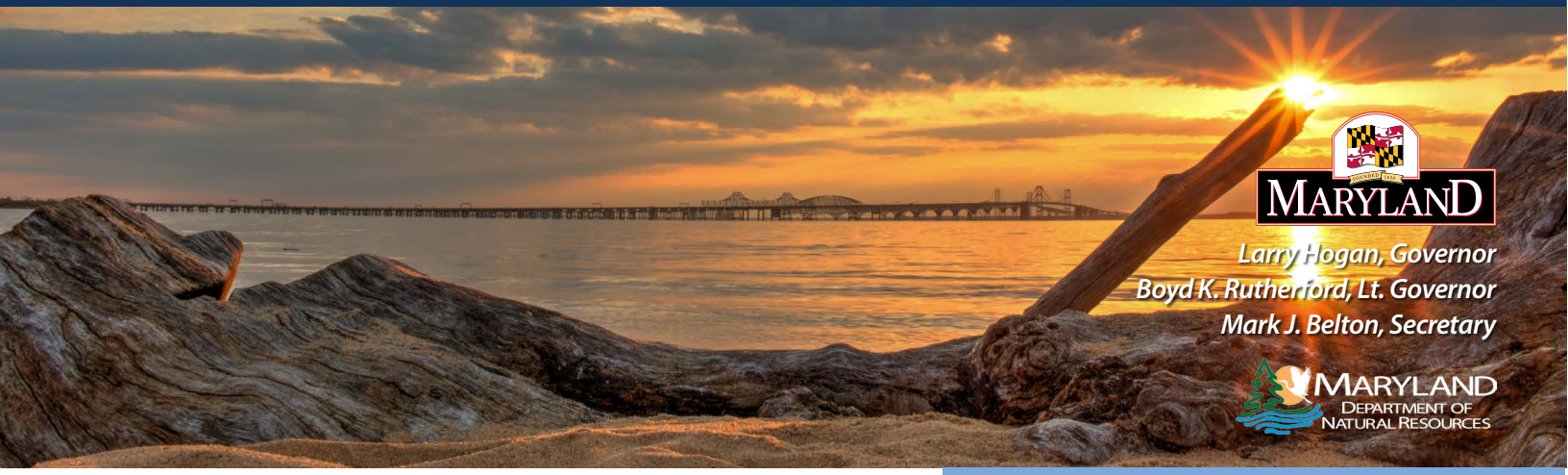
CHESAPEAKE AND ATLANTIC COASTAL BAYS TRUST FUND
2018 ANNUAL REPORT



The Chesapeake and Atlantic Coastal Bays Trust Fund (Trust Fund) was created to provide the financial assistance necessary to advance bay restoration by focusing limited financial resources on the most effective pollution control projects. Essential to its success is an annual allocation process that:

- Targets funds to the most cost-effective locations and practices;
- Leverages funds to the greatest extent practicable;
- Engages the community and holds everyone accountable; and
- Provides the flexibility necessary to take advantage of constantly changing conditions, opportunities and scientific developments.

"The Chesapeake and Atlantic Coastal Bays Trust Fund has been catalytic in advancing the science, policy and regulation pertaining to water resources management in Maryland. As a Maryland business owner focused on restoring natural ecosystems, I've been able to grow my workforce and expand my company's mission by utilizing resources through the Trust Fund."

