

Veronique Bugnion Board Chair Anne Arundel County

Nate Betnun Board Vice Chair City of Annapolis

Teresa Sutherland
Board Treasurer
Anne Arundel County

Emily Clifton

Board Secretary

Anne Arundel County

Jamie Benoit Anne Arundel County

Mariah Davis City of Annapolis

David Jarrell
Anne Arundel County

Jared Littmann City of Annapolis

Stacy Schaeffer Anne Arundel County

Mike Sewell Anne Arundel County

Staff: Matt Fleming, Executive Director 443.370.6951

The Resilience Authority of Annapolis and Anne Arundel County

April 2nd, 2025 Board of Directors Annual Meeting

DATE: March 14, 2025

TO: Board of Directors and Advisory Committee Members

FROM: Matthew Fleming, Executive Director

RE: Board of Directors Annual Meeting Packet

The Quarterly Meeting of the Resilience Authority of Annapolis and Anne Arundel County Board of Directors will take place, April 2nd from 5 to 7 pm in the Lower Level | 104 Cabinet Room of the Arundel Center on CALVERT ST &, Clay St, Annapolis, MD 21401.

The conference room is located on the ground floor. As you come through security, take the elevator to the ground floor and make a left out of the elevator. The Cabinet Room is down the hall on the left. If you arrive late or are waiting long <u>call/text me at 443.370.6051</u>. Please make sure you allow extra time for going through security.

Parking is located at the following places:

John Whitmore Parking Garage (Bring Your Ticket to be Validated)
37 Clay Street
Annapolis, MD
https://parkabm.com/facilities/john-whitmore-parking-garage/

Gott's Court Garage 25 Calvert Street Annapolis, MD

https://www.annapolisparking.com/parking-locations/gotts-court-garage/

Attached is a meeting agenda and supporting materials. If you have any questions, please do not hesitate to contact me at 443.370.6951 or by email at matthew.fleming@aacounty.org.

Annapolis and Anne Arundel County Resilience Authority 2025 Board of Directors Quarterly Meeting

Wednesday, April 2nd from 5 to 7 pm

Lower Level | 104 Cabinet Room of the Arundel Center CALVERT ST & Clay St, Annapolis, MD 21401.

Video call link: https://meet.google.com/uix-tuxp-bid
Or dial: (US) +1 513-757-0041 PIN: 797 590 018#

A portion of this meeting may be closed to the public in accordance with the Open Meetings Act procedures

Board Handbook (Updated 12.03.24)

5:00PM GETTING STARTED: ORDER OF THE DAY AND INTRODUCTIONS: Welcome remarks given by the Chair and Director. (*Veronique Bugnion, Chair & Matt Fleming, Executive Director*)

5:10PM REVENUE PORTFOLIO AND STRATEGY: In the short-term, the Resilience Authority has focused on funding priority projects with state and federal grant revenues. The next step for the Resilience Authority will be to identify strategies for transitioning the revenue system from a reliance on grants to codified and sustained sources of funding, income, and resources.

Topics:

- 1. Impact Investment: Quantified Ventures is an impact investment and advisory firm that specializes in structuring innovative financing solutions to support environmental, social, and public health initiatives. Their expertise includes designing outcome-based financing models, such as environmental impact bonds (EIBs), pay-for-success structures, and blended capital strategies that help fund critical infrastructure, conservation, and resilience projects. They focus on climate resilience, water quality, sustainable agriculture, forestry, public health, and community development. A project of interest was Hampton, Virginia in which they helped to create the state's first environmental impact bond to finance community resilience projects. The environmental impact bond was finalized in 2020 with a total of \$12 million dollars in outcomes-based financing. This will fund many flood-mitigation and resiliency projects in Hampton.
 - MIKE CROWLEY | Senior Director, Qualified Ventures

- MuniCap: MuniCap, Inc. is a public finance consulting firm specializing in public
 financing for real estate development, particularly focusing on public-private partnerships
 and urban redevelopment projects. They assist developers and public agencies in
 developing, implementing, and managing public financing plans, including tax increment
 financing and special tax bond financing.
 - EMILY METZLER | Chief Operating & Compliance Officer | MuniCap, Inc.
- 6:10PM

