

# DoD CHESAPEAKE BAY PROGRAM JOURNAL

Edited by the DoD Chesapeake Bay Program Team

PROTECTING THE CHESAPEAKE BAY FOR MILITARY READINESS, FOR OUR COMMUNITY, FOR FUTURE GENERATIONS



## Navy Climate Resilience Funding and Contract Support

By Kevin Du Bois, Department of Defense (DoD) Chesapeake Bay Program (CBP)

As part of its approved Fiscal Year (FY) 2023 Climate Installation Physical Resilience spend plan, the Department of the Navy (DoN) has approved 14 projects in the Chesapeake Bay watershed, at Naval Support Activity (NSA) Bethesda, Naval Weapon Station (NWS) Yorktown, Naval Air Station (NAS) Patuxent River, Naval Support Facility (NSF) Dahlgren, NSF Indian Head, NSF Carderock, and NSA Annapolis. The projects provide for stream restoration, tidal shoreline erosion protection and stabilization, and listed species habitat restoration. To facilitate execution of these projects, DoN installations should be aware that Naval Facilities Engineering Systems Command (NAVFAC) Atlantic has an existing Indefinite Delivery/Indefinite Quantity (IDIQ) contract for mission sustainment and coastal resilience environmental planning services. The contract is designed to provide timely and vital professional services that will support the study and implementation of mission sustainment and coastal readiness measures, including hardened structures and green infrastructure that will ensure Navy and Marine Corps readiness of installations, ranges, and operation areas.



Services may include technical support for coastal resilience planning, climate adaptation services, master planning, installation development planning, encroachment and conservation planning, and Installation Natural Resource Management Plan (INRMP) and Integrated Cultural Resources Management Plan (ICRMP) support. Scopes of Work related to the DoD CBP can include:

- Mission Sustainment and Readiness Services
- Coastal and Riverine Enhancement and Restoration
- Adaptation Action Alternatives/Green Infrastructure Planning
- Risk and Vulnerability Assessment
- Modeling and Analyses Services for Coastal Resiliency
- Economic Analyses for Resilience Planning, Adaptation Alternatives, and Valuation of Natural Resources
- Ecological Studies and Surveys
- Weather Related Services
- Landscape Conservation Services, Regulatory Permitting, Biological Consultation and National Environmental Protection Act
- Spatial Data Acquisition, Optimization, Integration, Conversion, and Management Services
- Specialized Services Related to Wildland Fire Management

To date, there have been 20 total task orders awarded on this contract for a total of approximately \$6 million (M). Of these task order awards, 11 have been awarded using environmental compliance funds, and 9 have been awarded using facilities planning funds. There is approximately \$12M of remaining capacity on the IDIQ contract, and the contract expiration date August 9, 2024. This contract was designed to be a shared contract between Asset Management (Planning) and Environmental, and the overall task order awards are aligned almost perfectly to that climate-related execution plan. For more information on the IDIQ contract, please contact [david.m.james@navy.mil](mailto:david.m.james@navy.mil).

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# Commander’s Corner: Resources for Effective CBP Information Transfer to Commanding Officers

By Elizabeth Karivelil, Brown and Caldwell

Installation Chesapeake Bay Program activities integrate a wide range of environmental initiatives, including implementing best management practices (BMPs) to reduce stormwater pollution and provide other co-benefits, conducting projects aimed at the conservation and restoration of natural resources, building climate resilience, and contributing to the protection of plant and animal species on DoD lands. For Commanding Officer (CO) awareness, installation environmental leadership and staff are expected to identify and routinely communicate environmental requirements and commitments, progress and planned activities to achieve interim and long-range targets, and challenges to attaining goals.

The DoD CBP routinely develops and releases several outreach materials to facilitate regular information exchange between installation environmental leadership and COs. This includes the quarterly DoD CBP Journal, quarterly fact sheets, and the Annual Progress Report. Past DoD CBP materials can be found online at: <https://www.denix.osd.mil/chesapeake/>.

