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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

Essential Partnerships for DoD

By Sarah Diebel, DoD Chesapeake Bay Program Coordinator

The Chesapeake Bay Program Partnership (Partnership) was founded in 1983 and its continued success is owed to honoring the principles of partnership. As the first federal agency to become involved with the Partnership, the Department of Defense (DoD) believes in the benefits of partnership, which is one of the three tenets of the DoD Chesapeake Bay Program (CBP) mission. The DoD partners with federal, state, and local governments, and other organizations to maximize resources and strengthen Bay preservation and restoration efforts.

Depending on the planned outcome, partnerships may be voluntary or required through legal obligations and memoranda of agreement. The articles in this issue highlight some of the partnerships DoD is currently engaged in and beneficial outcomes that have been and continue to be achieved.

Currently, DoD CBP staff are active in many organizations and partnerships throughout the Bay watershed. A few examples of DoD participation in the Partnership include the Federal Facilities Work Group (FFWG), the Virginia Chesapeake Bay Stakeholder Advisory Group, and the Water Quality and Habitat Goal Implementation Teams. DoD installations are also represented on the Interagency Oyster Team, which coordinates action among stakeholders to restore oyster habitat and populations in key waterways in the region. The Readiness and Environmental Protection Integration (REPI) program involves partnerships with external parties such as state agencies and local communities to conserve land beyond DoD fencelines. Additionally, DoD installations work with the Fish and Wildlife Service and state wildlife agencies to develop and update their installation Integrated Natural Resources Management Plans.

In addition to the DoD's current partnerships, there are always opportunities to forge new partnerships for mutual benefit. Some examples of possible partnership opportunities with others include working together to increase street sweeping on and around installations, working together on community outreach and environmental educational events, and developing regional best management practices (BMPs) for nutrient credits.

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PHOTO BY KEVIN DU BOIS, DOD CBP.

The Chesapeake Bay Commanders' Conference was held August 22, 2019 in Quantico, Virginia.

Partnerships are important to DoD because they:

- Encourage involvement between/with other entities
- Promote understanding of Bay issues through shared information
- Consolidate and coordinate individual efforts, expertise, and resources

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Identifying a Partnership's Critical Elements

By Stephanie MacDurmon, Brown and Caldwell

Environmental challenges are complex. They are often the result of multiple actors—people, organizations, and entities—and are further complicated by competing priorities, limited resources, and unequal impacts for and by those affected. These problems have no single source and, therefore, no simple solution. By necessity, then, the answer to environmental challenges will often require deliberate and coordinated action: in short, a partnership.

In the environmental realm, partnerships often include government agencies, academic institutions, and non-profit or non-governmental organizations. In some cases, additional resources from the private sector can also be leveraged strategically through what are called public-private partnership (P3) between a governmental body and a private company. Regardless of how it is structured, the purpose of a partnership is to solve a problem. Therefore, its composition and organization should be shaped around that goal.

Stormwater challenges bring particular difficulties. Though it is regulated as a point source, pollutants in stormwater come from diffuse sources, picked up from the buildings, roads, and lawns that stormwater runoff must cross before it reaches our waterways. Stormwater management practices, particularly green infrastructure, can efficiently treat, reduce, or remove stormwater runoff and its associated pollutant loads. However, the time and resources needed to finance, design, construct, and maintain those stormwater management practices can be significant. Furthermore, in developed areas where much of the land is already occupied by buildings, parking lots, and other uses, additional coordination and buy-in is needed. For these reasons, partnerships can be an essential part of efforts to address stormwater and water quality issues and comply with regulations.

Successful partnerships share key elements: innovation, transparency, accountability, roles filled by stakeholders, common goals, and a culture of constant improvement and learning. This article discusses these characteristics in the context of examples from the DoD environmental programs and Prince George County (PGC), Maryland's Clean Water Partnership.

Innovation. The collaboration that occurs within partnerships often leads to new ideas. Furthermore, when multiple parties join forces, a linear process (Step A to Step B to Step C) can sometimes be done more efficiently (Step A and B completed concurrently, then Step C). Achieving the Chesapeake Bay total maximum daily load's (TMDL) ambitious pollutant reduction targets will necessitate both innovation and efficiency. To assist communities working toward the Bay TMDL, EPA developed a model for Community-Based P3 (CBP3) to bring together local governments and private partners to implement urban stormwater retrofit programs. These partnerships leverage the institutional authority of the local government with the financial and capital resources of the firm. The PGC Clean Water Partnership is an example of a CBP3 in action: the county utilizes a company to manage the green infrastructure retrofit program, overseeing each design from inception to completion. Having one entity oversee the entire process creates efficiency, and a performance-based compensation structure rewards timely and innovative solutions.

