

2022 Restoring Wetlands of the Chesapeake Bay Watershed Workshop – DAY 2, SESSION 3

Photo by Matt Rath/Chesapeake Bay
Program

Plenary sessions will be recorded for note taking purposes only. Breakout sessions will not be recorded.

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are scheduled to present

Virtual Meeting
August 3, 2022
10am – 3:30 pm



An aerial photograph showing a wide river with a yellowish-brown tint. The river is bordered by green agricultural fields and dense forests. The text 'FEDERAL PANELISTS' is centered over the river.

FEDERAL PANELISTS

Photo by Matt Rath/Chesapeake Bay Program

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National Oceanic & Atmospheric Administration

Sean Corson



Photo by Matt Rath/Chesapeake Bay Program

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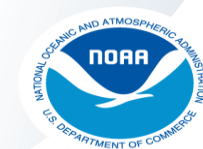
NOAA
FISHERIES

Habitat Restoration Funding under the Bipartisan Infrastructure Law Wetlands Options

Sean Corson, NOAA
August 3, 2022

Bipartisan Infrastructure Law

- Signed into law on November 15, 2021
- Unprecedented opportunity to make a difference for fisheries, threatened and endangered species, and communities
- Roughly \$3 billion for NOAA over 5 years, with significant funding for habitat restoration, conservation, and resilience
 - Learn more at noaa.gov/infrastructure-law



NOAA
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Habitat Restoration and Resilience Funding

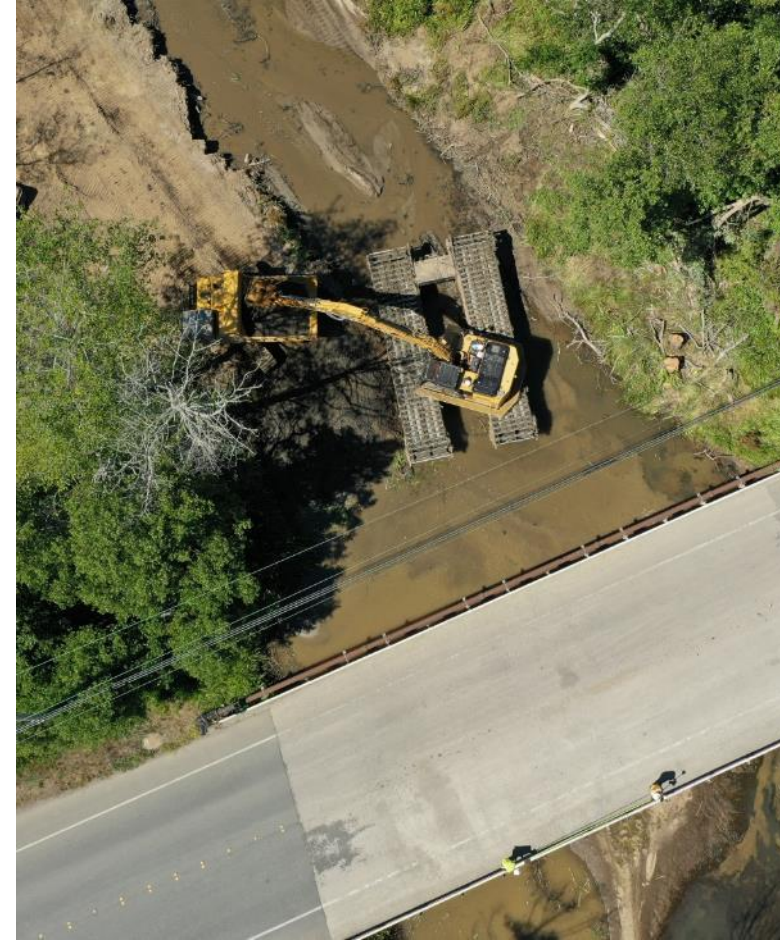
- **\$491 million** over 5 years for restoring marine, estuarine, coastal, and Great Lakes ecosystems, and enhancing coastal community resilience
- Two funding opportunities in 2022:
 - Transformational Habitat Restoration and Coastal Resilience Grants
 - Coastal Habitat Restoration and Resilience Grants for Underserved Communities



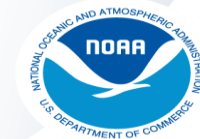
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Funding Opportunity: Transformational Habitat Restoration and Coastal Resilience Grants

- Up to **\$85 million** available to restore habitat for fisheries and protected resources, while also strengthening the resilience of coastal communities and ecosystems
- **Award range:** \$1 million to \$15 million
- **Opportunity number:** NOAA-NMFS-HCPO-2022-2007195
- Closes **September 6**
- **Contact:** Resilience.Grants@noaa.gov



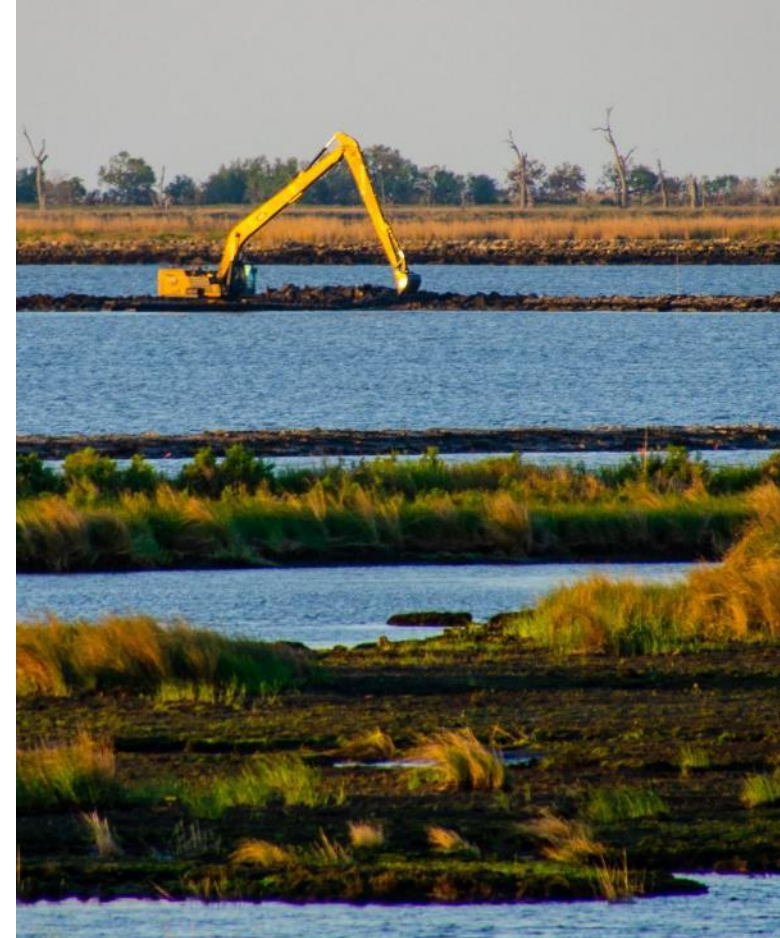
Credit: San Mateo Resource Conservation District