**Journal.** The quarterly DoD CBP Journal includes articles that highlight installation success stories and technical topics relevant to DoD environmental staff. Each Journal also includes a Commanders’ Corner article with highly pertinent information selected specifically for COs.

**Fact Sheets.** The quarterly fact sheets provide a concise two-page resource on a Chesapeake Bay-related topic. Recent examples of fact sheet topics include the updated Commanders’ Guide to the Chesapeake Bay, which can be found at: <https://denix.osd.mil/auth/chesapeake/dod-cbp-chesapeake-bay-action-team-cbat/training-and-guidance-documents/>.

**DoD CBP Annual Progress Report.** The DoD CBP Annual Progress Report, which is released each spring, highlights installation projects and DoD accomplishments across the Chesapeake Bay watershed in a polished document that can be shared with COs and non-DoD partners.

**Installation Chesapeake Bay Program Status Reports.** In 2019, the DoD CBP launched a pilot program to summarize installation-level CBP data in a two-page status report that could be used for both internal and external communication. The status reports included a standard list of metrics for each installation, which are included in Table 1. However, the DoD CBP team received feedback from participating installations that the chosen metrics did not accurately characterize the breadth of installation activities due to variability in landcover or mission requirements and that a more customized approach would provide greater utility.

**Table 1. 2019 Pilot CBP Status Report Template Sections**

Metric Name	Description of Metric
Expenditures for Chesapeake Bay-related Projects	Provides a breakdown of DoD funds that contribute to the goals of Executive Order (EO) 13508 by fiscal year
Expenditures for Best Management Practices	Charts reported BMP investment from 2015 to 2020 and planned BMP investment through 2025, as reported in the annual datacall
BMPs credited in the Chesapeake Assessment Scenario Tool (CAST)	Represents BMPs credited toward pollution reduction goals and the number of BMPs that require corrective action to be credited in CAST
BMP Inspection and Maintenance Activity	Includes metrics that describe the number of BMPs inspected and maintained and the number of BMPs needing inspection and/or maintenance
BMPs with Natural Resource and Climate Resilience Co-Benefits	Presents number of BMPs with natural resource or climate resilience co-benefits
Implementation of BMPs in the Fill Gap Strategy	The Fill Gap Strategy expressed each installation’s contribution to DoD’s Federal Planning Goals as BMP implementation. This section shows the remaining implementation needed by the installation
Citizen Stewardship	Highlights the number of stewardship events and participating volunteers

In response, the DoD CBP team is developing two new outreach materials. The first is a fact sheet listing a comprehensive set of CBP metrics that can be extracted from the annual installation datacalls. The second is a PowerPoint template with sample slides and infographics that can be customized into a status report that meets installation needs. Expected in late spring, 2023, these materials should serve as a ready and powerful tool to track installation CBP status and inform COs about the many ways their environmental staff are helping to protect and restore the Chesapeake Bay.



# Natural and Nature-Based Features to Build Resilience

By Elizabeth Karivelil, Brown and Caldwell

Rising sea levels and intense rain events create storm driven flood events, making flooding a widespread issue for coastal and inland communities. For DoD personnel, flooding events can harm mission readiness by impacting access to DoD facilities or the availability of resources to conduct routine training and testing activities. A study conducted by the Virginia Institute of Marine Science (VIMS) provides one example of how natural and nature-based features (NNBFs) can be implemented to protect against flooding if placed at strategic locations along the coast. In this example, the Adapt VA Interactive Map was used to identify opportunistic locations for NNBFs, but similar methods could be used throughout the Bay watershed. For military installations, environmental staff can identify NNBF projects that can contribute to Integrated Natural Resource Management Plan or Sikes Act objectives and Chesapeake Bay Total Maximum Daily Load (TMDL) goals or municipal separate storm sewer system permit requirements.