- Keith Underwood, Underwood & Associates

Through FY 2018

$399,970,000 in state funds

$196,877,000 in leveraged funds

$596,847,000 total

By the Numbers

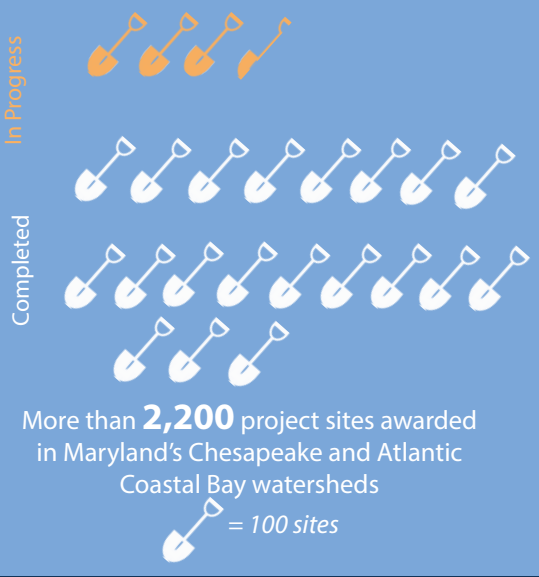
Annual Nutrient Reductions of Completed Projects:

2,192,189
lbs. Nitrogen

227,408
lbs. Phosphorus

186,532
tons Total Suspended Solids

Status of Funded Projects:



More than **2,200** project sites awarded in Maryland's Chesapeake and Atlantic Coastal Bay watersheds

= 100 sites

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Measuring Impact

Magothy Watershed Stream Restoration in Anne Arundel County

PROBLEM: Eroding stream banks and flooding along Cypress Creek were allowing excess nutrients and sediment to reach the Chesapeake Bay.

SOLUTION: Reduce excess nutrients and sediment by reconnecting floodplain and restoring wetlands and riparian buffer on the North Branch of Cypress Creek.

Erosion Reduction
(Annual lbs.)

42,866 Suspended Sediments

349 Phosphorus

1,485 Nitrogen

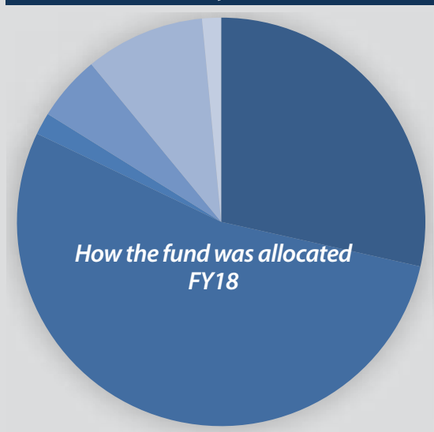
Cost per Pound
(Based on an est. 15-yr. project life)

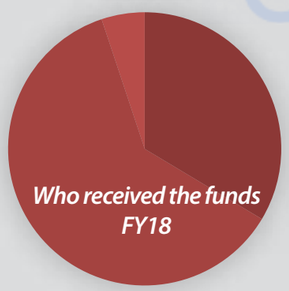
cost per lb. of Sediments **$4.46**

cost per lb. of Phosphorus **$548**

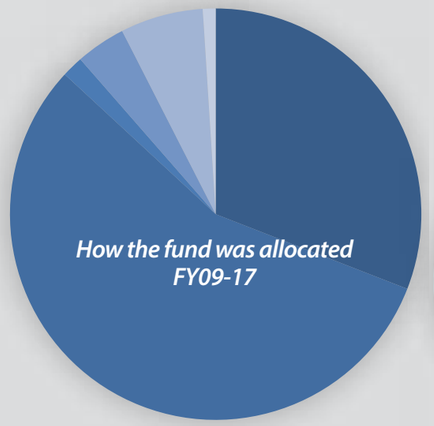
cost per lb. of Nitrogen **$129**

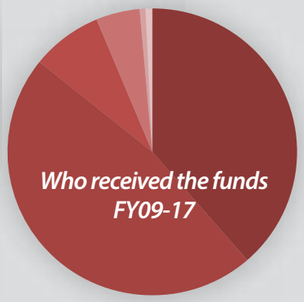
Trust Fund by the Numbers





Agricultural Practices
Local Competitive Projects
Monitoring and Tracking
Research and Development
Technical Assistance
Administration
Nonprofit
County
Municipality
State
University
Federal