NOAA
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Funding Opportunity: Coastal Habitat Restoration and Resilience Grants for Underserved Communities

- Up to **\$10 million** available to engage underserved communities in habitat restoration activities that promote resilient ecosystems and communities
- **Award range:** \$75,000 to \$1 million
- **Opportunity number:** NOAA-NMFS-HCPO-2022-2007354
- Closes **September 30**
- **Contact:**
Underserved.Community.Grants@noaa.gov



Additional NOAA Funding for Habitat

- Fish Passage
 - **400 million** over 5 years (%15 Tribal set aside)
- National Oceans and Coastal Security Fund Grant Program
 - **\$492 million** over 5 years
- Habitat Restoration - Coastal Zone Management Program
 - **\$207 million** over 5 years
- Habitat Restoration - National Estuarine Research Reserves
 - **\$77 million** over 5 years
- Pacific Coast Salmon Recovery
 - **\$172 million** over 5 years



Credit: Alaska ShoreZone



NOAA
FISHERIES



Thank you!

Credit: Hawk Visuals



NOAA
FISHERIES



U.S. Fish & Wildlife Service

Rick Bennett



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Funding Opportunities



2022 RESTORING WETLANDS OF THE CHESAPEAKE BAY WATERSHED WORKSHOP AUGUST 2-3, 2022

Richard O. Bennett, Ph.D.
Regional Scientist,
U.S. Fish and Wildlife Service
Hadley, MA
rick_bennett@fws.gov

Photo: NOAA



Partners for Fish and Wildlife Program



Background:

- Service provides technical and financial assistance to plan, design, supervise and monitor customized habitat restoration projects.
- Available to landowners, managers, tribes, corporations, schools and nonprofits interested in improving wildlife habitat on their land
- Projects are voluntary and customized to meet landowners' needs
- Projects designed to benefit federal trust species including migratory birds, endangered, threatened and at-risk species
- Priority given to projects that provide habitat for rare, threatened and endangered species
- Projects have a minimum duration of 10 years
- The Service partners with other federal agencies, state agencies and non-governmental organizations to complete projects on private lands
- Landowners do not forfeit property rights and not required to allow public access



Partners for Fish and Wildlife Program



Northeast Region Goals include:

- **Conserve and Protect Habitat:** for listed and at-risk species, connecting aquatic and terrestrial habitats, and by Restoring and protecting resilient ecosystems
- **Broaden and Strengthen Partnerships:** Engage and facilitate key partnerships that will restore important fish and wildlife habitats
- **Improve Information Sharing and Communication:** engage with communities, schools, and congressional members to increase program awareness, share success stories, and connect people with nature
- **Increase Accountability:** ensure actions are effective and that they promote transparency

Funding levels:

- **FY 2022 - \$57,715,000**
- **FY2023 – House mark \$69,897,000; Senate mark \$60,867,000**



Chesapeake Watershed Investments for Landscape Defense (Chesapeake WILD)



The Chesapeake WILD program's framework is organized around five themes, or "Pillars," that inform the program's focus:

- 1. Sustain and enhance restoration and conservation activities by conserving a resilient network of fish and wildlife habitats and connecting corridors, with an emphasis on at-risk and federally listed species and their habitats.**
- 2. Address climate change by increasing scientific capacity and supporting strategic planning, monitoring, and applied science activities necessary to ensure resilience of natural ecosystems and habitats impacted by changing climate and development.**
- 3. Increase capacity and support for coordinated restoration and conservation activities in the Chesapeake Bay watershed, particularly in historically and systemically under-resourced communities, through outreach, education, and civic engagement.**
- 4. Enhance recreational opportunities and public access with a strong emphasis on equitable access to nature and all associated benefits, consistent with the ecological needs of fish and wildlife habitat.**
- 5. Improve and sustain water quality, upgrade water-management capability, and reduce flood damage, with an emphasis on green infrastructure and natural infrastructure to support fish and wildlife populations, their habitats, and drinking water for people.**



Chesapeake Watershed Investments for Landscape Defense (Chesapeake WILD)



The Chesapeake WILD grant program complements existing investments in clean water for wildlife and people by supporting projects that are of exceptional value for fish and wildlife, outdoor recreation, climate resiliency, community engagement, and equitable access to the outdoors that cannot be funded by other restoration grant programs

- **FY 2022 - Chesapeake WILD program received \$4 million**
- **Used the NFWF and EPA Chesapeake Stewardship Fund Small Watershed Grant program to announce potential funding of Chesapeake WILD funds**
- **FY 2023, will use a separate RFP for Chesapeake WILD funding - \$15 million House mark; \$6 million Senate mark**



America the Beautiful



Conserving and Restoring America the Beautiful report - core areas of need

1. Conserving and restoring rivers, coasts, wetlands and watersheds
2. Conserving and restoring forests, grasslands and other important ecosystems that serve as carbon sinks
3. Connecting and reconnecting wildlife corridors, large landscapes, watersheds and seascapes
4. Improving ecosystem and community resilience to flooding, drought, and other climate-related threats
5. Expanding access to the outdoors, particularly in underserved communities

