



Leveraging Department of Defense Installation Collaboration and External Partnerships

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DoD Chesapeake Bay Program Coordinator





Overview



Meet the Team



Chesapeake Bay Program Partnership



DoD CBP Background & Drivers



DoD FY22 Contributions to Bay Restoration



Programmatic Accomplishments



DoD CBP Climate Initiatives

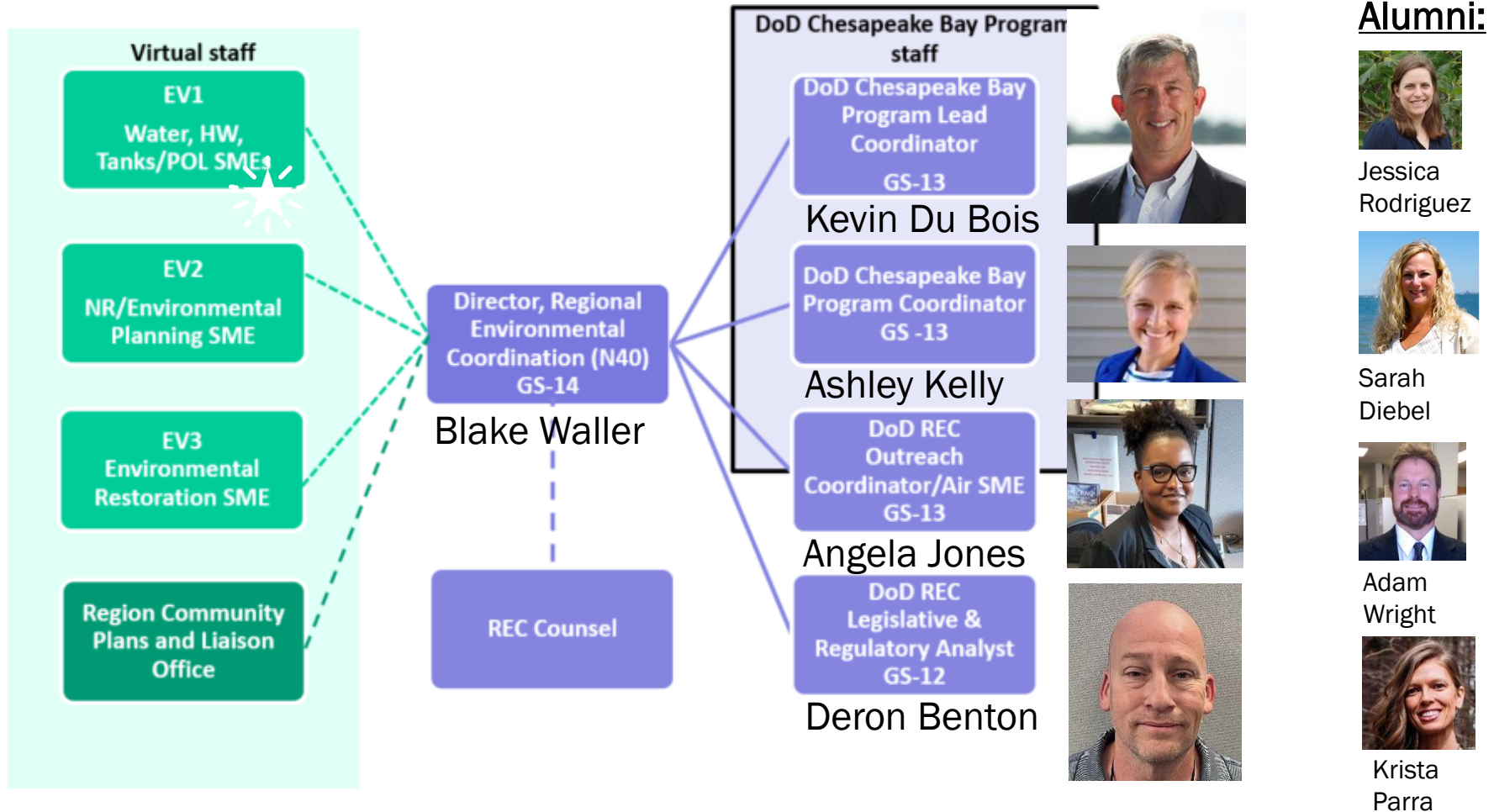


DoD Collaboration with Communities





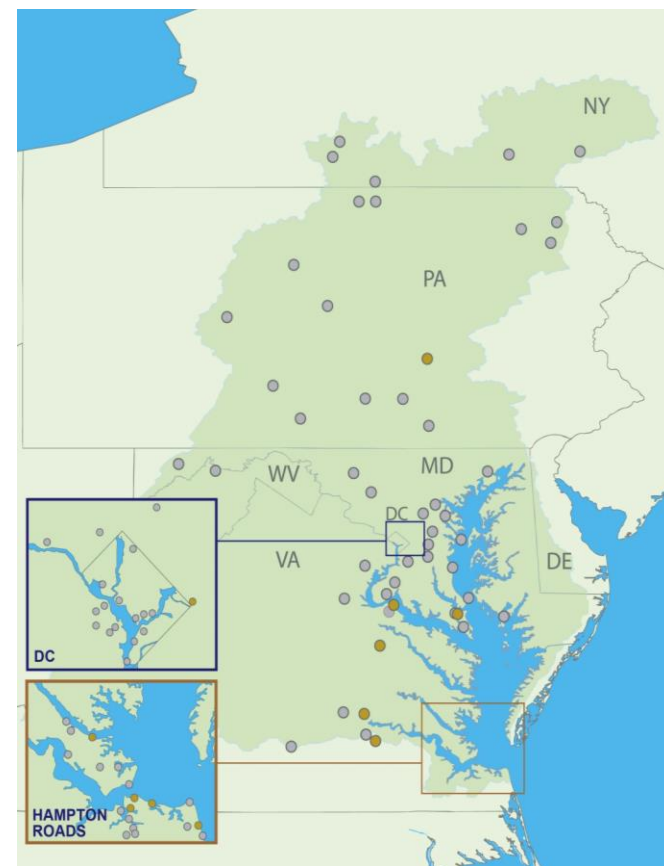
Our Team





DoD in the Chesapeake Bay Watershed

- DoD Services manage
 - ~ 136 sites
 - ~ 400,000 Acres
 - ~ 1% of the watershed
- DoD is the largest federal owner of developed land
- Dept. of Navy is the Lead Agent
- Commander Navy Region Mid-Atlantic (CNRMA) oversees the program
- Each Service has its own CBP lead
- Drivers:
 - **Executive Order 13508** – Protecting and Restoring the Chesapeake Bay Watershed
 - **2014 Chesapeake Bay Agreement**
 - **Executive Order 14008** – Tackling the Climate Crisis at Home and Abroad





DoD Chesapeake Bay Program

The VISION of the DoD Chesapeake Bay Program is to protect the Chesapeake Bay for military readiness, for our community and for future generations



DoD CBP Mission

Integrate

Integrate restoration, pollution prevention, and stewardship initiatives for the Chesapeake Bay into DoD's daily mission of providing the military forces needed to deter war and protect the security of the United States.

Engage

Engage all levels of DoD military, civilians, and their families to be environmental stewards of the watershed where they live.

