West Chester Municipal Authority in Pennsylvania discovered elevated levels of PFAS in drinking water, officials there reached out to the EPA Mid-Atlantic Region for assistance, and the Region swiftly put a team into action to create a comprehensive sampling plan.

Within weeks, this team of experts collected samples of surface water, industrial wastewater, treated sanitary wastewater, and drinking water. These samples provided critical data that would ultimately empower West Chester and the Pennsylvania Department of Environmental Protection to take steps to ensure public health was protected.

ACCOMPLISHMENTS

- The Region's College/Underserved Community Partnership Program initiated two partnerships – one involving the Pennsylvania Department of Environmental Protection's Office of Environmental Justice, the City of Nanticoke, Pennsylvania, and Misericordia University, and the other with the College of Business & Public Management at West Chester University.
- The Region's Environmental Education Program awarded grants to the Living Classrooms Foundation in Baltimore (\$60,000), Friends of the Rappahannock (\$100,000), and Parks & People Foundation, Inc. (\$60,000) in addition to \$13,000 from the Children's Health Program.
- The Laboratory Services and Applied Science Division provided a wide array of technical and analytical services to partners in 2019. By the numbers:
 - ⇒ 3,632 analyses were performed by EPA's Mid-Atlantic Region laboratory and 928 data packages were validated.
 - ⇒ 97 streams, lakes and other aquatic resources sites were sampled and/or monitored.
 - ⇒ 181 samples were collected and evaluated during two ocean surveys of dredged disposal sites.
 - ⇒ 31 multi-faceted GIS/data analytics products that integrate a variety of services were developed, including cartography, data processing, advanced analytics.