Funding: \$375M over 5 years Eligible: States, territories, and Tribes

DOI Conservation and Restoration Funds – Match Requirements

- States 90% of costs 10% of costs, at least 2.5% must be cash
- Tribes & Territories 97% of costs 3% of costs, at least .75% must be cash



Other Opportunities



Fish Passage:

- program funding and
- BIL funding \$200 million/year for 5 years

National Coastal Wetlands Conservation Grants:

- In 2022, 25 projects in 13 states were awarded a total of over \$20.1 million to protect and/or restore over 61,000 acres of priority coastal and riparian habitat, and several miles of shoreline



Environmental Protection Agency

Martha Shimkin



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VERBAL PRESENTATION
(Notes will be included in the Meeting Minutes)





Natural Resources Conservation Service

Dan Ludwig



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VERBAL PRESENTATION
(Notes will be included in the Meeting Minutes)





U.S. Army Corps of Engineers, Norfolk District

Dan Bierly presenting on behalf of Michelle Hamor



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USACE Aquatic Ecosystem Restoration

Michelle Hamor
Chief, Planning and Policy Branch
U.S. Army Corps of Engineers, Norfolk District

*2022 Restoring Wetlands of the
Chesapeake Bay Watershed Workshop
3 August 2022*

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."



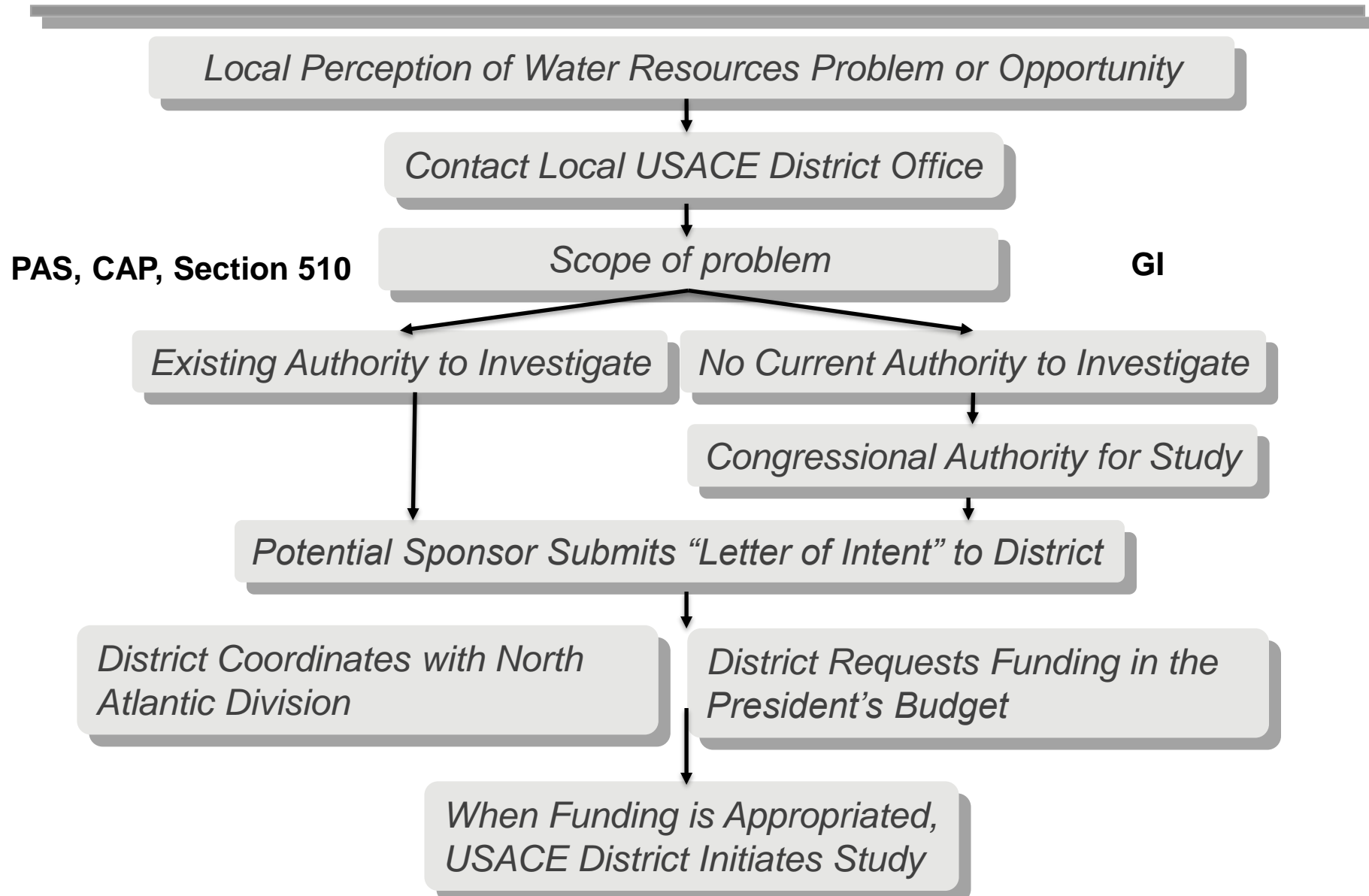
US Army Corps
of Engineers®



USACE Programs for Ecosystem Restoration

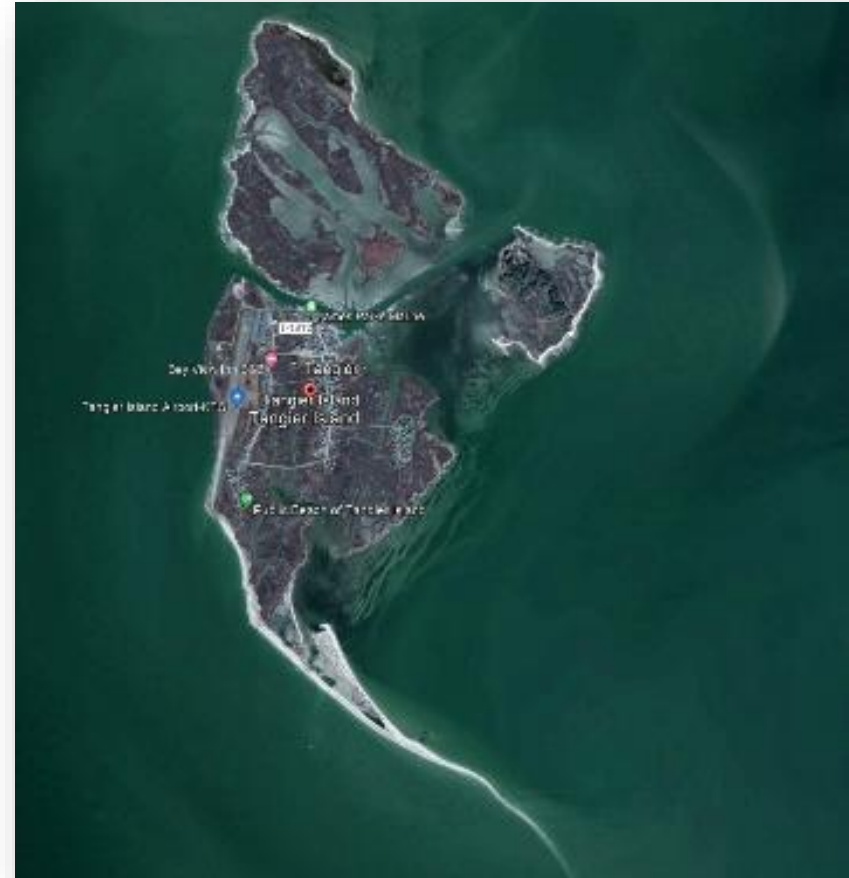
Program	Type	Cost Share	Example
Planning Assistance to States (PAS)	Technical Assistance, ~\$25K - \$100K	50/50	Shoreline and Oyster Reef Restoration, Menchville Marina, Deep Creek, Newport News (Complete)
Section 510 , Chesapeake Bay Environmental Restoration and Protection Program	Small Projects <\$10M	Feasibility: 100% Federal D&I: 75/25	Middle Peninsula State Park Living Shoreline (Proposed)
Continuing Authority Program (CAP), Section 204 , Beneficial Use of Dredged Material	Small Projects <\$10M	Feasibility: 100% Federal D&I: 65/35	Hampton Roads Beneficial Use of Dredged Material (Feasibility)
CAP, Section 206 , Aquatic Ecosystem Restoration	Small Projects <\$10M	Feasibility: 50/50; D&I: 65/35	Belle Isle State Park (Proposed)
General Investigations	Large Projects >\$10M	Feasibility: 50/50; D&I: 65/35	Lynnhaven River Basin Ecosystem Restoration (Construction)

How to Access Funding



Closing Thoughts

1. Anticipate and prepare for the need with a list of risk areas based on priority/funding
2. Map outlining areas of risk (multiple benefits, erosion, flood risk)