Partner

Partner with federal, state, and local governments, and organizations and citizen groups to maximize resources and strengthen Bay restoration and protection efforts.





DoD Chesapeake Bay Program Drivers



1984

Joined the CBP Partnership (Partnership).

EO 13508 (CB Protection and Restoration was signed.

2009



- Restore Clean Water
- Recover Habitat
- Sustain Fish and Wildlife
- Conserve Land and Increase Public Access
- Calls on the federal government to lead by example in restoring the Chesapeake Bay





DoD Chesapeake Bay Program Drivers

EO 13508 (CB
Protection and
Restoration was
signed.

2009



2010

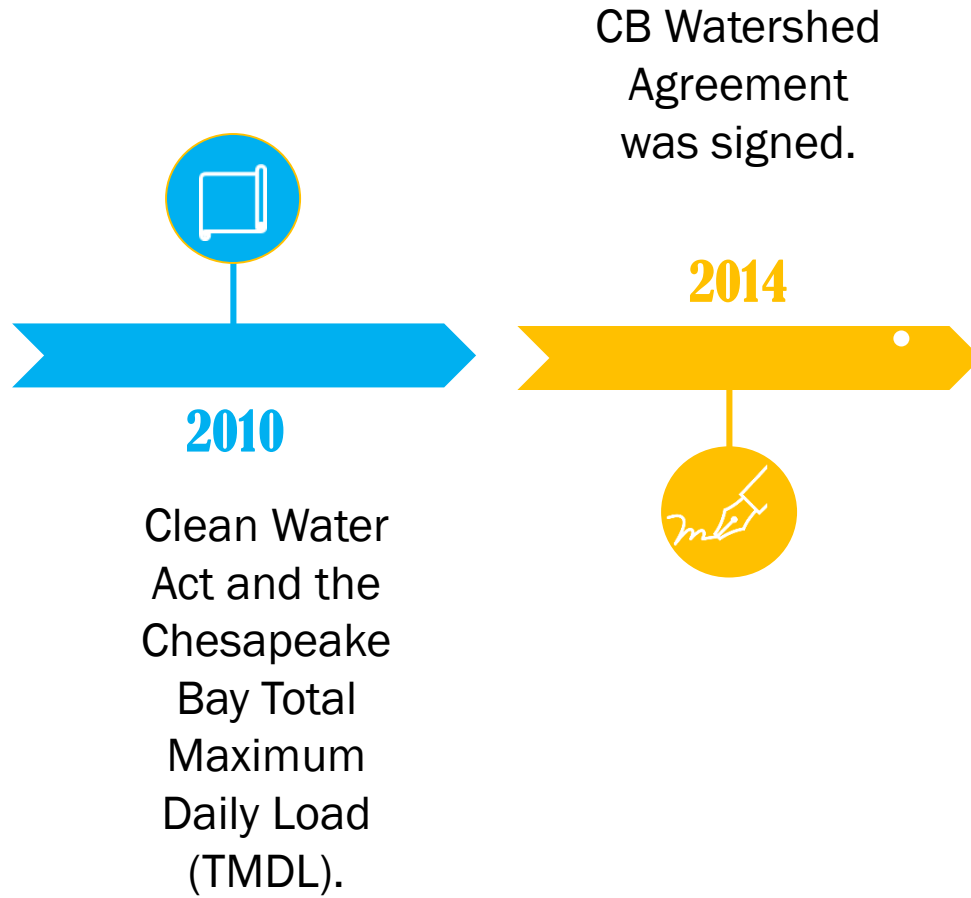
Clean Water
Act and the
Chesapeake
Bay Total
Maximum
Daily Load
(TMDL).

- The Bay TMDL was established by EPA because voluntary actions were insufficient to meet water quality goals
- Targets for pollution reduction are outlined in jurisdiction Watershed Implementation Plans (WIPs) and their Federal Planning Goals





DoD Chesapeake Bay Program Drivers



- TMDL water quality goals are embodied in the 2014 Chesapeake Bay Watershed Agreement



DoD Chesapeake Bay Program Drivers

EO 14008 (Sec. 201) - to implement a Government-wide approach that reduces climate pollution in every sector of the economy; **increases resilience to the impacts of climate change**; protects public health; **conserves our lands, waters, and biodiversity**; delivers environmental justice; and spurs well-paying union jobs and economic growth, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure.