Partnerships also leverage their members' experiences to identify best practices. DoD's annual datacall is a model for other federal agencies in the FFWG. Additionally, the Science and Technology Advisory Committee makes recommendations to the Partnership to answer a range of technical and programmatic questions around the best use of resources to meet the Chesapeake Bay TMDL and other Agreement goals and outcomes. Effective partnerships leverage the different strengths of their various members.

Governance, Transparency, and Accountability. Clear and well-documented governance structures set expectations, procedures, and consequences while providing transparency and accountability. Governance structures can be outlined in signed agreements or through memoranda of agreement. They should also include defined metrics of performance and consequences if the expectations are not met. For example, the PGC Clean Water Partnership has Master Program and Master Maintenance Agreements between PGC and the private company. Each retrofit

PHOTO BY WILL PARSON, CBP.

Prince George County, Maryland partners with a private firm to create its Clean Water Partnership based on EPA's CBP3 framework. The partnership oversees the installation of stormwater BMPs in areas like the residential community shown here.

project has a Project Maintenance Plan specific to the individual needs of the site. The company is only paid if it meets the agreed upon outcomes, which include numeric criteria, like impervious area credits generated.

Defined Roles. Within a partnership, members may assume a variety of roles. Some key roles are important to the partnership's success. In its early phases, a champion spearheads the cause, bringing in other stakeholders to support the idea and bolstering confidence among other prospective partners. A broker sets up the partnership's structure, outlining the important governance structure that will guide the partnership's day-to-day activities. Managers have a longer-term of involvement and oversee its direction, correcting course when necessary. Finally, external advocates offer expertise and resources in support of the partnership, sometimes in balance to external criticism. How individuals embody these roles may differ from partnership to partnership. In some cases, one person may fill multiple roles or vice versa. However, these roles must be filled in some capacity for a partnership to succeed.

Establish a Common Goal and Mutual Benefits. To ensure long-term success, a partnership must benefit each of its members. The REPI program is a great example in which multiple partners achieve mutual benefits through coordinated action. Conserving land near military installations (the goal in this case) provides unique benefits to its partners: protection from non-compatible land uses, preservation of valuable habitat and natural landscapes, and access for public recreation and enjoyment.

Create a Learning Culture. Successful partnerships are adaptive: the members learn from their mistakes. The Chesapeake Bay TMDL is the largest and most complex in the country, bringing together partners from different geographies, industries, and levels of government. As such, the Partnership piloted numerous initiatives to scale practices or develop new ones. It performs self-assessments through publicly-available data (Chesapeake Progress), two-year milestones, the three-phase Watershed Implementation Plans, the Chesapeake Bay Watershed Model, and its adaptive management process (referred to as the Strategy Review System or SRS) to track its progress and reassess its approaches, as needed, to stay on track to meet its goals. As a member of the Partnership, DoD establishes two-year milestones, and the DoD CBP has undertaken its own self-assessments. Like the broader Partnership, which uses various work groups to share information among its partners, DoD has the Chesapeake Bay Action Team (CBAT), which is intended to serve as a forum for questions and ideas from DoD installations.

The water quality issues in the Chesapeake Bay are the result of centuries of development and changes in the watershed. Today, those negative impacts are exacerbated by the pressure of continued growth and climate impacts. The Partnership oversees the regional effort, but within each state and local community are smaller partnerships, all working together toward the same goal. A closer look at successful examples of partnerships to address the significant environmental challenges of the Chesapeake Bay TMDL reveals that they have the aforementioned elements in common.

Source:

This article is sourced from "Making Partnerships Work: A Stormwater Example" from the Solutions Journal.

*Bruce Hull, Seth Brown, Making Partnerships Work: A Stormwater Example, The Solutions Journal, Volume 9, Issue 3, July 2018, (**https://www.thesolutionsjournal.com/article/making-partnerships-work-stormwater-example/**)*

Combining Partnerships with Recycled Material for Creative (and Sometimes Edible) Results

By Mira Micin, Brown and Caldwell

In addition to partnerships with external entities, DoD installations should look within for partnership opportunities in their own communities. Federal agencies, including DoD, are required by Executive Order 13834 to improve operational efficiency and implement waste prevention and recycling measures. One common instrument to implement these requirements are Environmental Management Systems (EMSs), and most DoD EMSs require use of EPA's P2 or Pollution Prevention approach, which prioritizes practices that prevent or recycle waste materials at the source. With a little creativity, it is not hard to find opportunities to reuse or recycle what one person considers waste into a positive use for another.

