

Resilience Authority of Charles County, Inc.
Annual Report

Pursuant to Maryland Annotated Code, Local
Government Article §22-113

Submitted December 30, 2024

Resilience Authority of Charles County, Inc. Annual Report 2024

History

The 2020 Maryland General Assembly passed enabling legislation that authorized a local government to create a Resilience Authority that would mitigate the impacts of climate change through infrastructure investment, and the legislation was codified in Title 22 of the Local Government Article of the Maryland Annotated Code. In December 2020, the Board of Charles County Commissioners passed a local law establishing the Resilience Authority of Charles County, Inc. that was subsequently codified in Chapter 299 of the Charles County Code.

Mission and Vision

The Resilience Authority of Charles County, Inc. (“Resilience Authority”) is a 501(c)(3) nonprofit organization that, as a government instrumentality, is operated for the public purpose of responding to the impacts of climate change in communities across Charles County, Maryland. The risks of climate change are not shared equally, so the Resilience Authority prioritizes the most vulnerable communities, and all efforts are grounded in principles of diversity, equity, inclusivity, and justice. The Resilience Authority’s vision is to set a national example of climate resilience grounded in environmental justice for everyone. The Resilience Authority works with the Charles County government to fund and accelerate the pace and scale of nature-based climate resilience projects with multiple benefits. Through government, education, nonprofit, and private partnerships, the Resilience Authority seizes the opportunity to turn climate change challenges into opportunities to create more equitable and environmentally sustainable communities throughout Charles County.

In 2023, the Resilience Authority hired its first Executive Director, greatly expanded its project portfolio, and began pursuing funding for its projects. In 2024, the Resilience Authority successfully secured funding for its 2023 Implementation Project Portfolio in underserved and overburdened communities most vulnerable to the effects of climate change.

In 2024, the Resilience Authority was approved as a 501(c)(3) nonprofit organization by the United States Internal Revenue Service (IRS).

Board Members

The 2021-2023 founding Resilience Authority Board Members were appointed by the Charles County Board of Commissioners and reflect the racial, ethnic, and geographic diversity of Charles County. The composition of the Board includes members of the Charles County Government Executive Leadership Team (ELT), members who represent a Charles County municipality, the business community, the agricultural community, a Charles County resident, experts in soil conservation and stormwater management, a representative of a Maryland State Government entity focused on the environment and infrastructure issues and a member from the climate change science community. As planned and provided for in its Bylaws, in 2023, the Bylaws were updated and clarified to reflect the Resilience Authority’s status as a government

instrumentality with independent nonprofit status. This year the Resilience Authority continued to independently manage itself. The Board of Directors has independent authority to elect its Officers and Board members, apart from Charles County Government ELT members, which are appointed by the Charles County Board of Commissioners.

The Board of Directors met virtually each quarter throughout the year with an in-person meeting on December 5, 2024. At its December 5th, meeting, the Board of Directors made clarifying updates to its Bylaws, including replacing the term “Ex Officio Member” with “Non-Voting Member.” The Board also added language that allows for “At Large” members and voted to approve Karen Price as a new Charles County Resident member. Updating the Bylaws is a proactive step to strengthen the Board’s framework, enhance its independence, and position it for long-term success. By adopting these changes, the Board will be better equipped to fulfill its mission and adapt to future challenges.

Membership

Term Expires

Teresa Ball (Chair)	June 30, 2027
Timothy Wells (Vice Chair)	June 25, 2025
Ryan Hicks (Secretary)	June 25, 2025
Jenifer Ellin (Treasurer)	June 25, 2025
Daniel Donohue	June 30, 2027
Dr. Charles C. Glass, P.E.	June 25, 2026
Martin Harris	June 30, 2027
Dave Nemazie	June 25, 2026
Bonnie Norman	June 30, 2027
David Wood	June 25, 2027
Karen Price	June 30, 2027

Personnel Updates

- **Executive Director Position Funding:** The Resilience Authority Board of Directors and the University of Maryland Center for Environmental Science (UMCES) entered into an agreement in 2024 to cover the Executive Director’s salary from January 1, 2025, through June 30, 2026. The Executive Director position was filled on January 23, 2023.
- **Chesapeake Bay Trust Conservation and Climate Corps Member**
In 2024, the Resilience Authority was matched with a Chesapeake Bay Trust funded Chesapeake Climate Corps member, and she began working full-time with the Resilience Authority in October. With a work program that includes developing an urban food forest, creating a grant subject matter library, supporting tree planting projects, and creating training materials, she is a valued member of the Resilience Authority team. She will be working with the Resilience Authority through August 2025.