- Climate Risk Analysis (Sec. 103)
- National Climate Task Force (Sec. 203)
- **Climate Action Plans** (Sec. 211)
- Advancing Conservation, Agriculture, and Reforestation (Sec. 214)
- Conserving Our Nations Lands and Waters (30 X 30) (Sec. 216)





DoD Chesapeake Bay Program Drivers

EO 14057 - Strengthening the Nation's Forests, Communities, and Local Economies

*It is the policy of my Administration, in consultation with State, local, Tribal, and territorial governments, as well as the private sector, nonprofit organizations, labor unions, and the scientific community, to pursue science-based, sustainable forest and land management; **conserve America's mature and old-growth forests on Federal lands**; invest in forest health and restoration; support indigenous traditional ecological knowledge and cultural and subsistence practices; honor Tribal treaty rights; and **deploy climate-smart forestry practices and other nature-based solutions to improve the resilience of our lands, waters, wildlife, and communities in the face of increasing disturbances and chronic stress arising from climate impacts. It is also the policy of my Administration, as outlined in Conserving and Restoring America the Beautiful, to support collaborative, locally led conservation solutions.*** •





DoD Contributions to Chesapeake Bay Protection and Restoration

DoD tracks and reports installations and regional efforts to meet:

- 1 Abundant life
- 2 Conserved land
- 3 Engaged communities
- 4 Clean Water

While projects are categorized by these four major outcomes, DoD CBP promotes the implementation of projects that provide other co-benefits including climate resilience

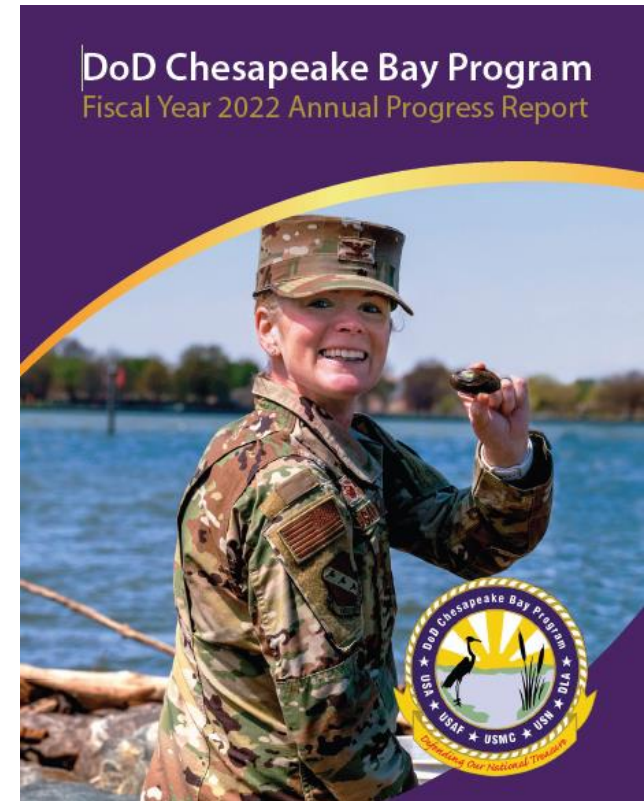
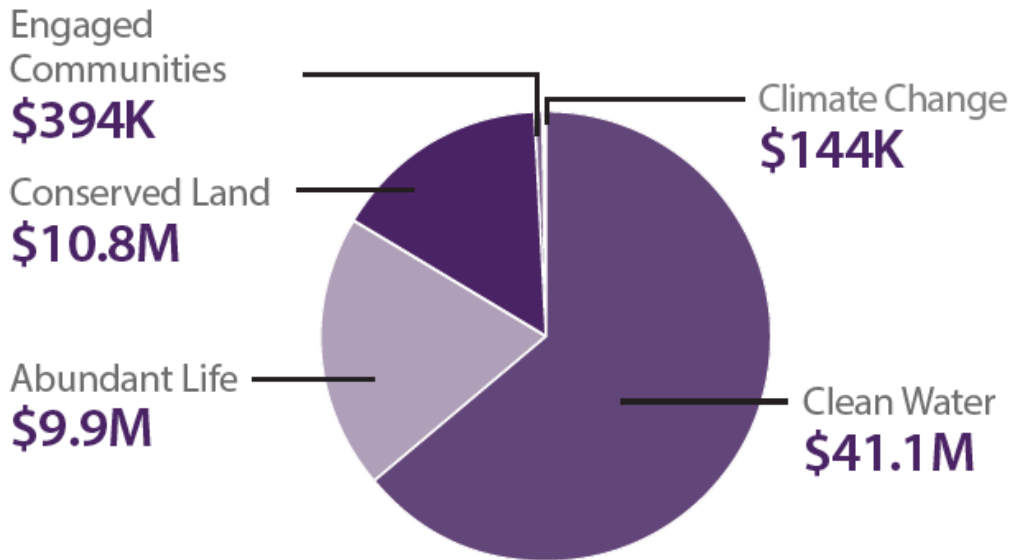




Fiscal Year (FY) 2022 Accomplishments

FY2022 Project Funding

\$62.3M | 285 projects



For more information, see the DoD CBP's FY22 Annual Progress Report at:
<https://www.denix.osd.mil/chesapeake/dod-cbp-annual-progress-reports/index.html>



Abundant Life



\$9.9M

invested in Abundant Life projects



6,999

additional trees planted at DoD installations



5,182

linear feet of shoreline and streambank restored



4

new oyster projects for reef restoration in waters at and around installations

<https://denix.osd.mil/chesapeake/dod-cbp-annual-progress-reports/>



Conserved Land



\$10.8M

invested in Conserved
Land projects



13

installations have
Readiness and
Environmental
Protection Integration
(REPI) partnerships