Across the Air Force, some installations are establishing organic gardens for a variety of reasons: to grow food, to beautify the installation, or to provide habitat and otherwise enhance natural resources. For example, in 2016, the Dover Air Force Base established an organic community garden with a commitment to not apply pesticides or fertilizers[1]. At Joint Base Langley-Eustis, the installation built a pollinator garden to promote bee colony health[2]. This garden likely supports other desired co-benefits, as well, like water quality improvement and preservation of green space.

These projects also present opportunities to combine EMS objectives through cooperation within installations. Wastes and other compostable materials generated by DoD dining facilities are often thrown away into local landfills. However, if they are properly composted, these scraps can provide a stream of organic fertilizer for community gardens. Furthermore, composting does not have to involve a significant investment of time and materials. Arthur Silver at Langley Air Field constructed a compost screener from broken wooden pallets discarded by the installation. He uses the screener along with his kitchen scraps to fertilize his personal gardens[2].

Installations should explore areas where these types of mutual benefit opportunities exist in their locations. Partnership opportunities could include local schools (students could learn recycling strategies and how to grow food and flowers), food facilities (a great source of compost materials), or surrounding municipalities and businesses (another source of recycled materials). These projects help engage the community, reduce waste from entering landfills, promote recycling, and provide habitat.

PHOTO BY ROLAND BALIK, U.S. AIR FORCE

Opening day of the new organic community garden, built entirely with recycled materials.

PHOTO BY ARTHUR SILVER, JOINT BASE LANGLEY-EUSTIS

Compost screener built with broken pallets.

PHOTO BY ALICIA GARCIA, JOINT BASE LANGLEY-EUSTIS

Pollinator Garden near Joint Base Langley-Eustis Golf Course.

Sources:

[1]Dover Air Force Base. Snapshot: Organic community garden officially opens. Downloaded May 10, 2016. https://www.dover.af.mil/News/Article-Display/Article/761550/snapshot-organic-community-garden-officially-opens/.

[2]Silver, Arthur. "RE: Photo Submission For CBAT Newsletter - DoD Pallet P2 Reuse Opportunity - Compost Screener Stand." Message to Sarah Diebel. 19 July 2019. E-mail.

State Partnership Meetings Provide New Opportunities for Collaboration

By Trevor Manning and Sharon Baumann, DoD Regional Environmental Coordination (REC) Office

As the designated lead for DoD in EPA Region 3, the Navy Region Mid-Atlantic REC office is charged with supporting the DoD/Military Services mission through coordination, communication, and facilitation of regional environmental issues and activities when these activities affect two or more installations.

One way we meet this mission is through partnering with state and federal regulatory agencies. Creating partnerships with our regulatory community brings with it a host of benefits including improved communication, education of upcoming and current requirements of each party, sharing of best practices, a more efficient use of limited resources, and cooperation to overcome hurdles unique to the military mission. However, one of the most beneficial aspects is building relationships that are incredibly valuable in helping us all meet our ultimate goal of improving compliance.

For years, the DoD has been an active partner in the Partnership, but in the last two years, we have stepped it up a notch. In 2017 we recognized that although great things come from large partnerships, such as those across the Chesapeake Bay watershed, we can focus efforts by forming state-specific partnerships. In May 2018, the Pennsylvania Department of Environmental Protection/EPA Region 3/DoD partnership was born. Then in June 2018, the Maryland Department of the Environment/EPA Region 3/DoD semi-annual partnership began. And finally, in January 2019, the Virginia Department of the Environment (VDEQ)/EPA Region 3/DoD partnership formed. Each of these partnerships provides a semiannual forum to share information on a host of topics including state and federal environmental policies, permitting, facility inspections and compliance, and Chesapeake Bay Watershed Implementation Planning.

As the states wrote their Phase III Watershed Implementation Plans, the state-specific partnership meetings were a great venue to discuss how DoD can support the plans and meet state and Partnership goals. Specifically, DoD CBP Coordinators have discussed our own innovative TMDL Midpoint Assessment, nutrient and sediment reduction progress, and potential strategies we are considering to fill the gap between currently planned reductions through 2025 and the remaining reductions needed to meet EPA and jurisdiction federal planning goals. Upon review, we discovered that DoD was not being fully credited for BMPs installed on our installations. Discussion with our state partners resulted in strategies for resolution and ultimately more DoD BMPs receiving credit, thus lowering the future TMDL implementation required by DoD.

Since 2017, DoD has initiated partnerships between EPA, DoD, and the state environmental agencies in Maryland, Pennsylvania, and Virginia.