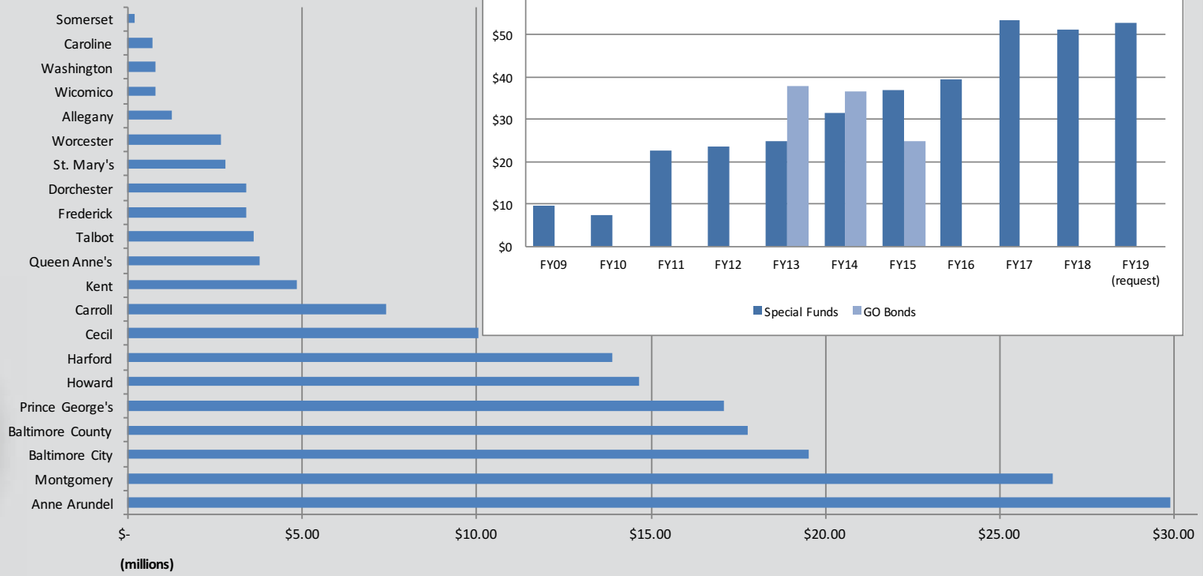




$400 million to date

for nonpoint source pollution projects across Maryland

Funding by County 2009-2017



Trust Fund Growth 2009-2019 (in millions)

2,706 acres of wetland restored

151,484 linear feet of stream restored

470 stormwater retrofits installed

500 rain gardens installed

17 acres of impervious surface removed

Completed to Date

15,467 urban trees

374,146 acres of Cover Crops in FY17

1,161 acres of riparian forest

34,680 volunteers engaged

2,619 direct and indirect jobs supported

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A Catalytic Tool in Bay Restoration

Closing the Technical Assistance Gap

Photo credit: Betsy Love, St. Luke's Episcopal Church

It has been well documented that there is a technical assistance gap for private landowners and local governments. To address this, the Trust Fund provides critical funding to support staff within the local conservation districts as well as supports restoration specialists and permit expeditors within state agencies to accelerate the pace of implementation. In addition, the Trust Fund has used creative partnerships with the private sector and nonprofit community organizations to provide engineering, permit preparation and implementation.

Accelerating Restoration through an Aggregator - In 2013, the Trust Fund entered into a public private partnership with the Harford Soil Conservation District and Ecotone, Inc. in the implementation of 13 separate projects comprised of stream, wetland and riparian forest restoration on agricultural and rural privately-owned properties in Harford County. Ecotone played the role of a project aggregator not only identifying these 13 separate projects but providing the expertise needed in the design and implementation. This public-private relationship has been integral to achieving project successes while improving agricultural conservation and stewardship on private lands in Harford County. This partnership has contributed to the restoration of 32 acres of wetland, 14 acres of riparian buffer, and 32,335 linear feet of stream restoration. The Trust Fund and Ecotone have since expanded the partnership into Baltimore and Frederick counties.