3. Watershed/State priority list
4. Local Government, NGO, Coordination
5. List of funding programs



An aerial photograph showing a wide river with a yellowish-brown tint. The river is bordered by green agricultural fields and a dense line of trees. The text "NON-FEDERAL & STATE PANELISTS" is overlaid in a dark blue box.

NON-FEDERAL & STATE PANELISTS

An aerial photograph of a marshy area with a winding waterway. The water is dark blue, and the surrounding land is covered in bright green vegetation. The text "Photo by Matt Rath/Chesapeake Bay Program" is overlaid in a black box.

Photo by Matt Rath/Chesapeake Bay Program

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National Fish & Wildlife Foundation

Jake Reilly



Photo by Matt Rath/Chesapeake Bay Program

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Funding Opportunities for Chesapeake Bay Wetlands Outcomes
CBP Wetland Outcome Attainability Workshop
August, 2022

WE'RE OPEN FOR BUSINESS – AND WE NEED YOU!

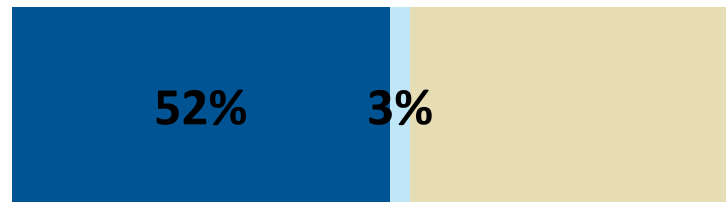
American black duck

NFWF will support the recovery of American black duck by **increasing wetland habitat and available food to support 5,000 wintering black ducks**, or 5% of the Chesapeake Bay Watershed Agreement goal for wintering black duck populations. Activities contributing to this outcome by 2025 include:



- Creating, reestablishing, or enhancing the function of 7,000 acres of tidal and non-tidal wetlands to increase black duck carrying capacity through improved food resources.
- Increasing available food resources by 680 million kilocalories.

Acres created, restored,
or enhanced



3,000+ additional acres needed by 2025



NFWF

CHESAPEAKE BAY STEWARDSHIP FUND GRANTS PROGRAMS

	INNOVATIVE NUTRIENT AND SEDIMENT REDUCTION GRANTS	SMALL WATERSHED GRANTS	CHESAPEAKE WILD
PRIMARY FUNDER	U.S. EPA	US.EPA	U.S. FWS
PRIMARY OBJECTIVE	Accelerate the rate and scale of water quality improvements through coordinated and collaborative efforts of sustainable, regional-scale partnerships	On-the-ground actions to protect and restore water quality, species, and habitats in the Bay watershed	
PROGRAM TIMELINE	Fall solicitation / Spring awards	Spring solicitation / Summer awards	
AWARD RANGE	\$500,000 - 1,000,000	\$75,000 - 500,000	\$75,000 - 750,000
MATCH REQUIREMENTS	Base Program: 1:1 non-Federal Infrastructure Funding: Not required*	Base Program: 1/3 of request Infrastructure Funding: N/A	1:1 match requirement, up to half from non-DOI federal sources
FY23 FUNDING (EST.)	\$20M	\$30M	\$5.5M
WETLAND FIT	Non-tidal only	Tidal and non-tidal	