Most DoD installations in the Chesapeake Bay are located in Maryland, Pennsylvania, and Virginia. The state partnerships meetings create an accessible, locally-focused forum for collaboration and information-sharing.

As the Navy Region Mid-Atlantic REC office progresses into the new fiscal year, we will continue to educate state and federal agency officials on the military's operational and environmental needs, priorities, and concerns. We look forward to continuing to work with our partners on behalf of all DoD installations to produce additional benefits for DoD and the Partnership.

Oyster Gardening at Defense Facilities Boosts Restoration Work

By Kenny Fletcher, Chesapeake Bay Foundation

In recent years, several DoD installations in Virginia have raised thousands of oysters for restoration work with the CBF, many participating under the Elizabeth River Project's (ERP) River Star Business program.

Oysters in Virginia have been decimated by years of disease, overharvesting, and pollution, but are beginning to come back thanks in part to restoration efforts. Oyster gardening gives volunteers the opportunity to play a role in bringing back this iconic Chesapeake Bay species.

Together, conservation organizations, DoD facilities, oyster gardeners, and many other partners are working towards the Chesapeake Oyster Alliance goal of adding 10 billion oysters to the Bay by 2025.

Oyster gardeners keep their oysters in wire cages a bit larger than a shoe box, which hang in the water off a dock or bulkhead. Each cage is filled with baby oysters, called spat, about the size of a pinky nail. These grow rapidly in the waters of the Bay's rivers and creeks. Once they've outgrown a cage, they are then split between two cages.

After a year, oyster gardening volunteers return the adult oysters they raised, which the CBF plants on sanctuary reefs that are off-limits to harvest. The gardeners then receive a new set of baby oysters to repeat the cycle.

Many DoD installations are participating in oyster gardening under ERP's River Star program, including the U.S. Army Corps of Engineers Norfolk District, Norfolk Naval Shipyard,

The Oyster Gardening Cycle

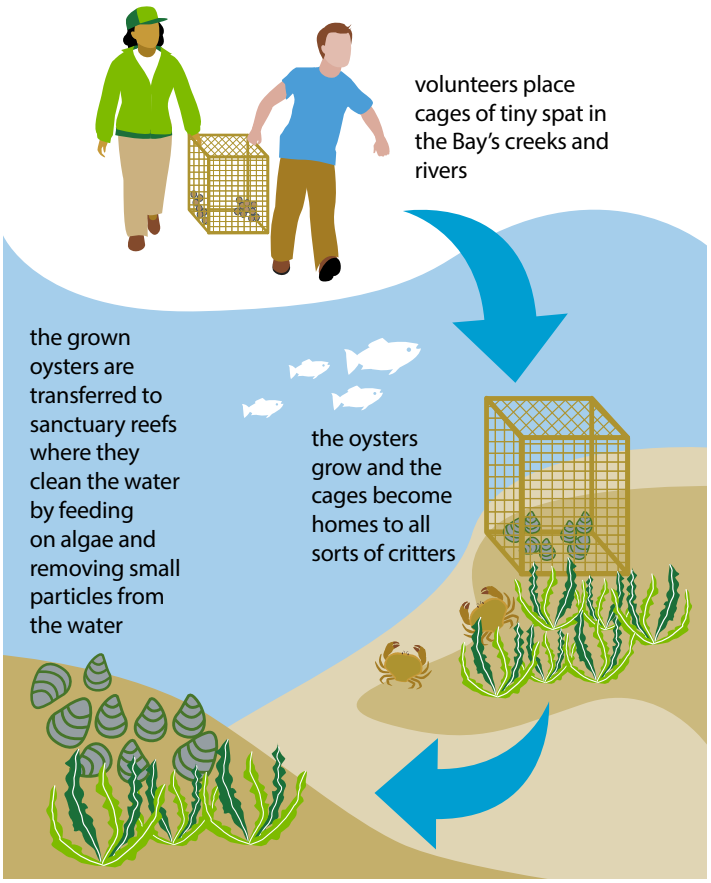


PHOTO PROVIDED BY CBF.

Volunteers play an important role in supporting oyster growth and restoration in the Bay.

> "One of the most rewarding parts of my job is seeing the various partners, local, state, and federal, coming together with a common goal of improving water quality through oyster restoration. No one organization, installation, or community can do it alone. It's a collaborative effort and the relationships that are created along the way bring about a stronger Commonwealth."
>
> — Heather Lockwood,
> CBF Oyster Restoration Specialist

Portsmouth Naval Medical Center, and the Naval Support Activity Hampton Roads—both the Portsmouth and Lafayette annexes.