Projects:

Over the last two Calendar Years (2023-2024), the Resilience Authority secured \$1,018,241 in grant funds to execute the below projects in underserved and overburdened communities most vulnerable to the effects of climate change. For a list of funding sources, please see CY 2023-2024 grant funding chart in the Appendix.

Increasing Precipitation and Stormwater Flooding: Building Resilience through Creative Nature Based Solutions

Through the Chesapeake Bay Trust (CBT) Watershed Assistance Grant Program, with program partners Maryland Department of Natural Resources, Maryland Department of the Environment, the Chesapeake Bay Program, the Resilience Authority secured funding in February 2024 for the Engineered Design of two large-scale projects to replace failing “gray” stormwater infrastructure with nature-based solutions that provide multiple co-benefits including cooling shade, carbon sequestration, improved air and water quality, community beautification, and wildlife habitat.

- **Residential:** In partnership with Charles County government, the Resilience Authority funded Engineered Design of green infrastructure to address stormwater and flooding in Charles County’s East Waldorf Neighborhood, an overburdened and underserved community that is in an urban heat island with poor air quality. As of December 2024, the Engineered Design of the green infrastructure and Nature Based stormwater solutions is 90% complete, and the Resilience Authority is handing off the project to Charles County government for implementation through the Charles County Residential Stormwater Drainage Improvement Program.
- **Public Spaces:** As part of its Concrete to Green initiative with the Charles County Department of Recreation, Parks, and Tourism, the Resilience Authority funded the Engineered Design of a “Stormwater Pocket Park” to mitigate climate impacts of rising precipitation and temperatures by removing unused asphalt landcover that functions as a heat island and replacing it with conservation landscaping designed as a pocket park with a natural play area and a separate quiet seating and picnic area. The conservation landscaped areas – the pocket park - will have the dual function of storing and treating stormwater runoff during rain events while also providing much needed access to natural, shaded greenspace for the community during more favorable weather. The native plants and trees installed as part of the conservation landscaping will cool and shade the pocket park, absorb stormwater runoff, help filter the air, create wildlife habitat, and provide a community sense of place. The Engineered Design is 100% Complete, and the Resilience Authority has applied to the Maryland Department of Natural Resources Grants Gateway to secure funding in 2025 for Design Implementation and Construction of the project.

**These projects were funded wholly or in part by the United States Environmental Protection Agency (EPA) under assistance agreement C2-96389001 to Maryland Department of Natural Resources (MDNR) and/or C2-95306601 to Maryland Department of Environment (MDE). The contents of this document do not necessarily reflect the views and policies of the EPA, nor does*

the EPA endorse trade names or recommend the use of commercial products mentioned in this document.



Rising Water Levels, Coastal Flooding & Erosion: Living Shorelines for Habitat Restoration and Coastal Access to Nature and Advanced Water Level Sensors.



Search NOAA sites

Biden-Harris Administration announces \$123 million for coastal habitat restoration through Investing in America agenda

Funding will support NOAA's efforts to increase community resilience to climate change and extreme weather events

- **Popes Creek Waterfront Park Living Shoreline Design:** In partnership with the Maryland Department of Natural Resources Coastal Zone Management Program, the Resilience Authority successfully secured funding as a sub-awardee from the National Oceanic and Atmospheric Administration (NOAA) Bipartisan Infrastructure Law competition - part of the Biden Harris Administration Coastal Habitat Restoration through its Investing in America Agenda - for the Engineered Design of a Living Shoreline at the future Popes Creek Waterfront Park located on the Potomac River in Newburg, Charles County. The future public park and surrounding area are vulnerable to sea level rise and storm surges. Moreover, a significant percentage of the surrounding communities are underserved with low access to nature and its associated health and climate resilience benefits. The Resilience Authority's living shoreline project is intended to restore, enhance, and protect sensitive wildlife habitat, provide public coastal access, improve water quality, reduce flooding and erosion, and enhance the capacity of the surrounding disadvantaged communities to respond to the effects of climate change. In collaboration with Charles County Parks Department, it will support creation of the first public beach in Charles County as part of a nature-based park that will protect the natural ecosystems while providing nature-based recreation such as fishing, kayaking, bird watching and environmental education opportunities. Popes Creek Waterfront Park living shoreline will provide a demonstration of equitable climate resilience grounded in the connection between healthy biodiverse ecosystems and healthy human communities.
- **University of Maryland Climate Resilience Network – Hydro Net System and Weather Stations:** The Resilience Authority has continued its founding partnership with UMD's Climate Resilience Network, and this relationship had resulted in Charles County

piloting two of the first six HydroNet Water Level Sensors and Weather Stations deployed across the Chesapeake Bay.