Relationship Building with Landowners - In 2012, the Trust Fund entered into a partnership with The Nature Conservancy to restore the Pocomoke floodplain, one of the largest ecological restoration efforts in Maryland's history. Through this partnership, the state was able to leverage The Nature Conservancy expertise and staff to provide the relationship building with landowners, engineering, design, construction and monitoring. The partnership has resulted in 2,193 acres of wetlands and leveraging an additional $2,382,000 of private and federal dollars towards this effort.

Engaging Diverse Communities in Bay Restoration - In 2017, the Trust Fund continued a partnership with Blue Water Baltimore in its effort to help Baltimore City meet local and state water quality goals by assisting MedStar Harbor Hospital to design and install a suite of stormwater best management practices on its highly-impervious, waterfront campus. The project engages a new landowner and the surrounding community in constructing 12 practices that will better capture and treat water as well as provide enhanced green space for patients, visitors and community members.

Reducing the Risk of the State's Investment - In 2017, the Trust Fund entered into a public-private partnership with Cecil Land Trust, Cecil County and Ecosystem Investment Partners in the restoration of Principio Creek in Cecil County. While Cecil Land Trust is providing the critical relationship building with the private landowners, Ecosystem Investment Partners is providing the technical assistance, design and construction as well as the upfront financing to restore 24,560 linear feet of stream and 64 acres of riparian buffer on two farms.

To learn more about the Trust Fund and to track projects funded in your region, please visit:

dnr.maryland.gov/ccs

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MARYLAND DEPARTMENT OF NATURAL RESOURCES | MARYLAND DEPARTMENT OF AGRICULTURE | Maryland Department of the Environment | MARYLAND DEPARTMENT OF PLANNING | UNIVERSITY OF MARYLAND 1856

The allocation and implementation of the Trust Fund is a collaborative effort between the following partners: Maryland's bay agencies, the Scientific Advisory Panel, the General Assembly. The program is administered by the Maryland Department of Natural Resources.

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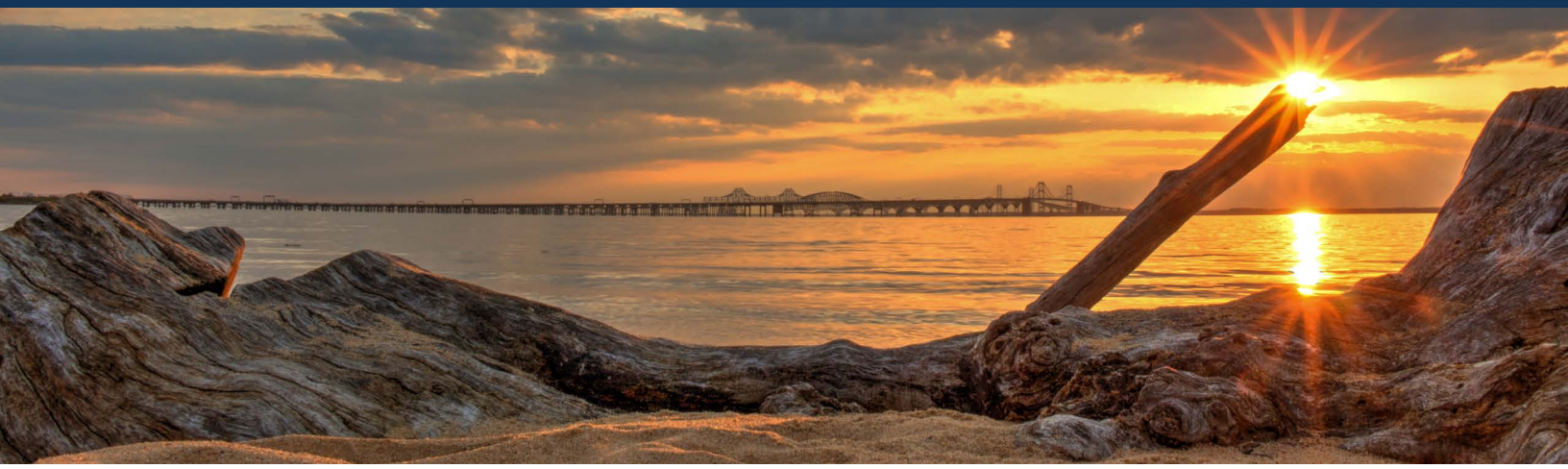
CHESAPEAKE AND ATLANTIC COASTAL BAYS TRUST FUND