## Why Choose NNBFs for Climate Resilience?

Existing natural features, such as dunes, forests, riparian buffers, and wetlands, provide climate resilience co-benefits and sequester carbon to buffer against the effects of future climate conditions. They also provide numerous ecosystem services for water quality and natural resources; protection or enhancement of natural features will ensure these benefits will persist over time. Nature-based features can be specifically designed and installed to protect against storm effects; however, in contrast to many hard structures, they can also be built to augment and mimic the benefits provided by naturally occurring ecosystems. Meeting multiple installation objectives and regulatory requirements related to water quality, natural resources, climate adaptation, and carbon sequestration is a wise use of DoD's limited staff, land, and fiscal resources.

## Research Methodology and Results

The VIMS researchers' study area included sections of the Virginia coastal zone up to an elevation of 10 feet based on the North American Vertical Datum of 1988 (NAVD 88). The goals of the analysis were to rank existing NNBFs based on their benefits for climate resilience and identify opportunities for nature-based projects that may maximize those benefits. Existing land and shoreline NNBFs selected for the assessment included non-tidal wetlands, living shorelines, tidal marshes, and wooded features. The researchers used elevation contours to identify Inundation Pathways (IPs) that show the flow of water from tidal waterways to inland buildings and then identified existing NNBFs along the flow path. Based on existing scientific literature, those NNBFs are assumed to provide some protection to the upstream buildings from coastal flooding. The researchers ranked the benefits of existing NNBFs based on the following criteria:

- **Flood mitigation benefits:** Determined based on the NNBF's flood mitigation ability (see Table 1 below) and elevation along the IP. These two factors were used to estimate the likelihood of a building flooding.
- **Number of buildings:** Defined as the number of the buildings protected by NNBFs.
- **Types of buildings:** Determined by whether the protected building is a facility used for immediate emergency response such as law enforcement buildings, medical facilities, educational facilities, places of worship, and airports.
- **Other co-benefits:** Assessed by whether the NNBF provides co-benefits for water quality improvement toward the Chesapeake Bay TMDL.

**Table 1. Scoring to describe NNBFs' flood mitigation ability based on permeability, surface roughness, and vegetation roughness.**

Feature Type	Permeability (out of 3)	Surface Roughness (out of 3)	Vegetation Roughness (out of 3)	Total (out of 9)
Beach	3	1	0	4
Dune	3	2	2	7
Wooded	3	2	3	8
Scrub-Shrub	3	3	3	9
Non-Tidal Forested Wetlands	2	3	3	8
Non-Tidal Scrub-Shrub Wetlands	2	3	3	8
Non-Tidal Emergent Wetlands	2	3	2	7
Tidal Marsh	2	3	2	7
Hybrid Living Shoreline: Marsh Sill	0	3	0	3
Hybrid Living Shoreline: Oyster Sill	0	3	0	3
Hybrid Living Shoreline: Breakwater	0	3	0	3





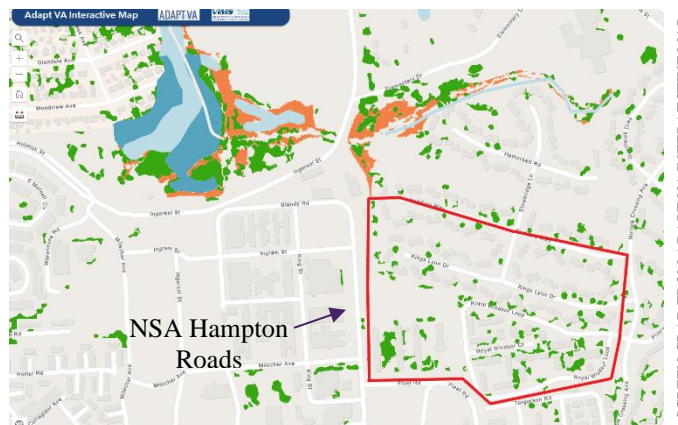
After the analysis of existing NNBFs, researchers recommended potential new NNBF implementation locations for enhanced flood mitigation by identifying shoreline locations along IPs where there were no NNBFs. Researchers noted shoreline locations are more likely to maximize benefits compared to upland locations. Additionally, the Center for Coastal Resources Management Shoreline Management Model, which is focused on shoreline practices, was used to recommend one of six shoreline BMPs: non-structural living shoreline, plant marsh with sill, groin field with beach nourishment, maintain beach or construct offshore breakwater with beach nourishment, revetment, and revetment/bulkhead toe revetment. In the Adapt VA Interactive Map, these shoreline BMPs are within the Shoreline Management Model v5.1 layer of the Shoreline Management layer group. It is important to note that the evaluation of NNBF opportunities only evaluated shoreline locations and BMP types; upland opportunities were not considered.