ERP connects these DoD facilities with CBF, which provides the oysters and cages to participate in the program. Since starting in 2015, these facilities have raised about 8,000 oysters that have been returned to sanctuary reefs.

Joint Base Langley-Eustis in Hampton has participated in CBF's oyster gardening program since 2018, returning a total of 1,389 oysters. Joint Base Langley-Eustis not only raises oysters, but in 2017 they also built a sanctuary oyster reef right off the installation in Back River, working together with CBF and students from Booker Elementary School in Hampton.

Even before the oysters raised by gardeners are planted on sanctuary reefs, they have many benefits for local waters. Over time, the oyster-filled cages that gardeners tend become homes to all sorts of critters, re-creating the habitat offered by wild oyster reefs. In particular, the crevices between the shells are hiding spots for many small creatures. Tiny crabs, shrimp, toadfish, gobies, and even seahorses make themselves at home.

The oysters that gardeners raise reproduce when they mature, increasing the local population. At the same time, they play an important role cleaning the water by feeding on algae and removing other small particles from the water. **A single adult oyster can filter up to 50 gallons of water per day. These activities improve water clarity, support the growth of submerged underwater grasses, and provide habitat for fish, crabs, and other marine species.**

PHOTO PROVIDED BY CBF.

Oyster cages filled with spat grow in the Bay's rivers and creeks and benefit other water life while cleaning water.

> "Not only are DoD facilities improving the Elizabeth River by growing oysters, they are dramatic in their environmental efforts, from huge to small. From energy efforts to permeable pavement to reducing waste - these facilities are not only improving wildlife habitat but reducing pollution to improve their home river."
>
> — Pam Boatwright, River Star Businesses program manager

PHOTO PROVIDED BY KENNY FLETCHER, CBF.

Colonel Patrick Kinsman and Catherine Galway (US Army Corps of Engineers), aboard the CBF restoration vessel, Chesapeake Gold, planting their one-year-old oysters on a restoration reef in the Elizabeth River during the summer of 2018.

How You Can Increase Your Support

ERP is recruiting more DoD facilities in the Elizabeth River watershed to pledge to perform environmentally friendly practices, including oyster gardening, under the River Star Business program. River Star Businesses, Elizabeth River Project's free program, recognizes organizations for making environmental stewardship the business standard on the Elizabeth.

To learn more, contact:
Pam Boatwright at **pboatwright@elizabethriver.org** or Trevor Manning at **trevor.a.manning@navy.mil**.

CBF is always eager to work with more DoD facilities to restore oysters in the Chesapeake Bay. Beyond oyster gardening, DoD volunteers can support oyster shell recycling, plant oysters on reefs, create reefball structures, and more.

To learn more, contact:
Heather Lockwood at **HLockwood@cbf.org** or reach CBF's Virginia oyster team at (757) 644-4125. If interested, contact Kevin Du Bois, Chesapeake Bay Program Coordinator, at **kevin.dubois@navy.mil** for more information.

U.S. Navy's "Stewards of the Sea" Partnerships Help Foster Proactive Environmental Stewardship Efforts in Hampton Roads and Beyond

By U.S. Fleet Forces Installations and Environmental Readiness Directorate

Together, the 900,000 Sailors and civilians in the U.S. Department of the Navy form the world's most formidable expeditionary fighting force, capable of maritime defense, major combat operations, and disaster relief. To maintain military readiness, the Navy must train and test the way they fight.

The Navy conducts routine at-sea training and testing to ensure assets are ready when duty calls. At-sea training and testing must be realistic, rigorous, and as comprehensive as possible in order to develop and sharpen the skills that our Sailors need to prevail in combat and other real-world situations. These skills are specialized, highly perishable, and demand frequent practice.

As Stewards of the Sea (SoTS), the Navy complies with environmental laws while maintaining ready, trained operational forces. The Navy's environmental stewardship initiatives include responsibly disposing of shipboard waste and wastewater, actively participating in the development of regional coastal and marine spatial plans as part of the National Ocean Planning process, and complying with environmental laws designed to protect marine mammals, endangered species, and sensitive habitats.

To help the Navy remain in compliance with federal law, while ensuring our Sailors have the sea, land, and airspace they need to maintain readiness, U.S. Fleet Forces Installations and Environmental Readiness Directorate oversees the development of policy and procedures that enable both objectives. To support these efforts, the Navy partners with natural resource specialists, marine scientists, acousticians, planners, and other specialists from their in-house teams, the private sector, and academia to conduct scientific projects to better understand marine species and their near shore and ocean habitats.