Pennsylvania

**Robert Boos, PA Infrastructure Investment Authority
(PENN VEST)**



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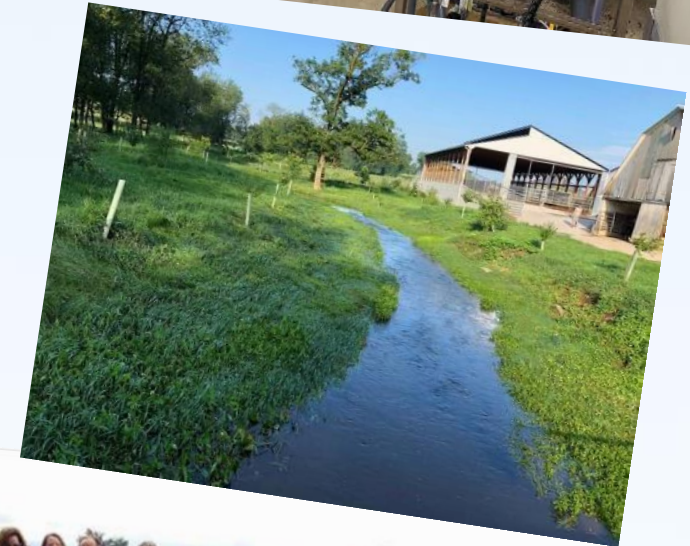


PENNVEST

PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY



Funding Clean Water Projects!!



How Can PENNVEST Help?

- **Drinking Water – Public/Private**
- **Wastewater – Public/Private**
- **Stormwater – Public/Private**
- **Non-Point Source**
 - **Ag BMPs – Public/Private**
 - **Acid Mine – Public/Private**
 - **Brownfield – Public/Private**
 - **Green Infrastructure – Public/Private**
 - **Onlot Systems – Principal Residence**
 - **Sewer Lateral Repair/First-Time Hookup – Principal Residence**
- **Lead Testing and Remediation – Schools and Childcare facilities**

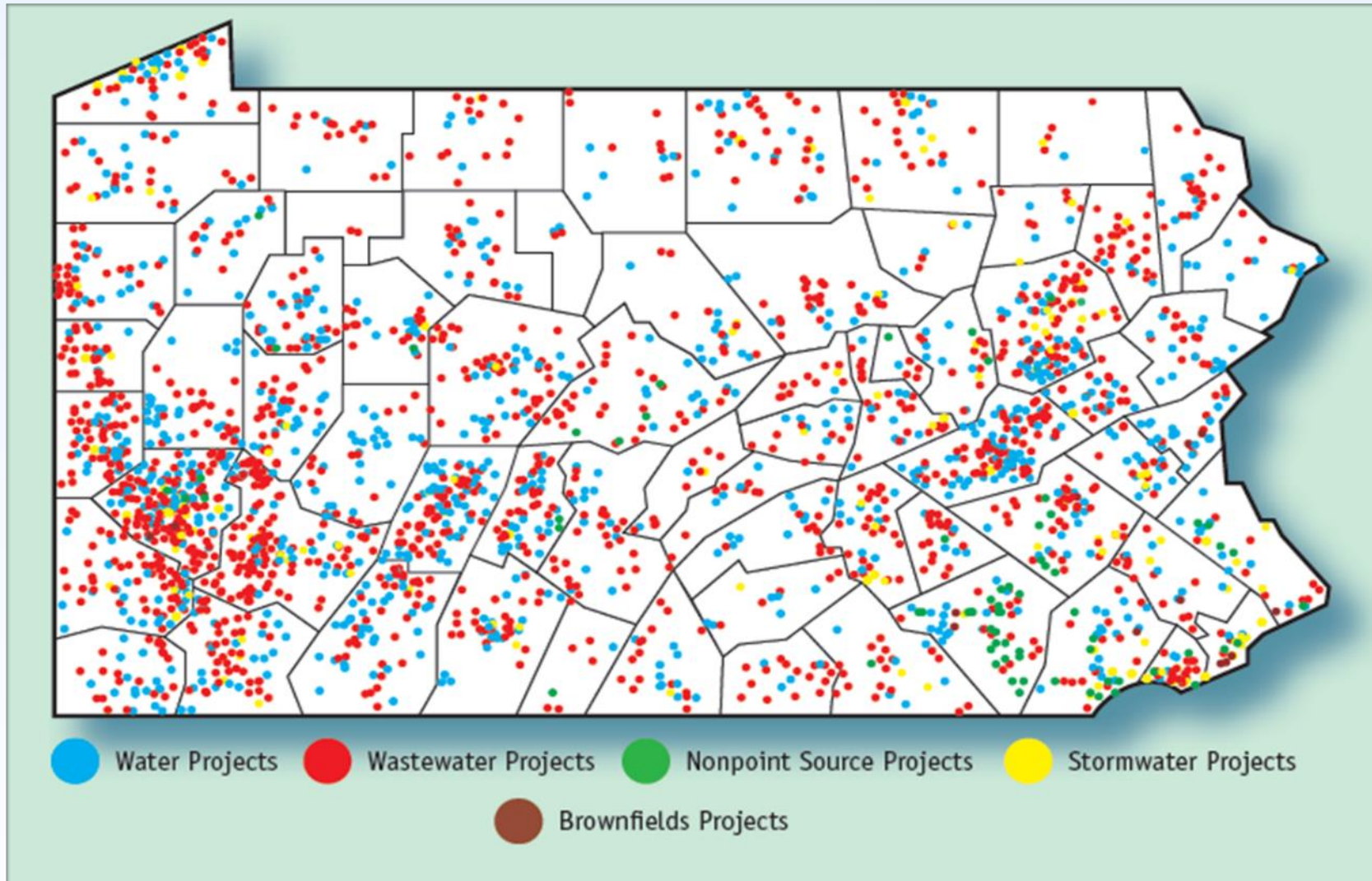
PENNVEST Financing

Projects Approved: 4,523 for a Total Funding of \$10.7 Billion

\$800 Million Budgeted for 2022-2023

- **1,162 Drinking Water**
- **1,736 Wastewater**
- **17 Brownfield**
- **185 Non-Point Source**
- **3 Acid Mine Drainage**
- **149 Stormwater**
- **1,019 Onlot Repairs**
- **24 Sewer Laterals Replaced**
- **228 New Sewer Connections**