### Applicability for Virginia Installations

The information presented in the study can be used by Virginia installations to select and map potential projects to increase climate resilience and potentially satisfy multiple Chesapeake Bay restoration and INRMP goals. Particularly, it could be used in projects aimed at building coastline resilience while providing natural resource and water quality co-benefits. It is important to note that installations should further evaluate project locations for feasibility, mission compatibility, and relevant benefits.

### Transferability Beyond Virginia

In addition to the interactive map, VIMS developed fact sheets about 10 different NNBF types and their benefits. Installations outside of Virginia may use the fact sheets for reference when assessing if NNBFs are viable options within their local context. Moreover, repeating the procedures in the study could allow installations outside Virginia to create a map of local NNBF opportunities. Installations may need assistance from a contractor or academic partner to perform the analysis to identify the ideal location to implement NNBFs. The technical partner could also help expand the types of NNBFs considered beyond just shoreline locations and BMPs into upland areas where more resilience benefits may be achieved. Table 2 summarizes partnership opportunities and funding sources for projects, depending whether the proposed location of the NNBF to protect DoD assets or critical infrastructure is on- or off-base.



Adapt VA Interactive Map shows restoration opportunities (orange features) surrounding a portion of the NSA Hampton Roads base (outlined in red). NNBFs pictured include wetlands (blue features) and upland wooded area (green features).

**Table 2. Potential opportunity locations, partners, and funding sources to repeat study procedures for installations outside Virginia.**

Opportunity Locations	Partners	Funding Sources
On DoD Property	Installation Natural Resource Managers, Stormwater Subject Matter Experts, Planners	Legacy Grants, Operation and Maintenance Funds, and Emerging Climate Resilience Funding
Off DoD Property	Private Landowners, Adjacent Defense Communities, Non-Governmental Organizations, Other Federal and State Agencies, Academics	Office of Local Defense Community Cooperation (OLDCC) Compatible Use Plan (CUP) and Military Installation Resilience (MIR) Studies, Readiness and Environmental Integration Program (REPI) including the Sentinel Landscape Partnership Program, Defense Community Infrastructure Program (DCIP), Federal Grant Opportunities (Building Resilient Infrastructure and Communities, etc.)

### Takeaways for DoD Installations

A diverse suite of natural and nature-based features can work together to protect and enhance valuable ecosystem services, build climate resilience, and improve water quality. The Adapt VA Interactive Map or a similar analysis can help identify locations for new NNBF implementation within inundation pathways that protects valuable assets from coastal flooding. Combined with installation staff knowledge of approved BMPs for the Chesapeake Bay TMDL and their installation’s INRMP objectives, NNBFs can provide an effective use of the installation’s limited resources to meet multiple mission objectives.