2,922

additional acres
Protected by the
REPI program



48,017

cumulative acres
protected through
the REPI Program





Engaged Communities



\$394K

Invested in Engaged
Community projects



385

new citizen stewardship
events

2,381

volunteers at citizen
stewardship events



205

Total public access
sites open to DoD
service members,
employees and
their families



22,496

Pounds of trash
picked up during DoD
cleanup events



Clean Water



\$41.1M

invested in Clean Water projects



368

new acres of treated impervious surface



2,237

acres with Urban Nutrient Management Plans to reduce pollution discharge



123

New best management practices (BMPs built in State Year 2022



5,066

Total BMPs implemented in the Chesapeake Bay watershed



81

BMPs Provide Climate Resilience Co-Benefits





DoD CBP Reporting, Outreach and Education

- DoD Chesapeake Bay Program Annual Datacalls
 - Current FY and two years projected
 - Best management practice (BMP) implementation progress reporting
 - Natural resources and conservation projects
- Executive Order 13508 Two-year Water Quality Milestones
- DoD Chesapeake Bay Program Annual Progress Report
 - At-A-Glance Metrics
 - Highlights noteworthy Installation projects implemented by goal
- DoD Chesapeake Bay Program Journal
 - Highlights Installation success stories
- Chesapeake Bay Program Partnership - Climate Directive
- MD Chesapeake Bay Memorandum of Understanding (MOU)
 - Upgrade status of wastewater treatment plants and installation restoration projects
- Installation Fact Sheets
 - metrics and briefing template
- Chesapeake Bay Accountability and Recovery Act (CBARA)



Meet DoD's New Regional Environmental Coordination Office Team Member

By DoD Chesapeake Bay Program

Please welcome to the team, Ashley Kelly, our new Department of Defense (DoD) Chesapeake Bay Program (CBP) Coordinator. Regional Environmental Coordination (REC) office in Norfolk, Virginia. Ms. Kelly grew up in the Adirondack Mountains in Upstate New York. Though she did not visit the coast of the Atlantic Ocean until the age of 18, she credits her love of the ocean to this experience. In 2010, she received her bachelor's degree from University of Rhode Island with a major in Marine Biology. During her undergraduate education, she also studied abroad in Australia and attended James Cook University. This notable experience peaked Ms. Kelly's interest in conservation. She later attended the College of the Atlantic and received a Master of Philosophy degree in Human Ecology with a focus in Marine Ecology and Policy in 2013. From 2013 to 2015, Ms. Kelly worked as a Phytoplankton Specialist at the Community Environmental Health Laboratory within the Mount Desert Island Laboratory (MDL) in Maine. As a phytoplankton specialist, she collected phytoplankton and water quality at three coastal locations in partnership with Maine's Protection. She submitted the historic MDL, she was also a study cellular totipotency organism C. elegans. For a government contract environmental planning Environmental Impact Statement Training and Test In April 2019, Ms. Kelly Facilities Engineering 5) she served as a National manager and oversee on commission, and permit needs. She also manages efforts for the Marine C.



PHOTOGRAPH BY ASHLEY KELLY

CBP Metrics for Internal and External Communications



Installation environmental staff should regularly brief their installation leadership on their Chesapeake Bay Program (CBP) responsibilities and metrics that describe their progress, strengths, and program needs. The DoD CBP collects a large body of information in the annual datacall, which is used to develop the Best Management Practice (BMP) Crediting Reports. Chesapeake Bay Assessment Scenario Tool (CBAST) scenarios, and program metrics for DoD across the Chesapeake Bay watershed. This data also provides a range of metrics installations can leverage to customize their internal and external communication strategies.

This fact sheet includes a list of potential CBP indicator metrics and how to develop them. These metrics can be used in public outreach, informal briefings or incorporated into a more formal status report template that the DoD CBP is developing for briefing installation or service leadership about installation specific Chesapeake Bay Program progress. The template will be released separately.

CBP Metrics Options

Table 1 below and on the subsequent pages summarizes the potential CBP metrics, the applicable data sources, and a brief description of how the metrics can be developed from the stated source.

Table 1. Potential CBP metrics to be included in internal or external communications about installation CBP status (part 1 of 3)