Specifically, in the greater Chesapeake Bay and Hampton Roads areas, the Navy has partnered with the Virginia Aquarium & Marine Science Center Foundation to attach satellite and acoustic tags to juvenile loggerhead, Kemp's ridley, and green sea turtles. This initiative helps the scientific community gain a better understanding of sea turtle movement and habitat use in the lower Chesapeake Bay and the waters near U.S. Navy facilities in southeastern Virginia, such as Naval Station Norfolk.

Navy has also partnered with HDR, Inc., The Nature Conservancy and the Virginia Department of Game and Inland Fisheries to document seal presence at select haul-out locations in the lower Chesapeake Bay and coastal waters of Virginia, which are important areas for Navy training and testing activities. To acquire a better understanding of the seals' seasonal occurrence, habitat use, and haul-out patterns in this area, seasonal counts and photo identification methods are employed. Currently underway, this study will provide valuable baseline information for the future assessment of seal movement, site fidelity, and relative abundance in the region.

Another portion of the Navy's environmental stewardship includes conducting public outreach that helps to curb misconceptions of the Navy's environmental practices while educating stakeholders about the various programs and activities in place that support both military readiness and environmental protection. The SoTS outreach program, managed cooperatively by teams from U.S. Fleet Forces Command and U.S. Pacific Fleet, conveys messages and educational information about environmental stewardship initiatives that the Navy conducts worldwide, along with the protective measures the service puts in place to minimize the impact of its military readiness activities. The aim of these outreach activities is to 1) increase awareness, 2) increase confidence in the Navy's environmental stewardship, and 3) correct misinformation about the Navy's efforts among the general public, scientific, and regulatory communities.

The SoTS outreach team consists of a small group of individuals, but the message is intended to reach a very large audience. In order to complete this task, SoTS must rely on many partnerships. In the past year SoTS has worked with Virginia Beach, Norfolk and Chesapeake Public Schools, the Portsmouth Children's Museum, Virginia Wesleyan University, College of William & Mary, Norfolk Naval Shipyard, Naval Station Norfolk, Naval Air Station

PHOTO BY DANIELLE JONES, NAVFAC ATLANTIC UNDER NMFS GA PERMIT #19826.

Haul-out counts of lounging seals in Chesapeake Bay, Virginia.

Oceana, Naval Facilities Atlantic, Naval Facilities Mid-Atlantic, and Commander, Navy Region Mid-Atlantic.

Through working with these civilian and military partners, SoTS is able to maximize the number of people it reaches with information about the Navy's environmental stewardship efforts. The Navy created the SoTS brand and program in 2013 and has reached millions of people through the events where they have participated. Since July 1, 2018, SoTS has been involved in 17 events along the East Coast. These events consisted of Fleet Weeks, Navy Weeks, Navy and Marine Corps air shows, STEM (science, technology, engineering, and math) education days, community festivals, scientific and professional military symposiums and conferences, as well as academic speaking engagements. These events had a combined attendance of more than 900,000 people. In this same period, volunteers donated 317 hours of their time to assist in spreading the outreach message of SoTS.

Locally, SoTS also partners with Nauticus in downtown Norfolk, a maritime-themed science center and museum. The "Stewards of the Sea: Defending Freedom, Protecting the Environment" exhibit is located in the museum. Annually the SoTS exhibit has 45,000 interactions with the public. It opened on March 13, 2014, and is located on the third floor of the facility.

The Navy's SoTS environmental programs and events build community partnerships with the hope that the environmental programs show our country's people a message of commitment to protecting the seas through science. The success of the Navy's at-sea environmental stewardship program contributes to the success of our military mission, all while preserving the ocean environment for future generations.

Connect with Stewards of the Sea:

Facebook:
https://www.facebook.com/USNavyStewardsoftheSea

YouTube:
https://www.youtube.com/USNavyStewardsoftheSea

Using hands-on activities, games, videos, and immersive scenarios, visitors to the Stewards of the Sea exhibit at the Nauticus can:

- Scan the ocean using giant "Big Eye" binoculars like a navy lookout to spot whales, dolphins and other marine species
- Pretend to be a Sailor looking for enemy submarines using sonar
- Hear what marine mammal, man-made, and natural sounds are like underwater
- Learn how whales are tagged and tracked for research
- See scientific research equipment used by the Navy to study marine mammals in the ocean environment
- Learn about different types of environmental careers in the Navy

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 1ST CLASS GARY A PRILL/RELEASED.

North School students attend a SoTS educational exhibit on Earth Day. U.S.

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 1ST CLASS GARY A PRILL/RELEASED.

Mike Jones talk with guests at the Navy's SoTS exhibit during Maryland Fleet Week and Air Show Baltimore.

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 2ND CLASS MICHAEL FIORILLO/RELEASED.