### For More Information

VIMS, “Increasing Use of Natural and Nature-Based Features to Build Resilience to Storm-Driven Flooding” paper:

<https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=3827&context=reports>

VIMS, “Adapt VA Interactive Map” web map: [https://cmap22.vims.edu/AdaptVA/AdaptVA\\_viewer.html](https://cmap22.vims.edu/AdaptVA/AdaptVA_viewer.html)

VIMS, “Nature-Based Solutions” fact sheets: [https://www.vims.edu/ccrm/research/climate\\_change/adaptation/nbnbs/index.php](https://www.vims.edu/ccrm/research/climate_change/adaptation/nbnbs/index.php)

# Success Story: Big Bethel Reservoir Swamp Forest Preservation

By Elizabeth Karivelil, Brown and Caldwell with information provided by Alicia Garcia, JBLE-Langley

Discovery of the invasive emerald ash borer (EAB) in the United States in 2002, has led to new efforts to safeguard America's unique and important ash trees<sup>1</sup>. EAB causes ash trees to lose most of their canopy within 2 years of infestation and is generally fatal to more than 90% of trees within 5 years. On June 20, 2022, Joint-Base Langley-Eustis (JBLE) staff discovered the presence of EAB around a 67-acre forested swamp located upstream of the Big Bethel Reservoir. Approximately 25% of the forested tree canopy consists of pumpkin ash and green ash trees, both of which are at risk of elimination from the EAB infestation. The loss of this forested wetland would threaten existing water quality benefits and the habitat, climate resilience, and other ecosystem services the swamp provides, which also contribute to EO 13508, 2014 Chesapeake Bay Watershed Agreement, and Chesapeake Bay TMDL goals and objectives.

## A Dual Strategy to Save the Ash Trees

JBLE-Langley partnered with the Virginia Department of Forestry (VDOF) to combat EAB infestation and used two methods to address the problem. Initially, a systemic Mectinite insecticide treatment was used on 20 pumpkin ash trees. These trees will be retreated biannually to preserve the genetic diversity of the forest population, especially since pumpkin ash is likely to become critically endangered within the next 10 years. Funds from Air Force Civil Engineer Center were utilized to purchase chemicals and equipment related to treatment with manpower to complete the insecticide application provided by VDOF and JBLE-Langley.



PHOTO BY ALICIA GARCIA, JBLE-LANGLEY

Ash tree tissue damage typically associated with emerald ash borer at JBLE-Langley's Big Bethel Reservoir.



PHOTO BY CECILIA BOYD, JBLE-LANGLEY

Molly O'Liddy from VDOF works with Pablo Fitzen, an Air Force civilian with the 633 Civil Engineer Squadron's Pest Management Team, to treat pumpkin ash trees with insecticide.

For the remaining trees, a biocontrol release was planned to suppress local EAB populations. Larvae of a non-stinging parasitoid wasp population were released on the ash trees to prey on the EAB larvae. Research and implementation of this procedure was done in accordance with VDOF and USDA standards. The wasp species was supplied by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service and Plant Protection and Quarantine EAB Parasitoid Rearing Facility with funds from VDOF. JBLE has also banked seeds from the ash trees, allowing for the preservation of their unique genes that could support future species recovery efforts in case these efforts are not successful.

## Recognizing the Ash Tree's Value for the JBLE Ecosystem

Preserving the swamp's forest cover and population diversity protects its capacity to naturally filter stormwater pollutants from the City of Hampton, the City of Newport News, and York County. In addition to the water quality benefits, preservation of ash tree also sustains biodiversity within the swamp and surrounding ecosystems. Therefore, combatting this invasive species means fighting to preserve a range of environmental benefits the forested wetlands provide. For more information about this project, please contact Alicia Garcia at [alicia.garcia.4@us.af.mil](mailto:alicia.garcia.4@us.af.mil).

<sup>1</sup> USDA Animal and Plant Health Inspection Service - Emerald Ash Borer, 05 January 2023. <https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/pests-and-diseases/emerald-ash-borer>





# Success Story: Arlington National Cemetery Stream Restoration

By Stacey Rosenquist, ANC

Arlington National Cemetery (ANC) grounds honor those who have served our nation and provide a sense of beauty with its perfect rows of marble headstones, peaceful views, and graceful trees. In recent years, ANC has strategically implemented many stormwater BMPs to add ecological richness and diversity to ANC's beautiful and historic grounds. These BMPs include restoration of a highly eroded stream, establishment of a riparian protection area, construction of beautiful and effective rain gardens, and installation of permeable walkways. Together, they demonstrate the Army's strong commitment to the goals and outcomes of EO 13508 and the 2022 Army Climate Strategy. This article highlights one project that demonstrates the benefits of inspection, maintenance, and retrofit to maintain its ecological and flood mitigation benefits into the future.