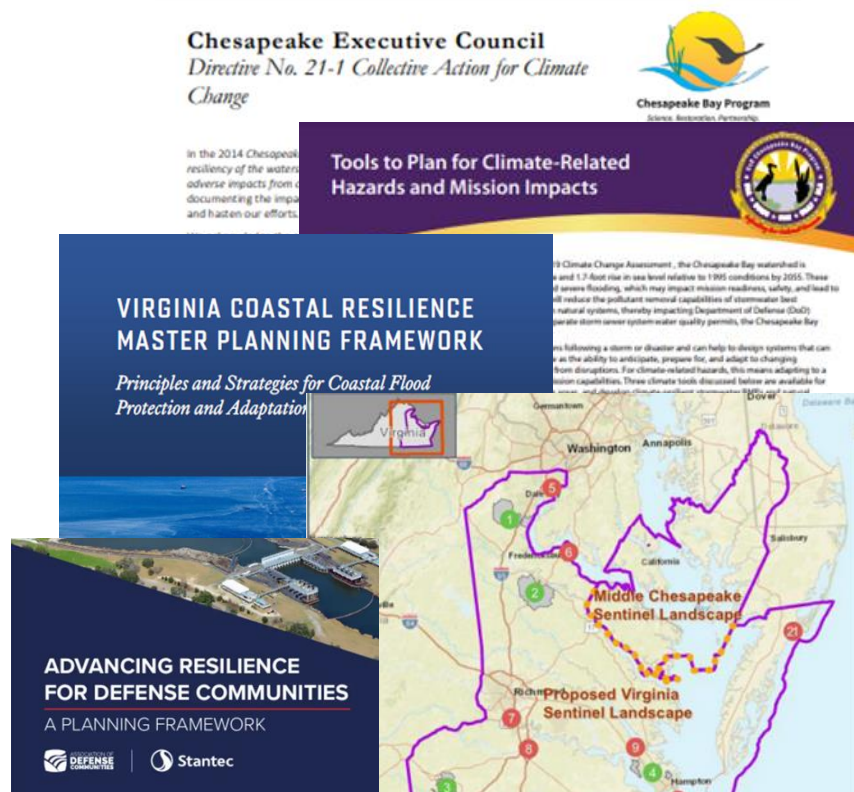
Metric Description (type)	Data Source	Retrieval Method
Installation CBP Program Information <ul style="list-style-type: none"> Installation map or aerial image that shows natural resources (range) Program strengths (e.g., significant land conservation, innovative public outreach) (narrative) Program challenges (e.g., limited funding, staff) (narrative) Recommended actions (e.g., identify partners, maintain BMPs) (narrative) 	Maps: Google Maps, Installation GIS, Integrated Natural Resources Management Plans (INRMPs), Installation planning documents Other Information: Staff knowledge	Discuss with appropriate installation staff.
Implementation of Stormwater BMPs <ul style="list-style-type: none"> Number of BMPs installed since 2010 (count) Number of Progress BMPs (count) Number of Planned BMPs (count) Number of BMPs with natural resource or climate resilience co-benefits (count) 	Number of BMPs Implemented by Year: BMP datacall	For number of BMPs installed since 2010, filter in the Date Installed/Built Date column for dates after 6/30/2010. For number of Progress and Planned BMPs, filter by BMP Status for the appropriate BMP status.
BMP Crediting Information <ul style="list-style-type: none"> Number and Percentage of BMPs credited in CBP (count %) Number of BMPs not credited due to lapsed inspection and maintenance (count) 	BMPs with Co-benefits: CBP datacall & list of BMPs with select co-benefits (a link to the list is included in the For More Information section) BMP Crediting Reports	For number of BMPs with select co-benefits, filter in the BMP Type column (name may vary by jurisdiction) for the BMP types on the list. Refer to the "Developing Installation Chesapeake Bay Program Metrics" fact sheet for a description of the crediting method. A link to this resource is included in the "For More Information" section at the end of this fact sheet.





DoD CBP Climate Initiatives

- Water Quality Programmatic Milestones to Address Climate Impacts on BMP Effectiveness
- EO 14008 - DoD and Service Climate Adaptation Plan
- CBP Partnership Climate Directive
 - Federal Implementation
- OLDCC – CUP & MIR Cooperative Planning
- REPI & Sentinel Landscapes –
 - Focus on regional initiatives
- Virginia Coastal Resilience Master Plan
- Outreach – Climate Literacy
- Carbon Sequestration Calculator



Success Story: NWS Earle Leads a Regional Approach to Climate Resilience

By Dennis Blazak, Community Planning Liaison Officer, NWS Earle, edited by Brown and Caldwell staff

Virginia Security Corridor





Projects with Co-Benefits Support Mission Assurance

Projects with co-benefits:

- Help DoD cost-effectively meet multiple objectives.
- Wise use of limited resources (i.e., staff capacity, land, finances)



Habitat

- » Biodiversity & Habitat
- » Fish Passage
- » Stream Health
- » Submerged Aquatic Vegetation
- » Wetlands



Healthy Watersheds

- » Healthy Watersheds
- » Land Use Methods & Metrics



Sustainable Fisheries

- » Fish Habitat
- » Oysters



Water Quality

- » Bacteria Loads
- » Energy Efficiency
- » Flood Control/ Mitigation
- » Forest Buffers
- » Groundwater Recharge
- » Recreation