Increasing Temperatures and Urban Heat Islands: Building Resilience by Planting & Maintaining Native Trees

Increasing temperatures from climate change affect everyone, and communities in urban heat islands (areas characterized by more heat-absorbing buildings and pavements and fewer cool spaces with trees and greenery) are more likely to experience heat-related illnesses and mortality, with related negative effects including poor air quality and a higher air conditioning cost burden. Urban heat islands are caused by the uneven, inequitable spread of land covers in the urban landscape, leading to more heat-absorbing buildings and pavements and fewer cool spaces with trees and greenery. Multiple Charles County public schools, neighborhoods and community recreation centers are in urban heat islands. Well planned native tree planting and long-term maintenance of trees build climate resilience by reducing impervious surface, providing much needed cooling, improving air quality and health outcomes, while advancing carbon sequestration and stormwater management.

As an active partner in Maryland's Five Million Trees (5MT) effort, the Resilience Authority secured funding for, and as of December 2024, planted over 600 biodiverse trees native to the coastal plain of Maryland at nine Charles County Public Schools sites and a County Senior and Recreation Center in urban heat islands that serve overburdened communities. Planting trees is not enough – all 601 trees must be watered and maintained on a biweekly basis to ensure survivability and to provide the associated benefits of community adaptation to the effects of climate change. Therefore, in 2024, the Resilience Authority continued its partnership with the Student Conservation Association to create youth paid employment and career development opportunities associated with maintaining all the newly planted trees.

Youth Green Job Training and Employment Connected to Newly Planted Trees: The Resilience Authority Youth Corps (RAYC)

The Resilience Authority, through multiple grant efforts and funding sources, was awarded over \$500,000 in 2024 to not only plant native trees, but to provide the necessary biweekly watering and maintenance of these trees over the next three years. This need provides the opportunity to fund youth employment and career ladder opportunities.



In 2024, the Resilience Authority and the Student Conservation Association, www.thesca.org continued the Resilience Authority Youth Corps (RAYC) partnership that started in 2023. The Resilience Forward - RAYC Ahead initiative provides local high school students and young adults year-round green job employment, training, and career ladders for encouraging diversity in natural resource careers and urban forestry. RAYC members learn how to build equitable resilience to the climate effects of extreme heat and flooding by working with government and nonprofit professionals to design, plant, and sustainably maintain urban tree cover and healthy forests at public schools, parks, and community-based organizations serving overburdened communities throughout Charles County. Started in 2023, this program employed and continues to employ multiple high school students through its School Year Saturdays (2023-2024) program, its Full-Time Summer Crew (2024), and the current (2024-2025) School Year Saturdays program.

Community Engagement, Strategic Studies and Planning Efforts

- **UMCES Climate Readiness Report Card for Charles County:** The Resilience Authority continued its work with the University of Maryland Center for Environmental Sciences (UMCES) to assess the preparedness of Charles County communities for climate change and sea level rise events. Modeled after the first-ever Coastal Adaptation Report Card for the State of Maryland, the UMCES Report Card gives a snapshot of current adaptation status in Maryland's coastal zone and establishes a framework for measuring future progress. The report card is designed to provide a simple, straightforward method of communication to the public about climate resilience. UMCES completed the final draft of the Report Card which is currently under review by the Resilience Authority Board of Directors.
- **New Hope's Eden: A Food Forest Sanctuary – Capstone Project for CBT Conservation and Climate Corps Member Jewel Lester:** Planning, design, and implementation of an agroforest at the New Hope Community Outreach Services facility in Waldorf. The planned project will enhance community resilience by providing access to locally-grown, fresh fruits and vegetables and by creating social connectedness through shared planting, gardening, and harvesting activities.
- **Adaptive Capacity Building - Refining a Strategic Action Plan for Whole Watershed Restoration and Equitable Access to Nature and its Health and Climate Resilience Benefits for Underserved Communities in Charles County:** The RA received a Chesapeake Bay Trust Capacity Building Initiative grant in the fall to build on the Board of Director's work on the Five-Year Strategic Plan in 2023. The project will involve an internal and external analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT) and will include information on branding, marketing, communications, financing, and fundraising. It will also include action plans for 2025 through 2030. The project's scope includes the formation of a Resilience Authority workgroup to facilitate community engagement, and this group will be formed early in 2025. The plan will be completed in the fall of 2025.