 SOUTH COUNTY SEA LEVEL RISE STUDY: The Sea Level Rise on the Deale-Shady Side
 Peninsula Feasibility Study will determine cost-effective, feasible mitigation strategies that
 enhance resilience of the Peninsula in the face of increasing flood inundation levels and storm
 event intensities/frequencies associated with a changing climate. The primary deliverable will
 include a comprehensive adaptation report that will include a menu of preferred, cost-effective,
 and feasible mitigation projects that will reduce risks to people and properties within the
 benefitting area. Preferred projects will be determined based on vulnerability to the threats of
 compound flooding. Various desktop analyses, storm water and coastal modeling, and input from
 the community on climate related concerns will all be used to prioritize areas for mitigation
 strategy implementation
 - BRENNAN SMITH | Bureau of Watershed Protection & Restoration
- **6:20PM THE CHAIR'S CORNER:** This is time set aside at every meeting to hear directly from the Board Chair on recent administrative activities of the Resilience Authority.

Topics:

- 1. Approval of December Meeting Minutes ~ Veronique Bugnion
- 2. Workgroups and Committee Update ~ Veronique Bugnion
- 3. Executive Director Reporting and Board Membership ~ Matt Fleming & Teresa Sutherland
- **TREASURER'S REPORT:** This is time set aside at every meeting to hear directly from the Board Treasurer on the current financial state of the organization. Discussion of the internal controls and financial accountability of the Resilience Authority.

Topics:

1. Review and Approve FY25 3rd Quarter Budget~ Kristina Alexander

Materials

<u>FY25 3rd Quarter Budget (prepared for decision)</u>

6:55PM New Business and Public Comment: Opportunity for public comment, input from the Advisory Committee Members, and Board Member discussion.

7:00PM <u>Meeting Concludes</u>

Next Meeting | June 11th, 2025

The Resilience Authority quarterly meeting agendas are developed to address issues challenging the region. Topics selected are influenced by availability of science, community interest, timing and opportunity. We welcome your input on posted agendas or as topics for upcoming meetings. If your suggestion is relevant to a posted agenda topic, please submit your comment in writing one week prior to the meeting. To submit your comment, please email matthew.fleming@aacounty.org.







RESILIENCE AUTHORITY OF ANNAPOLIS AND ANNE ARUNDEL COUNTY

Quarterly Impact Report | January 01, 2025 to March 31, 2025

WHAT IS NEW

LOOKING AROUND

- Severn River Watershed Announcement Whats Up Magazine
- State of Maryland Press Release on Sever River Whole Watershed Announcement
- Anne Arundel County Press Release on the Severn River
- City of Hampton Fights Flooding with Issuance of Virginia's First Environmental Impact Bond
- Saltwater intrusion leads farmers near Chesapeake Bay to ponder 'switch
- Wetlands to return to Baltimore's 'forgotten waterfront'
- Gas Plant in PA Explores Underground Carbon Storage
- Chesapeake Bay States Shatter Warmth Record

WHATS NEW:

- Whole Watershed Award for the Severn River | The Severn River watershed's selection for significant state funding under the Whole Watershed Act. This initiative, aimed at revitalizing Maryland's waterways, will provide critical support for flood control, environmental restoration and economic development within the Severn River and four other key watersheds across the state. The Whole Watershed Act, passed in 2024, emphasizes a targeted, science-driven approach to watershed restoration. It focuses on areas with significant potential for water quality improvement, habitat restoration, and community benefit. This comprehensive strategy is expected to yield substantial economic benefits, particularly for Maryland's tourism and seafood industry.
- Annapolis Maritime Resilience Initiative | The Annapolis Maritime Resilience Initiative has continued its public outreach tasks, attending community meetings, and holding tailored events specific to the project. A meeting with over 50 participants was held on February 4 at Pip Moyer, with another planned for April 8 during the Eastport Civic Association meeting. Community members have been responding to a survey to provide further input. Led by GreenVest, the AMRI team has a preliminary project site map with a myriad of opportunities for nature-based projects to reduce flood impacts, which will be shared during spring outreach meetings to fine tune and begin working on designs of 10 projects. This effort continues to work closely with the City staff and an Eastport-focused FEMA award that is also focused on mitigating adverse climate impacts.