Climate Resilience



Citizen Stewardship



Protected Lands

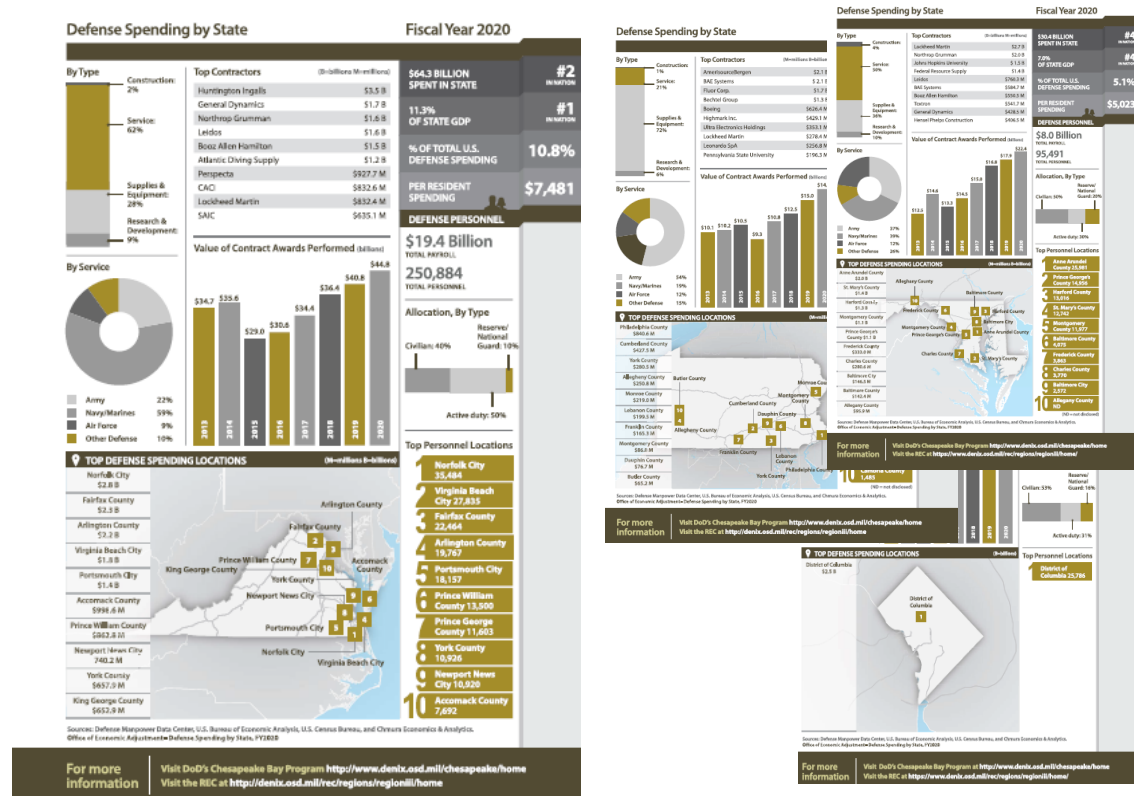




Ways the DoD Interacts with Defense Community

Impact on Local Economies

- Defense Spending by Type
- Defense Spending by Service
- Top Military Contractors
- Value of Contract Awards Performed
- Top Defense Spending Locations
- Personnel and Payroll
- Top Personnel Locations



<https://oldcc.gov/dsbs-fy2022>

Information Source: Defense Manpower Data Center, U.S. Bureau of Economic Analysis, U.S. Census Bureau, and Chmura Economics & Analytics. Office of Economic Adjustment – Defense Spending by State, FY2020






Ways the DoD Interacts with Defense Community

Cooperative Community Planning

The Office of Local Defense Community Cooperation's Installation Resilience program activities presents states and communities with the opportunity to partner with their local installations and the Military Departments to support installation resilience.

Projects may include the following:

- a comprehensive review of natural and man-made threats and vulnerabilities;
- targeted studies or plans concerning, but not limited to, transportation, land use/encroachment, utility services, housing, stormwater management, sewer, and communications; and,
- table-top exercises with local military and civilian (public and private) leadership to review capacities of hard infrastructure and public services to respond to natural and/or man-made disruptions.



Installation Resilience

A TOOL TO SUPPORT MILITARY MISSION SUSTAINMENT

Overview

The Office of Local Defense Community Cooperation's Installation Resilience program enables states and communities to partner with their local installations and the Military Departments to collectively, as "one community," respond to either the encroachment of a civilian community or threats to installation resilience that are likely to impair the continued operational utility of the military installation. Factors impacting an installation's resiliency may also impact the local defense industrial base as these program efforts can have far reaching benefits for the local mission. This program also merges previous installation resilience and compatible use (formerly the Joint Land Use Study, or JLUS) elements into one broader program continuum.

Program Goals

- A cooperative, community-driven planning effort that leverages the capabilities and strengths of state and local governments to address resilience and encroachment risks;
- Protect and enhance the public health, safety, and general welfare of those living and working near an active military installation, noting that, on average, up to 70 percent of an installation's force resides in the surrounding civilian communities - commuting to work on local roads occupying privately-owned housing, and attending local education facilities;
- Protect and enhance military readiness and defense capabilities while supporting continued community economic development; and,
- Enhance civilian and military communication and collaboration.

Program Activities

Installation Resilience program activities are designed to support the organizing, planning, and

implementation actions necessary to foster, protect, and enhance the sustainability of our military installations (including testing and training ranges, special use airspace, military operations areas, and/or military training routes) and related defense industrial base. Local civilian jurisdictions partner with their local installations as "one community" to identify man-made or natural threats across the community that are likely to impair the continued operational utility of local military installations, and then plan and carry out responses to enhance infrastructure and other resilience measures, as well as projects involving the protection, restoration, and maintenance of natural features. This may also include integrating installation and related defense industrial base vulnerabilities with local mitigation program and risk management program planning under the Federal Emergency Management Agency. It enables a "one community" response through a collaborative Federal, state, local, and private effort to optimize the capacities and resources each can bring to the effort and requires the civilian leaders and their military counterparts to not let an installation fence line distract or otherwise disrupt responses to vulnerabilities locally.

These program activities establish or reinforce an ongoing collaboration between civilian (public and private) and military equities that endures beyond the term of any project. Program activities encourage planning and collaboration to analyze options for the situation, adopt a strategy, and implement actions.

Projects may include the following:

- a comprehensive review of natural and man-made threats and vulnerabilities;
- targeted studies or plans concerning, but not limited to, transportation, land use/encroachment, utility services, housing, stormwater management, sewer, and communications; and,
- table-top exercises with local military and civilian (public and private) leadership to review capacities of hard infrastructure and public services to respond to natural and/or man-made

Contact: Margit Myers
Program Activity Lead
margit.a.myers.civ@mail.mil





REPI

READINESS AND ENVIRONMENTAL
PROTECTION INTEGRATION PROGRAM

Ways the DoD Interacts with Defense Communities

Readiness and Environmental Protection Integration (REPI) and REPI Challenge Opportunities

The Department of Defense's (DOD) Readiness and Environmental Protection Integration (REPI) Program preserves military missions by supporting cost-sharing agreements between the Military Services, other federal agencies, state and local governments, and private conservation organizations to avoid land use conflicts near military installations, address environmental restrictions that limit military activities, and increase resilience to climate change.