- **Branding, Marketing, Fundraising, and Financing – Moving Beyond Government Grants:** The Resilience Authority had a successful year securing funding through government grants. There is, however, a growing need to explore other sources of revenue to fund and finance climate resilience work. Therefore, the Resilience Authority is positioning itself for corporate and private sponsorships, donations, and financing opportunities. This work is part of the Adaptive Capacity Building Strategic Planning effort described above.

Partnerships

Charles County Government, State of Maryland, and Other Established and Continuing Partnerships:

- Charles County government Executive Leadership Team
- New Hope Community Outreach Services – Faith and Community Based
- Montgomery County Greenbank
- University of Maryland Center for Environmental Science (UMCES)
- University of Maryland Earth Sciences
- Charles County Public Schools (CCPS)
- Charles County Soil Conservation District
- Maryland Department of Natural Resources (DNR)
- Maryland Forest Service
- The Student Conservation Association
- The Nature Conservancy (TNC)
- Southern Maryland Resource Conservation & Development Board (MD RC&D)
- Middle Chesapeake Sentinel Landscape Partnership
- US Fish and Wildlife Service (USFWS)
- Friends of Maryland State Parks

Compliance

The Authority remains in good standing with the Maryland State Department of Assessment and Taxation.



APPENDIX

Accelerating and Funding Nature Based Resilience with through The Inflation Reduction Act (IRA), Bipartisan Infrastructure Law (BIL), State, Local & Nonprofit Grants

Calendar Years 2023 & 2024: Grant Awards totaling \$1,018,241

Increasing Temperatures and Urban Heat Islands: Building Resilience by Planting & Maintaining Native Trees						
Grant Name	Source of Funding	Project Name and Initiative	Award Amount	Result	Date Awarded	Grant Period
Fall 2023 and Spring 2024 Maryland Department of Transportation Urban Tree Program	State funding from MDOT with MUCFC	Establishing Native Tree Canopies at Charles County Public Schools in Urban Heat Islands. Supports Maryland 5 Million Trees Effort.	\$ 25,000 & \$2,028	120 Native Trees (5-7 ft. tall) at 8 Charles County Public Schools in Heat Islands.	Oct. 2023 & April 2024	Oct. 23- Oct. 24
Chesapeake Bay Trust (CBT) Urban Trees Program	IRA through the Environmental Protection Agency and administered through CBT	Establishing Native Tree Canopies in EPA-IRA identified "Disadvantaged" Communities. Supports Maryland 5 Million Trees Effort.	\$79,822 (\$67,000 of which funded our School Year Saturdays RAYC)	466 Native Trees at Thomas Stone High School and 15 Trees at Waldorf Senior and Recreation Center + Maintenance	August 2024	Aug. 24 – Aug. 25
Totals:			\$106,850	602 Trees + RAYC Maintenance		

Youth Green Job Training and Employment Connected to Newly Planted Trees: The Resilience Authority Youth Corps (RAYC)						
Grant Name	Source of Funding	Project Name and Initiative	Award Amount	Result	Date Awarded	Grant Period
CBT Charles County Forestry Grant	Chesapeake Bay Trust (CBT) and Charles County Forest Conservation Act fees. (fee in lieu)	Maintaining Newly Planted Tree Canopies	\$14,839	Funded watering supplies and transportation for RAYC	Nov. 2023	Nov. 23 -Nov. 24
Maryland Forest Service Community Catalyst Fund	IRA through the USDA Forest Service and administered through Maryland Forest Service	Resilience Forward and RAYC Ahead: The Resilience Authority (Tree) Youth Corps: Paid Green Jobs, Training and Career Development for local high school students.	\$100,000	Funded our 2024 Full-Time Summer Crew of 6 Local High Schools Students, and all supplies and training. Hosted by SCA	July 2024	July 24-July 25
Forest Corps (CFC) Grant Program	IRA through USDA Forest Service and administered by the Urban Sustainability Directors Network	Resilience Forward – RAYC Ahead: The Resilience Authority Youth Corps	\$356,605	Will fund 3 years of our Resilience Authority Youth Corps!	Nov. 2024	Nov. 24-Nov. 27
Totals:			\$ 471,444	Paid Youth Employment, Job Training, and Tree Care 2023- 2027		