PROJECTS DISTRIBUTION STATEWIDE



PENNVEST BOARD MEETINGS

APPLICATION CUT-OFF DATES

May 4, 2022

August 3, 2022

November 2, 2022

February 1, 2023

May 3, 2023

BOARD MEETING DATES

July 20, 2022

October 19, 2022

January 18, 2023

April 19, 2023

TBD



WEB-BASED SYSTEM

APPLY **ONLINE**

- The collection and evaluation of information for project review, ranking, and recommendation
- Submittal of bid, project costs, contracts, and documents necessary for settlement
- Submittal, review, and disbursement of eligible costs associated with implementation of construction
- PENNVEST review of change orders and project close-out
- Collection of repayments and annual financial statements
- Electronic signature

24/7 access to the information and status of your project along the way!

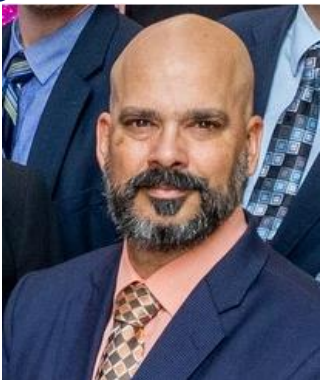
PENNVEST CONTACTS

Region 1 – Northwest PA



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Region 2 – Southwest PA



Dan Mikesic
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Region 3 – Southcentral PA



Tess Schlupp
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Region 4 – Northeast and Southeast PA



Rebecca Hayden
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Region 5 – Northcentral PA



Leslie Cote
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lecote@pa.gov



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Calendar



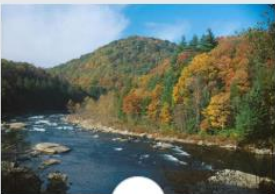
PV Portal



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SPOTLIGHT



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[Update Regarding COVID-19](#)

[Payment Deferral](#)

[Funding Programs](#)

PRESS RELEASES



[Gov. Wolf Announces \\$450 Million Loan Program for Financially Strained Hospitals](#)

[Governor Wolf Announces \\$9.2 Million Investment in Water Infrastructure Projects in 15 Counties](#)

[Governor Wolf Announces \\$98](#)

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Come join us at one of our information exchanges at a location nearest you!

PENNVEST
PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

SPRING 2019 PENNVEST INFORMATION SESSIONS
Municipal officials, conservation districts, private landowners, authority users and staff, regulators, engineers, and others interested in learning how PENNVEST funding can help improve water quality in your community. Join PENNVEST to learn about:

- Architecture and engineering requirements
- Project Eligibility
- Lead line replacement program
- On-lot, lateral replacement program

New funds disbursement system
Discussion of modernizing the application process (input on the current process)
What's working & what needs improvement (settlement, disbursement closeout)
Open forum Q&A
Adjourn

If interested in attending, register at:
<https://www.eventbrite.com/e/pennvest-information-sessions-tickets-559486>

Register soon to reserve your seat!
contact your regional Project Specialist with questions or concerns regarding the events.

East Region: Rebecca Kennedy (717) 574-8454 rkennedy@pa.gov
West Region: Dan Mikesic (717) 574-8452 dmikesic@pa.gov
West and Northcentral Regions: David Henning (717) 574-8451 dhenning@pa.gov
East and South Central Regions: Tesra Schlupp (717) 574-8453 tschlupp@pa.gov

ALL WORKSHOPS ARE 9:30 – NOON UNLESS NOTED OTHERWISE
Parking is available on-site for all locations

11th CLEARFIELD COUNTY 9:30-NOON, at the PennDOT Training Center, 101 Drive, Clearfield, PA, 16830 814-765-5825

12th TIOGA COUNTY 9:30-NOON at the Mansfield, PA, Microtel Inn Suites, 90 Driftfield, PA, 16933; 570-662-9300

13th CHESTER COUNTY 9:30-NOON at the Tredyffrin Township Building, Keen H. Mortal Road, Berwyn, PA, 19312; 610-633-1400

14th CAMBRIA COUNTY 9:30-NOON at the PADEP Offices, 286 Industrial Park Road, PA, 15931 814-472-1905

15th WESTMORELAND COUNTY 1:00-3:30 at the PADEP Offices, 131 Broadview Road, PA, 15672 724-925-5530

16th CRAWFORD COUNTY 9:30-NOON at the Meadville Holiday Inn Express, 18240 Lake Road, Meadville, PA, 16335; 814-724-0012

17th LEHIGH COUNTY 9:30-NOON at the offices of the Lehigh Valley Planning Commission, 960 Marcon Boulevard, Allentown, PA, 18109; 610-965-4544

18th DAUPHIN COUNTY 9:30-NOON at the offices of the Fish and Boat Commission, Avenue, Harrisburg, PA, 17110 717- 705-7900

19th LACKAWANNA COUNTY 9:30-NOON at the Lackawanna County Emergency Center, View Drive, Jessup, PA, 18434; 570-307-7300

20th BEDFORD COUNTY 9:30-NOON at the Bedford County Courthouse, 200 S. Jefferson, PA, 15522; 814-623-4807

21st LUZERNE COUNTY 9:30-NOON at the Top of the 80's Restaurant Meeting Room, 80's Road, Hazle Township, PA, 18202 570-454-8795

Robert H. Boos
Deputy Executive Director for Project Management
PENNVEST
Phone – 717.783.4493
E-mail - rboos@pa.gov



Virginia

Mike Crocker, Department of Environmental Quality



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Clean Water Financing & Assistance Program



Clean Water Financing & Assistance Program

- Virginia Clean Water Revolving Loan Fund (VCWRLF aka CWSRF)
- Water Quality Improvement Fund (WQIF)
- Stormwater Local Assistance Fund (SLAF)