Results:

- Over 1.1M Acres Protected
- \$800M in REPI Dollars matched by \$1.1B in Partner Funds

Characteristics of Successful Applicants

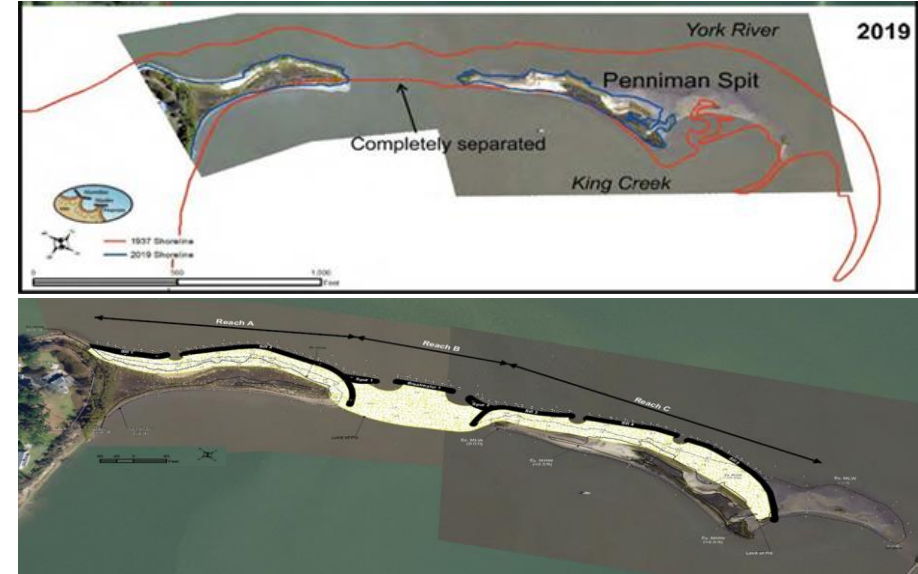
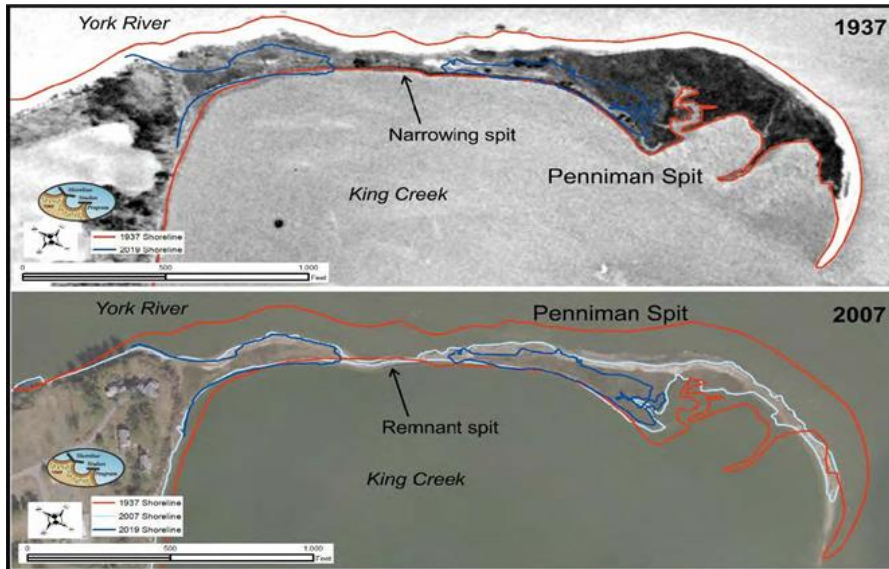
- Leverage >50% partner match; multiple diverse partnerships
- Executability – agreements in place and planning activities (if applicable) are/near complete
- Clearly demonstrate linkage between critical mission vulnerability and proposed solutions

Kristin Thomasgard, REPI Program Director: <https://www.repi.mil/>



Naval Weapon Station Yorktown (VA)

REPI Funding Nature-Based Strategies for Climate Resilie



Penniman Spit Highlights – protect 2,900 lf. of eroding shoreline including protection of NPS Colonial Parkway

- Living shoreline wetland restoration
- Sand flat and shallow water habitat restoration
- 675 linear feet of oyster reef restoration



Ways the DoD Interacts with Defense Communities

Sentinel Landscape Program Partnership

- ★ The U.S. Department of Agriculture, U.S. Department of Defense, and U.S. Department of the Interior established the Partnership in 2013
- ★ The Partnership's overarching goals are to:
 - ▶ Strengthen military readiness;
 - ▶ Bolster agricultural and forestry productivity;
 - ▶ Conserve natural resources; and
 - ▶ Enhance climate change resilience.



Contact: Kristin Thomasgard
DoD REPI Federal Coordinating Committee
Representative, Sentinel Landscapes Partnership
FCC@sentinellandscapes.org