The 1,000-square foot "Stewards of the Sea" exhibit is a dynamic display that showcases how the U.S. Navy protects the environment while operating at sea.

‘Catch the King’ Tide Event Gets Local Citizens Involved in Science

By Jessica Rowe, Brown and Caldwell

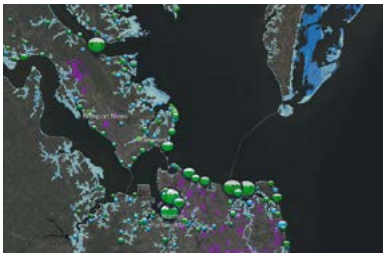
Every year, the “Catch the King” effort encourages local Hampton Roads, Virginia, citizens to participate in data collection efforts to track the highest tide of the year, the king tide, in hopes of improving predictive model accuracy for future flooding forecasting.

King tides, in combination with rising sea levels, cause flooding along the coastline, and Virginia has some of the highest rates of relative sea level rise in the U.S. Accurately tracking king tides is important because, as sea levels continue to rise, current king tide levels will become increasingly more prevalent, potentially causing extensive flooding and damage. Understanding tidal flooding provides insight of potential threats along the coast for decades to come.

Catch the King is the world’s largest environmental survey. The effort draws numerous volunteers as well as extensive local media coverage leading up to the event, including over 40 separate volunteer training events in the Hampton Roads area. Last year, there were approximately 430 participants with 37,728 GPS points including geotagged photographs of the King Tide flooding during the event.

This year’s King Tide is October 27th. Additional information about the King Tide and volunteer opportunities can be found at **https://kingtide.whro.org**.

PHOTO BY WILL PARSON, CBP.



MAP FROM VIMS CATCH THE KING MAP APPLICATION

Ethiopia’s Tree Planting is One of Many Efforts Combating Deforestation Worldwide

By Jessica Rowe, Brown and Caldwell

Ethiopia’s prime minister, Abiy Ahmed, inspired a major tree planting effort this summer which resulted in the planting of over 350 million trees in one day. The effort was part of Mr. Ahmed’s campaign to plant four billion indigenous trees in Ethiopia before their forests are entirely lost due to deforestation and global warming.

Schools and government offices were closed for the day, with people from all walks of life volunteering to support the planting effort including staff from the United Nations, African Union, students, farmers, professionals, environmentalists, as well as foreign embassies.

This effort marks one of many efforts worldwide to combat the devastating effects of deforestation and climate change. Reforestation also improves water quality and can provide benefit for regional waterways, like the Chesapeake Bay. To learn more about how you can support tree planting efforts, please check out the following initiatives:

The Earth Day Network’s “Canopy Challenge” wants to plant one tree for every living person, which would total 7.8 billion trees.
https://www.earthday.org/campaigns/reforestation/help-us-plant-trees/

The Nature Conservancy’s “Plant a Billion Trees” effort has a goal of planting a billion trees across the planet.
https://www.nature.org/en-us/get-involved/how-to-help/plant-a-billion/

The National Forest Foundation’s “50 Million for our Forests” initiative is to plant 50 million trees across our national forests.
https://www.nationalforests.org/get-involved/tree-planting-programs

PHOTO BY CBP.

PHOTO BY CBP.

Chesapeake Bay Action Team Updates

By Hee Jea Hall, Brown and Caldwell

PHOTO BY STACEY ROSENQUIST, ARLINGTON NATIONAL CEMETERY.

Members of the CBAT convened for their quarterly meeting on 25 July 2019, to review ongoing Chesapeake Bay-related service and installation projects and activities, the BMP Crediting Reports, Fiscal Year (FY) 2019 Datacalls, and the 2019 Chesapeake Bay Commanders' Conference.

Chesapeake Bay Service Leads and Installation Updates

- The DoD CBP will work with the Virginia Department of Environmental Quality to provide clarification on reporting BMPs installed to meet Virginia Stormwater Management Program regulations for new development and redevelopment vice municipal separate storm sewer system permit reporting requirements and DoD's contribution to the Chesapeake Bay TMDL.
- The Facility Sustainment Model Stormwater BMP Funding Sub-committee continues to make progress on establishing new facility category codes in the Real Property system. Mike Khalamayzer and other members met with staff from the Office of the Secretary of Defense Real Property Board to learn how to successfully submit the four proposed codes for approval. Board staff mentioned that projects in their application system should be described as "structures", instead of as "equipment".