FY19 BUDGET AT A GLANCE



Annual Expenditure Plan (FY 17 - FY 19)

Targeted Activity	Project Partner	FY 17 Actual	FY 18 Current	FY 19 Request	+/- FY 18 to FY 19
Accountability, Verification and Management					
1. Strategic Monitoring & Assessment	Natural Resources	$400,000	$400,000	$400,000	$0
2. Targeted Monitoring Grant Program	Competitive grants	$300,000	$300,000	$300,000	$0
3. Implementation Tracking	Information Technology	$200,000	$200,000	$200,000	$0
4. Administration & Management (1.5%)	Natural Resources	$750,000	$695,000	$793,970	$98,970
Accelerating Restoration through Research & Development					
5. Innovative Technology Fund	Natural Resources/ University of Maryland	$1,000,000	$1,000,000	$1,000,000	$0
6. Manure Management through Proven Technology	Agriculture	$1,510,000	$1,660,000	$660,000	($1,000,000)
Implementation Technical Assistance					
7. Agricultural Technical Assistance	Agriculture	$3,290,000	$3,290,000	$3,290,000	$0
8. Water Management Permit Expediters	Environment	$750,000	$825,000	$750,000	($75,000)
9. Field Restoration Specialists	Natural Resources	$750,000	$750,000	$750,000	$0
	Sub TOTAL	$8,950,000	$9,120,000	$8,143,970	($976,030)
Integrated Targeted Projects to Meet Maryland's Milestones					
Implementation of Agricultural Practices					
10. Cover Crop Program	Agriculture	$11,250,000	$11,250,000	$11,250,000	$0
11. Conservation Reserve Enhancement Program Bonus Payments	Agriculture	$500,000	$500,000	$500,000	$0
12. Grants to Farmers	Agriculture	$2,000,000	$2,000,000	$3,000,000	$1,000,000
13. Manure Transport Program	Agriculture	$750,000	$750,000	$750,000	$0
14. Governor's Phosphorus Management Tool Initiative	Agriculture	$300,000	$150,000	$150,000	$0
Implementation of Local Watershed Implementation Plans (WIPS)					
15. Cost-Effective Nonpoint Source Projects	Competitive grants	$23,720,000	$21,540,000	$23,137,363	$1,597,363
16. Natural Filters on Public Lands	Competitive grants	$6,000,000	$6,000,000	$6,000,000	$0
	Sub TOTAL	$44,520,000	$42,190,000	$44,787,363	$2,597,363
	GRAND TOTAL	**$53,470,000**	**$51,310,000**	**$52,931,333**	**$1,621,333**

CHESAPEAKE AND ATLANTIC COASTAL BAYS TRUST FUND
FY19 BUDGET DETAILS

Accountability, Verification and Management : $1,693,970

1. Strategic Monitoring & Assessment: Will provide $400,000 to develop and implement monitoring strategies, collect and analyze data for trends, provide biological monitoring in Trust Fund watersheds and comparison watersheds, and communicate the results of the restoration efforts.

2. Targeted Monitoring Grant Program: Will provide $300,000 to competitively fund monitoring projects that will answer regulatory and restorative questions about best management practices for non-point source pollution in a robust, rigorous and representative manner.