www.sentinellandscapes.org



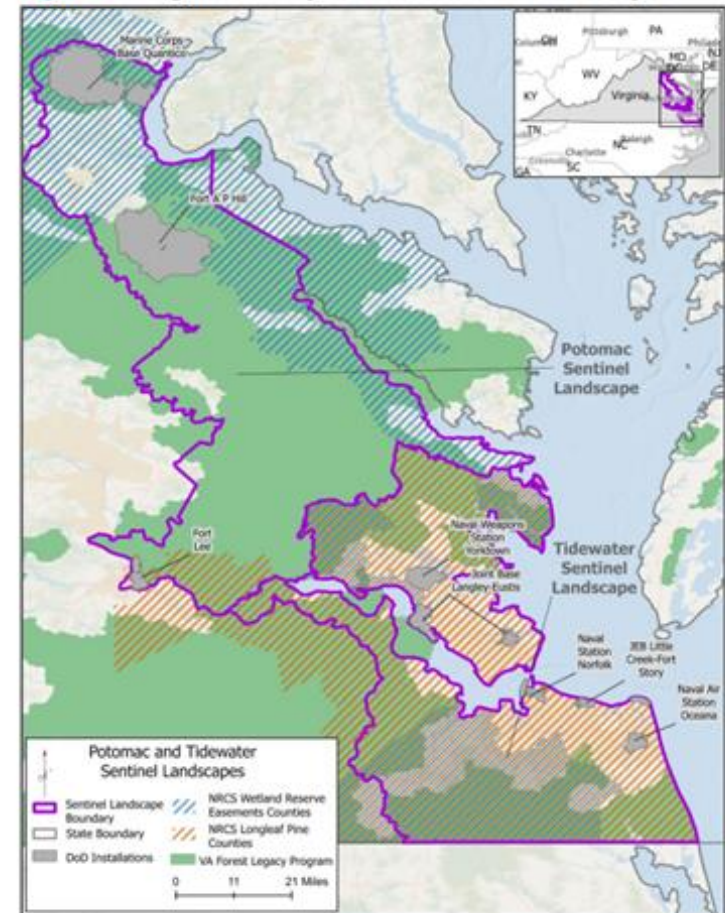


Conserved Land – Sentinel Landscapes

The Sentinel Landscapes Partnership is a coalition of federal agencies, state and local governments, and non-governmental organizations that work with willing landowners and land managers to advance sustainable land use practices around military installations and ranges.

- Virginia Security Corridor Partnership
- Two New Sentinel Landscapes in VA
 - Tidewater Sentinel Landscape
 - Potomac Sentinel Landscape
- Connects Eastern NC and Middle Chesapeake Sentinel Landscapes

Figure 1: Virginia Security Corridor Sentinel Landscapes





Ways the DoD Interacts with Defense Communities

Defense Community Infrastructure Pilot (DCIP) Program

The Defense Community Infrastructure Pilot Program (DCIP) is designed to address deficiencies in community infrastructure, supportive of a military installation, in order to enhance military value, cadet training at covered educational institutions, installation resilience, and military family quality of life.

Eligible community infrastructure projects generally must:

- Supports a military installation or the training of cadets
- Is located off of a military installation
- Will enhance military value, training, military installation resilience, or military family quality of life
- Is endorsed by the installation commander representing the installation benefiting from the proposed project
- Is construction-ready

To learn about the application process and past grantees:
<https://oldcc.gov/defense-community-infrastructure-program-dcip>



Defense Community Infrastructure Pilot Program

Overview

The Defense Community Infrastructure Pilot Program (DCIP) is designed to address deficiencies in community infrastructure, supportive of a military installation, in order to enhance military value, cadet training at covered educational institutions, installation resilience, and military family quality of life.

Section 2391(d) of Title 10, United States Code (10 U.S.C. 2391), authorizes the Secretary of Defense to "make grants, conclude cooperative agreements, and supplement funds available under Federal programs administered by agencies other than the Department of Defense," for projects owned by a state or local government, or a not-for-profit, member-owned utility service to address deficiencies in community infrastructure supportive of a military installation.

DCIP is a competitive grant program administered by the Department of Defense Office of Local Defense Community Cooperation (OLDCC). Between FY20 and FY22, OLDCC awarded 48 projects representing \$200 million in Federal funding and over \$212 million in match. In FY23, \$100 million is available for award.

Who Can Apply

- State or local governments
- Entities other than those identified above may partner with an eligible entity

Eligible Projects

Eligible community infrastructure projects are any complete and useable transportation project, school, hospital, police, fire, emergency response, or other community support facility; or water, wastewater, telecommunications, electric, gas, or other utility project that meets the following criteria:

- Supports a military installation or the training of cadets enrolled in an independent program at a covered educational institution;
- Is located off of a military installation or on property under the jurisdiction of a Secretary of a military department that is subject to a real estate agreement;
- Will enhance military value, training of cadets enrolled in an independent program at a covered educational institution, military installation resilience, or military family quality of life at the supported military installation;
- Is endorsed by the installation commander representing the installation benefiting from the proposed project; and,
- Is construction-ready.





Ways the DoD Interacts with Defense Communities

Model-Based Tracking and Integrated Valuation of Ecosystem Services (MoTIVES)

The DoD's Strategic Environmental Research and Development Program (SERDP) is working with a Duke University Researcher (Dr. Mark Borsuk) to test and refine a model that estimates the value of installation land management practices and their monetary contributions to ecosystem services in surrounding defense communities.

The research will:

- document the ecosystem values that military installations provide to surrounding communities
- will help predict impacts of future land use management activities on ecosystem service production

Initial Study Results:

Current management at Eglin Air Force Base generates \$75.6 Million per year in ecosystem services

Follow up:

In the Chesapeake Watershed, Fort Belvoir (VA) is one of six installations nationwide where similar contributions will be assessed.



Ways the DoD Interacts with Defense Communities

Defense Access Roads Program

The Defense Access Road (DAR) Program provides a means for the military to pay their share of the cost of public highway improvements necessary to mitigate an unusual impact of a defense activity. An unusual impact could be a significant increase in personnel at a military installation, relocation of an access gate, or the deployment of an oversized or overweight military vehicle or transporter unit.

To initiate a DAR project:

- The local military base identifies the access or mobility needs and brings these deficiencies to the attention of the Military Surface Deployment and Distribution Command (SDDC).
- The base commander formally submits the requirement to SDDC if it is determined to impact the mission or welfare of the base or military service.
- The SDDC will then either prepare a DAR needs evaluation or request the FHWA to make an evaluation,
- Development of a cost estimate and scope of work to address the noted deficiencies.

**SDDC Defense Access
Road Program Contacts:**

Darryl Hampton, P.E.
Phone: (618) 220-5578

Bryan Hall, P.E.
Phone: (618) 220-5253



Questions?

Contact us:

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Ashley Kelly, DoD CBP Coordinator (ashley.l.kelly.civ@us.navy.mil)