PHOTOS BY STACEY ROSENQUIST, ANC

*(Left) Excess sediment and debris inhibited stream flow, and lack of bank stabilization allowed for erosion upstream of the trash screen at Ord & Weitzel Drive. (Right) Removed sediment and debris, reconstructed stream plunge pools, and stabilized stream banks allow improved flow of water.*

As part of a cemetery expansion project completed in 2018, ANC restored 1,900 linear feet of Millennium Stream in 2013. This stream traverses ANC's riparian protection area passes under interment sections, and flows through its historic boundary wall, eventually discharging into the Potomac River. This restoration project focused on debris removal, slope stabilization, and habitat improvement along the stream channel. While these actions improved the natural landscape, it also helped ANC achieve compliance with the Clean Water Act, Virginia's Chesapeake Bay Preservation Act, and Virginia Stormwater Management Program regulations.

Nonetheless, even after this successful restoration effort, routine inspections revealed that activities adjacent to the stream resulted in the excessive build-up of silt and debris at the culvert trash screen eventually leading to flooding and streambank erosion. In response, ANC conducted a maintenance and retrofit effort in 2021 to return 100 linear feet of stream back to the original 2013 design

specifications. This effort required removal of accumulated sediment and debris from the step pools and stabilization of the streambank with seed mix and erosion control matting. The culvert trash screen was replaced with a larger screen with more surface area for capturing debris, increasing the amount of time between future maintenance activities. Ultimately, these actions enhanced water flow in the stream, mitigated flooding, and reduced future maintenance costs. For more information about this project, please contact Stacey Rosenquist at [stacey.m.rosenquist.civ@army.mil](mailto:stacey.m.rosenquist.civ@army.mil).



PHOTOS BY STACEY ROSENQUIST, ANC

*(Left) Excessive debris covers the trash screen and impedes water flow causing flooding during heavy rain events. (Right) The same location after removal of excessive debris and sediment and replacement of trash screen with a larger model.*





# Chesapeake Bay Action Team Updates

By Elizabeth Karivelil, Brown and Caldwell

Members convened for the second quarterly CBAT on January 28, 2023. Members reviewed ongoing Chesapeake Bay-related service and installation projects and activities and listened to a presentation about shoreline protection as summarized below.

## Living Seawalls

Dr. Chela Zabin of the Smithsonian Environmental Research Center (SERC) discussed research conducted by SERC and the San Francisco State University Estuary & Ocean Science Center on greener solutions for shoreline protection in response to sea level rise. Traditional responses to sea level rise, such as groins and seawalls, present engineering and ecological problems including sediment starvation and development of scour. These issues cause loss of seagrasses and marine organisms and prohibit some marine vegetation species from becoming part of the nutrient cycle for terrestrial and marine organisms. Over the past decade, researchers have discovered that shoreline protection structures designed to incorporate elements of a natural shoreline with surface complexity attract a greater diversity of species.

Dr. Zabin and her team at SERC are in collaboration with the Port of San Francisco to develop designs to improve the seawall from the Embarcadero waterfront to Fisherman's Wharf in San Francisco. The City of San Francisco was planning to renovate its seawall for seismic safety issues and to address flooding, which is occurring more frequently during high tides and storm events. Dr. Zabin noted that incorporating textured tiles to the Port's seawall will provide habitat for a greater diversity of marine creatures. Dr. Zabin's efforts to develop a softer, greener approach for shoreline protection extend beyond the Port of San Francisco to other areas throughout San Francisco Bay.