Increasing Precipitation and Stormwater Flooding: Building Resilience through Creative Nature Based Solutions						
Grant Name	Source of Funding	Project Name and Initiative	Award Amount	Result	Date Awarded	Grant Period
CBT Watershed Assistance Program (WAG-P) for Design	100% Federal Funding from the EPA, through MDE, DNR, and the Chesapeake Bay Program. Grant administered by CBT.	"Concrete to Green" Elite Gymnastics Recreation Center Stormwater Pocket Park	\$83,801	Dec. 2024: 100% Complete Design & Permitted – Ready to go to Construction.	Feb. 2024	Feb. 24-June 25
CBT Watershed Assistance Program (WAG-P) for Design	100% Federal Funding from the EPA, through MDE, DNR, and the Chesapeake Bay Program. Grant administered by CBT.	Green Infrastructure to Equitably Address Stormwater Flooding in the East Waldorf Residential Neighborhood.	\$85,099	Dec. 2024: 90% Complete Design & Submitted for Permitting. Ready to transfer to County for Construction.	Feb. 2024	Feb. 24-Jan. 25
Totals:			\$168,900	Two Full Sets of Design Engineer Plans set for Construction		

Rising Water Levels, Coastal Flooding & Erosion: Living Shorelines for Habitat Restoration and Coastal Access to Nature.						
Grant Name	Source of Funding	Project Name and Initiative	Award Amount	Result	Award Date	Grant Period
NOAA Coastal Zone Management Habitat Restoration	Bipartisan Infrastructure Law (BIL). NOAA administered through MD DNR.	Popes Creek Waterfront Park Living Shoreline Design for Habitat Restoration and Coastal Access to Nature	\$120,865	Dec 2024: In Process. (This is a Design Project)	Oct. 2024	Oct. 24 – July 26
Totals:			\$120,865	Dec. 2024: In Process		

Building Climate Resilience by Increasing Equity in Community Access to Nature and Natural Restoration of Charles County Parks.						
Grant Name	Source of Funding	Project Name and Initiative	Award Amount	Result	Award Date	Grant Period
Sustainability in Practice: National Recreation and Parks Association. (NRPA)	Private – NRPA	Increasing Public Park Sustainability and Equitable Access to Nature	\$10,000	16-week course and technical assistance	April 2024	April 24-Sept.24
CBT Outreach and Restoration	CBT and Charles County MS4 credits	Bensville County Park: Stormwater and Habitat Restoration, Demonstration, and Training Site.	\$108,582	Just awarded!	Dec. 2024	Nov. 24 – Jan. 26
CBT Adaptive Capacity Building	EPA, the Chesapeake Bay Program, Chesapeake Bay Funders Network, and National Fish and Wildlife Foundation (NFWF).	Development of a strategic plan to increase resilience through Equity in Community Access to Nature in Charles County. Overburdened Community Engagement.	\$31,600	In Process: Working on Overburdened Community Engagement Plan with County	Sept. 2024	Sept. 24-Sept.25
Totals:			\$150,182	Technical Assistance and Planning for Greenspace Equity		







2024 Annual Report _Charles County Resilience Authority Inc_12 30 24

Final Audit Report

2024-12-30

Created:	2024-12-30 (Eastern Standard Time)
By:	Jesse Bungcayao (bungcayj@charlescountymd.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAAfICUGtZ5K34FrqCeEaLHnuAuomX-k2z8

"2024 Annual Report _Charles County Resilience Authority Inc_12 30 24" History

-  Document created by Jesse Bungcayao (bungcayj@charlescountymd.gov)
2024-12-30 - 9:52:13 AM EST
-  Document emailed to schaefer@resilientcharlescountymd.com for signature
2024-12-30 - 9:52:19 AM EST
-  Email viewed by schaefer@resilientcharlescountymd.com
2024-12-30 - 9:52:50 AM EST
-  Signer schaefer@resilientcharlescountymd.com entered name at signing as Stacy J. Schaefer
2024-12-30 - 10:14:00 AM EST
-  Document e-signed by Stacy J. Schaefer (schaefer@resilientcharlescountymd.com)
Signature Date: 2024-12-30 - 10:14:02 AM EST - Time Source: server
-  Agreement completed.
2024-12-30 - 10:14:02 AM EST