Virginia Clean Water Revolving Loan Fund

- Annual solicitation- June – July
- Local Gov't, PSA's, Non-profits
- Eligible project types include:
 - Publicly owned wastewater collection and treatment facilities
 - Publicly owned stormwater best management practices
 - Remediation of contaminated brownfield properties
 - Land conservation
 - Living shorelines
 - Agricultural best management practices

Virginia Clean Water Revolving Loan Fund

- Opportunities for wetlands restoration/enhancements
 - Projects may be eligible for funding under SW or WW Loan
 - Stand alone or project with co-benefit
 - May qualify for Green Project Reserve
 - Some projects qualify for 0% equivalent interest rate
 - Some receive subsidized program rate
 - Additional Principal Forgiveness (grant) possible
 - Pairing with Stormwater Local Assistance Fund (50/50 matching grant program) may provide additional grant funding

Virginia Clean Water Revolving Loan Fund

- Challenges-
 1. Project Identification
 2. Responsible parties
 3. Partnership arrangements
 4. Debt service are hard sell on non-utility projects
 5. Many projects in pursuit of water quality credit (permit compliance)

Virginia Clean Water Revolving Loan Fund

- Project examples
 1. City of Norfolk DPU- Constructed Wetlands & Living Shorelines
 2. MPPDC- Living Shorelines
 3. City of Waynesboro- Constructed Wetland
 4. SLAF- Many projects are stream restorations with floodplain reconnection and wetland restoration/enhancement



Questions?

Mike Crocker, Jr
Regional Team Manager
michael.crocker@deq.virginia.gov
804-929-5635



New York

Cassie Davis, Department of Environmental Conservation



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Calendar*





Delaware

Mark Biddle, Department of Natural Resources &
Environmental Control



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Maryland

Sarah Hildebrand, Department of Natural Resources



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Funding Opportunities; Chesapeake and Coastal Service

Wetlands Outcome
Attainability Workshop
August 3, 2022

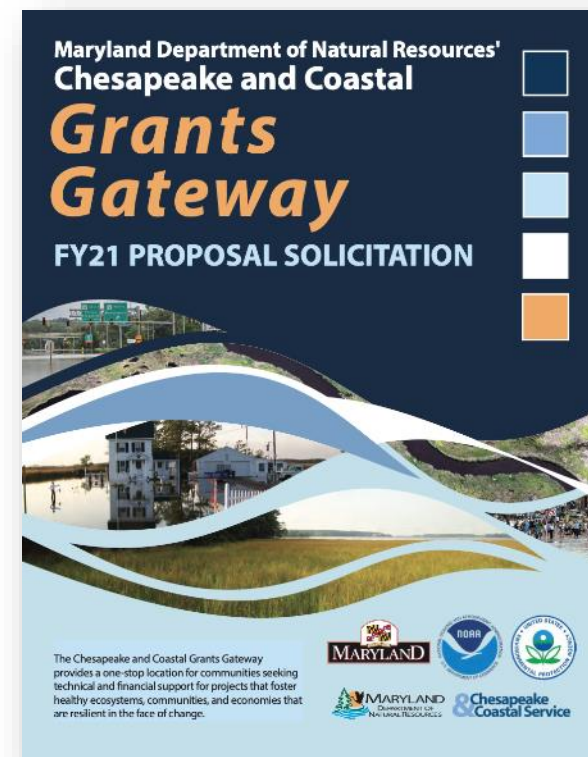
Grants Gateway



One-stop location for partners seeking technical and financial support for projects that foster healthy ecosystems, communities, and economies that are resilient in the face of climate change.

Grants are made with funding through:

- Chesapeake and Atlantic Coastal Bays Trust Fund
- Coastal Resiliency Program
- Waterway Improvement Fund,
- NOAA
- EPA's Chesapeake Bay Program



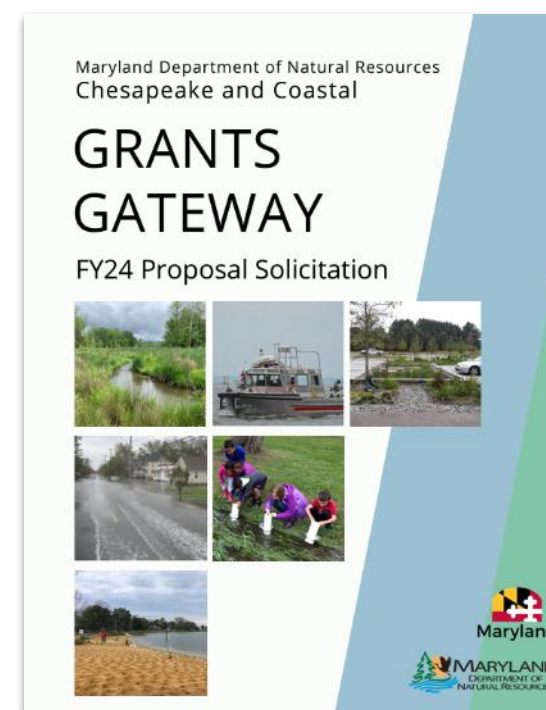
<https://dnr.maryland.gov/ccs/Pages/funding/grantsgateway.aspx>

Reduces administrative burden on applicants * Allows state to better leverage across fund sources * Supports more comprehensive review and project investment

Grants Gateway



- **Outcome 1** – Accelerate recovery and restoration of natural resources by implementing non-point source pollution reduction projects.
- Outcome 2 – Enhance capacity to understand and effectively plan to address flood risks associated with a changing climate.
- **Outcome 3** – Utilize natural and nature-based infrastructure to enhance resilience to climate change.
- Outcome 4 – Improve student ability to take action benefiting Chesapeake and coastal ecosystems through outdoor learning and stewardship.
- Outcome 5 – Foster sustainable development and use of Maryland waterways with projects that benefit the general boating public.