BMP Crediting Reports and the FY2019 Datacalls

Ms. MacDurmon summarized the results of the FY2018 BMP Crediting Reports which describe the crediting status of individual BMPs reported by DoD installations in Maryland, Pennsylvania, Virginia, and Washington, D.C. The BMP Crediting Reports summarize BMP information in two ways: (1) if a BMP is credited to DoD in the Bay Model with the DoD Agency Code and (2) if a BMP is credited at all. Each BMP was assigned a color: RED if no credit could be verified in the Bay Model, YELLOW for partial credit, and GREEN if a BMP is fully credited in the Bay Model. RED and YELLOW BMPs are also assigned an explanation code with a short description why the BMP received less than full credit. In 2018, the percentage of green BMPs in each state was 87%, 77%, 87%, and 0% in MD, PA, VA, and DC, respectively. Some BMPs did not receive credit due to reporting issues by the jurisdictions; other jurisdictions (in VA and DC) did not assign DoD BMPs to the DoD agency code, meaning DoD did not receive the credit for their implementation. Between 2017 and 2018, there were significant improvements in the crediting of BMPs in VA and PA, in particular. Installations can also improve the status of YELLOW and RED BMPs by reviewing the BMP datacall records for accuracy, providing missing information, and updating inspection and maintenance dates.

The BMP datacall was released on 31 July with responses due 30 August. Requested information included new and updated records of progress BMPs (implemented between 1 July 2018 and 30 June 2019), planned BMPs (to be implemented between 1 July 2019 and 30 June 2025), and historical BMPs (implemented prior to 1 July 2018) in the state template appropriate to their installation. The focus of this year's datacall was to improve reporting of annual BMPs (like street sweeping and urban nutrient management), inspection and maintenance dates and status, and planned BMPs. Changes to the templates were minor and intended to simplify or clarify the requests and processes.

The Project and Indicators (P&I) datacall was released 29 August and responses are due by 10 October. Installations are asked to update and report projects funded or programmed through FY2021 and update the indicators and metrics on the Installation Information sheet. This year's template has a new funding type, "In-House/No Cost/Volunteer", for certain project categories such as Environmental Educational Events.

Live trainings for the BMP and P&I datacall were held in August and September, respectively. To provide the best response to the datacall, installations should start early, attend the trainings, and ask questions.

2019 Chesapeake Bay Commanders' Conference

Ms. Diebel provided an overview of the 2019 Chesapeake Bay Commanders' Conference. CBAT members participated in an interactive Mentimeter survey as part of the conference discussion. The top three items CBAT members wanted the DoD CBP to communicate at the conference were regulatory planning and compliance needs, BMP operations and maintenance needs, and demonstration of how environmental programs support the DoD mission. They also provided additional items that needed to be communicated at the conference. See the full list in the CBAT meeting summary on DENIX:
https://denix.osd.mil/chesapeake/home/

The next CBAT meeting is scheduled for 24 October 2019.

DoD/DoN Chesapeake Bay Program Office
1510 Gilbert Street
Building N-26, Room 3300
Norfolk, VA 23511

Check it Out

New Stream Restoration Verification Memorandum: The Urban Stormwater Work Group has approved a new memorandum outlining recommended methods to verify stream restoration projects built for pollutant crediting. You can find a copy of the technical memorandum here: **https://chesapeakestormwater.net/wp content/uploads/dlm_uploads/2019/07/Approved Verification Memo 061819.pdf**
Or watch an archived webinar here: **https://chesapeakestormwater.net/events/webcast verifying stream restoration practices.**

Responses to the 2019 Projects and Indicators Datacall are due October 10, 2019.

The final Phase III WIPs were posted on August 23, 2019 to the Bay states' websites. Visit your state's website to download a copy, or you can find links to all jurisdiction WIPs at this link: **https://www.epa.gov/chesapeake bay tmdl/chesapeake bay watershed implementation plans wips**

National Public Lands Day was September 28, 2019. If you hosted an event for this important celebration, we want to hear about it to highlight in future DoD CBP publications! Please send your information and high resolution photos to the DoD CBP office.

The 14th Annual Chesapeake Watershed Forum is November 15-17, 2019 in Shepherdstown, WV.
https://www.allianceforthebay.org/our work/key program focuses/networking education/chesapeake watershed forum/

The Chesapeake Bay Commanders' Conference was August 22, 2019. If you attended and have photos and/or good news stories about outcomes from the conference, please share those with the DoD CBP office.

CBAT Quarterly Conference Call and Meeting.
October 24, 2019, 10:00 am to 12:00 pm, EDT.
Attend: Norfolk Naval Station, Building N 26, Room 3303
Call in: 1.866.749.3638, Passcode: 7362645
Web connect: **https://conference.apps.mil/webconf/quarterlyCBAT**

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