3. Implementation Tracking: Will continue to provide $200,000 to provide hosting, application, maintenance, and data support services for the Trust Fund dashboard, mapper and Maryland's iMAP services.

4. Administration & Management: Will provide 1.5 percent of the total operating allowance to provide fiscal oversight; manage grant programs including solicitation development, project review, contract and project development and management; coordinate with Bay agencies, the Scientific Advisory Panel, Department of Budget and Management, and Department of Legislative Services, and report to the General Assembly.

Accelerating Restoration through Research and Development: $1,660,000

5. Innovative Technology Fund: Will provide $1,000,000 to the fund, established with the goal of accelerating Chesapeake Bay restoration through the development of new innovative technologies. It is made possible through funding from the Trust Fund, the Environmental Protection Agency's Chesapeake Bay Implementation Grant and in partnership with the University of Maryland's Industrial Partnership and the Mtech Ventures Program.

6. Manure Management Projects with Proven Technology: Will provide $660,000 to support the Animal Waste Technology Fund. These funds will be used to support technologies that provide promising alternatives for utilization of excess animal wastes such as energy production.

Implementation Technical Assistance: $4,790,000

7. Agricultural Technical Assistance: Will provide $3,290,000 to support agricultural technical assistance positions in Soil Conservation Districts. In total, the Trust Fund now supports 68 (43 state and 25 local) Soil Conservation District positions needed to assist farmers in the implementation of agricultural best management practices as identified in the Watershed Implementation Plan.

8. Water Management Permit Expediters: Will provide $750,000 to expedite state review of qualifying stormwater and wetland restoration projects, and to protect the quality of the ground and surface waters.

9. Field Restoration Specialists: Will provide $750,000 to increase the level of field specialists to assist state and local partners identify, engineer, design, and provide construction and construction oversight assistance of priority Chesapeake Bay restoration projects.

Implementation of Agricultural Practices: $15,650,000

10. Cover Crop Program: Will provide $11,250,000 to Maryland's Cover Crop Program to supplement funds provided through Maryland's Chesapeake Bay Restoration Fund. Cover crops are critical to achieving the reduction of nutrients necessary to meeting the the Watershed Implementation Plan.

11. Conservation Reserve Enhancement Incentive: Will provide $500,000 to support the Conservation Reserve Enhancement Program. Trust Funds are used to provide the state $100 per acre signing incentive for new and re-enrolled acres on eligible best management practices including grass and forest stream- side buffers, wetlands and permanent stabilization of highly erodible land.

12. Grants to Farmers (Nutrient Management Regulations): Will provide $3,000,000 to assist farmers with implementing nutrient management regulations. This funding will help offset the infrastructure costs to implement or enhance manure storage and provide incentives for improved management of manure and other sources of crop nutrients.

13. Manure Transport Program: Will provide $750,000 to transport excess manure away from farms with high soil phosphorus levels to other farms or locations that can use the manure agronomically or for safe alternative to land application . Dollars will leverage funds already provided by poultry companies and state general funds traditionally used to support manure transport.

14. Governor's Phosphorus Management Tool Initiative: Will provide $150,000 to provide technical assistance through nutrient management advisors to assist farmers in planning for phosphorun management tool transition and implementation of management changes.

Implementation of Local Watershed Implementation Plans: $29,137,363

15. Cost-Effective NonPoint Source Projects: Will provide $23,137,363 to projects that deliver the greatest, most cost-effective and measurable nonpoint source pollution reduction per dollar. Grants are awarded on a competitive basis to projects that target and reflect the state's diverse landscapes, challenges and sources of pollution.

16. Natural Filters on Public Lands: Will provide $6,000,000 for the implementation of nutrient and sediment reduction projects on state and public lands. Projects include forested buffers, reforestation, wetland restoration, stream and floodplain restoration, stormwater retrofits and other bioremediation projects.