Outcome 1



In 2007, Maryland General Assembly took a bold step in their efforts to restore the Chesapeake Bay with the creation of the **Chesapeake and Atlantic Coastal Bays Trust Fund (Trust Fund)**



The Trust Fund allows Maryland to accelerate Bay restoration by focusing limited financial resources on the most cost effective non-point source pollution control projects



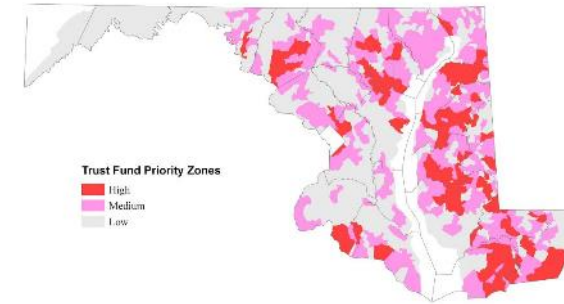
Funding is generated through motor fuel and car rental tax in Maryland. When fully funded, the Trust Fund will generate upwards of \$50 M annually in support of watershed restoration

Project Selection



Geographic Targeting (current)

Funds are annually targeted to specific watersheds, watershed areas, projects and practices that provide the most cost-effective water quality benefit to the Chesapeake and Coastal Bays via reductions in non-point source nutrient and sediment loadings.



Future of Geographic Targeting: Pilot FY2024

Targeting will move away from a static map where watersheds are ranked, and instead the user will highlight at the landscape scale how the project achieves nutrient/sediment reductions while also providing co-benefits.

Potential targeted co-benefits:

- restoration of aquatic resources including SAV and oyster reefs;
- climate resilience and carbon sequestration;
- creation of wildlife habitat;
- local employment opportunities;
- the improvement or provision of recreational opportunities;
- environmental justice benefits.

Project Selection



Cost-Efficiency

Projects are ranked on their cost-efficiency based on the request to the state funds.
Defined as the **state cost per pound of nutrient and sediment reduced***.

FIELDDOC.ORG

Readiness and Ability to Proceed

Project solicitation prioritizes projects that are fully designed and permitted.
This allows the state to have a full understanding of the investment and returns.
Managers also consider applicant's past success with the fund (ability).



Spotlight on Wetlands



- Wetland Restoration meets Trust Fund goals
 - cost effective for the sediment & nutrient reductions,
 - numerous co-benefits (wildlife habitat, carbon sequestration, flood storage...)
- Since 2010, The Trust Fund has supported more than 3,000 acres of wetland restoration projects.
- Project Mapper & Story map available online.



Outcome 3



Resiliency through Restoration: Utilize natural and nature-based infrastructure to enhance resilience to climate change.

Proposed projects:

- may support design, engineering and implementation of projects that restore, create, and strengthen natural infrastructure to enhance community resilience to flooding, erosion, and sea level rise.
- must be nature-based and provide risk-reduction and community-wide benefits (i.e. benefits more than one property owner and protects community infrastructure and/or assets).
- state how the project will address climate-related impacts in the short term (1-10 years) and long term (+10 years) based on the life expectancy of the proposed project.

Outcome 3



Resiliency through Restoration Pilot Projects

Through the state's Community Resilience Grant, 19 innovative resiliency projects were funded in FY 2018 through 2021.

Projects cover a breadth of restoration techniques, including:

- marsh restoration and enhancement,
- dune restoration,
- natural shoreline stabilization,
- beneficial use of dredged material,
- island restoration, stream restoration,
- and green stormwater practices.

CHESAPEAKE AND COASTAL SERVICE

Resiliency through Restoration



Maryland
Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Jeannie Haddaway-Riccio, Secretary

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Background
Since 2011, Maryland has experienced six hurricane and flood events warranting Presidential Disaster Declarations, resulting in more than \$156 million in federal public assistance. These costs don't include impacts from the more common urban and nuisance flood events that impede day-to-day activities across the state. In July 2017, the Department of Natural Resources launched a Resiliency through Restoration Initiative with the goal of using nature-based designs to help protect communities, economies and ecosystems from climate change impacts. As part of this Initiative, the Department provides financial and technical assistance to local government and non-profit partners through the Community Resilience Grant.

Goals of the Fund
The goal of this Initiative is to implement at least 15 priority restoration projects across the state over a five year period. Projects will demonstrate how nature-based techniques can build community resilience to climate change. Projects include shoreline restoration, beneficial use of dredged material, tidal marsh restoration, dune restoration, landscape-level green infrastructure, and other nature-based practices that provide community and ecosystem benefits. Projects are selected based on community exposure, level of community engagement, project readiness and status, cost efficiency, adaptation potential, ecological enhancement, demonstration value and broader social benefits.

First of its Kind
Maryland fully funds nature-based designs to enhance local resiliency:

"Worcester County, the only seaside county in Maryland, is one of the most vulnerable Maryland counties to sea level rise and climate change. The coastal environment is also the bedrock of our local tourism-based economy. Our waterfront communities are increasingly vulnerable and their protection poses numerous challenges. It's essential that we seek solutions for adapting to damaging storms, rising waters, and migrating coastlines and marshes."

-Katherine Munson, Worcester County

By the Numbers

16
Projects in Progress

8
Jurisdictions Represented

\$8,350,000
Allocated State Funds

24
Partnerships Supported



Sixteen unique projects are underway to demonstrate nature-based solutions to climate change.

Building a pipeline



Chesapeake Bay Trust and Maryland State Agency 2019-2020 Watershed Assistance Grant Program



Watershed Assistance Grant Program

- Provides funding for design and watershed assessment
- Allows Trust Fund to target construction-ready projects
 - Better understanding of outcomes and effectiveness, project viability and cost-efficiency

Contact Information



Thank you for your time.



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Outcome 1

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Outcome 3

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Chesapeake and Coastal Service

Department of Natural Resources

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District of Columbia

Matt Robinson, Department of Energy & Environment



Photo by Matt Rath/Chesapeake Bay Program

Please stay muted with
your camera off unless you
are scheduled to present

VERBAL PRESENTATION
(Notes will be included in the Meeting Minutes)





END OF SESSION 3 PRESENTATIONS

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