PHOTO BY CORRYN KNAPP, SERC

*A tile set-up as part of a preliminary experiment before the "Living Seawall Pilot" project began.*

The DoD CBP facilitated a discussion that resulted in several installations volunteering to partner with SERC to develop a Strategic Environmental Research Development Program (SERDP) research proposal to pilot similar design retrofits that would add wildlife habitat/water quality elements to shorelines dominated by hardened structures in the Chesapeake Bay.

For more information on this project, visit the Living Seawall Pilot page at <https://sfport.com/wrp/living-seawall>.

## DoD Chesapeake Bay Program Updates

- The DoD CBP requested high-quality photographs of outreach and stewardship events, stormwater BMPs, land conservation activities, habitat restoration, and other environmental projects for consideration in the FY2022 CBP Annual Progress Report. Photos were requested by February 13 but are accepted throughout the year.
- Kevin Du Bois asked attendees to send digital links or copies of their INRMPs via email or a DoD SAFE drop. Alternatively, they can provide the point of contact for this matter at their installation.
- The DoD CBP requested success stories for the Spring 2023 Journal by February 13.
- The Chesapeake Stormwater Network was accepting applications for the 2023 Best Urban BMP in the Bay Awards (BUBBAs) until February 24.
- The Commonwealth of Virginia has proposed for a revised boundary for the Sentinel Landscape in Virginia. Updates and more information on the new boundary will be provided in the future.
- The DoD CBP has been asked to develop climate metrics that report on current and ongoing efforts to address the impacts of climate on BMP effectiveness. For those interested in the results of this effort, contact Kevin Du Bois.
- The next CBAT meeting is scheduled for April 27, 2023.



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## ✓ Check it Out

**Risks, Resilience, and Readiness of Military Lands Facing Coastal Flooding**, SERDP-ESTCP Webinar, May 4, 2023, 12:00 pm, EDT. Discover more about the SERDP and Environmental Security Technology Certification Program (ESTCP) presentation by registering at: [https://www.zoomgov.com/webinar/register/WN\\_uUaBNWCQ0eXZ3QJ2g](https://www.zoomgov.com/webinar/register/WN_uUaBNWCQ0eXZ3QJ2g)

**2023 REPI Report to Congress**, REPI Webinar, March 15, 2023, 1:30 to 2:30 pm, EDT. A recording of the presentation, which reviewed REPI's accomplishments through Fiscal Year 2022 and project examples in the 2023 Report to Congress, can be found at: <https://www.repi.mil/Resources/Webinars/ModuleID/84948/ItemID/4674/mctl/EventDetails/>: <https://bah16f18.adobeconnect.com/rm7ft8rgav7w/>

**Estimating Stormwater Infiltration and Canopy Interception for Street Tree Pits**, published January 23, 2023. This article by researchers at The Citadel compares the amount of stormwater intercepted by leaves and branches of urban tree pits in New York City and the stormwater infiltrated by the tree pits to assess how they reduce stormwater runoff: <https://www.mdpi.com/1999-4907/14/2/216>

**FY2022 DoD CBP Annual Progress Report**. Development of this year's Annual Progress Report has started, and the completed FY22 DoD CBP Annual Progress Report will be released in Spring 2023!

**CBAT Quarterly Conference Call and Meeting**. April 27, 2023, 10:00 am to 12:00 pm, EDT. This meeting will include a review of the 2022 Chesapeake Bay Commanders' Conference After Action Report. Contact Kevin Du Bois or Angela Jones to receive a meeting invitation with a web link.  
MS Teams Conference Call Phone Number: (888) 404-2493  
Phone Conference ID: 851 068 092#

**MDE/DoD/EPA Partnership Meeting**. April 24, 2023, 1:00 to 3:00 pm, EDT. Contact Kevin Du Bois or Angela Jones to receive a meeting invitation with a web link.  
MS Teams Conference Call Phone Number: (888) 404-2493  
Phone Conference ID: 183 847 370#

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