- Carrs and Elktonia Beach Coastal Restoration | This quarter, the Carrs Elktonia Long Rage Park Plan team at McAdams held a series of Listening Sessions at Pip Moyer on January 30, January 31, and February 1, 2025. Additionally, the McAdams team held two briefings for the City Council members to provide updates and respond to questions (three of the eight council members participated). Taking their learned knowledge, the team is working on a design concept for the park to be presented at the Juneteenth celebration, with the full plan delivery in fall 2025. Similarly, the coastal restoration team has advanced their design to a 30% design set following outreach meetings and discussions with City staff. A pre-application meeting with MDE is scheduled for April 3, 2025 with a Critical Area Commission presentation to follow (date TBD). The design not only strategically addresses climate threats like sea level rise and storm surge, but also incorporates a robust public water-related experience, with a tidal pool for education, a kayak launch and a safe, swimmable beach. Resilience Authority staff, along with City staff, are participating in steering committees to develop environmental education opportunities in the park with Blacks of the Chesapeake.
- Municipal Investment Fund Application with City of Annapolis | The Resilience Authority, in collaboration with the City of Annapolis, submitted a proposal to be accepted into the Phase I cohort of the Municipal Investment Fund (MIF). The purpose of MIF is to identify a cohort of U.S. communities to become the focus of concentrated investing and local community and economic development activities serving the Coalition for Green Capital's (CGC) goal of clean air, clean water, and cheap clean power throughout American communities. The review process will identify and recommend up to 104 Qualified Communities comprised of up to two communities from every state, as well as up to four Tribes, the District of Columbia, and local governments in federal territories, who will receive up to \$250,000 in Market Building grants and technical assistance for activities necessary to develop public-private partnership plans that will accelerate the deployment of capital to NCIF Qualified Projects.
- Waterworks Resilient Park, Annapolis | The City of Annapolis and the Resilience Authority of Annapolis and Anne Arundel County completed its review and have identified the strategic partner to enhance the environmental and recreational amenities available to the community at Waterworks Park, a City-owned property on Defense Highway managed by the Annapolis Department of Recreation and Parks. The group was selected after a competitive Request for Proposal (RFP) bid process. Announcement of the firm(s) by the City of Annapolis is pending. Goals for the master development include the restoration of the natural landscape, the preservation and adaptive reuse of existing historic structures, and identifying opportunities to enhance the visitor experience. The City of Annapolis and the Resilience Authority will work with firm(s) to develop a strategy for renovating the historic pump house building at the entrance to the park. The team also aims to collaborate with key stakeholders to explore opportunities for further programming and maintenance of public spaces in the area.
- Commence Construction at Chestnut Hill Cove Stream and Outfall Restoration | On March 2, 2025,
 mobilization and construction commenced on the restoration of 580 LF segment of urban stream and a 367 LF
 stormwater gully at Chesnut Hill Cove in District 3. The project will connect the upstream restoration project
 completed in 2021 that protects the largest sewer line in the County to the downstream shoreline restoration project
 completed in 2022. The restoration will reconnect the stream to the floodplain, protect infrastructure, improve

riparian and wetland habitat, improve water quality in the receiving creek, and treat storm flows, creating a holistic and comprehensive nature-based water treatment train from headwaters to shoreline. Construction is anticipated to be complete by May 1, 2025, with planting and adaptive management activities through June 2026.

- Jabez III Stream and Wetland Coastal Restoration | Final payments have been issued and both the NFWF and DNR grants have been closed. The Resilience Authority will continue to help manage the on-going monitoring and adaptive managing efforts.
- Glen Burnie Town Center Revitalization | The Resiliency Authority is now under contract with WRA (lead), Mahan Rykiel and Walker Consultants to design, permit and produce bid documents for the revitalization of the Glen Burnie Town Center and Parking Garage. Following a kickoff meeting on March 24, the first task of the team will be to perform the Environmental Site Assessment (Part 58 Environmental Review) to satisfy HUD requirements to release the funding. The Authority is continuing to work with Watershed Stewards Academy to incorporate robust community engagement despite federal funding becoming unavailable, and are sharing community input discovered during the current Better Blocks effort with the AAEDC (Kayleigh de la Puntes) with WRA for incorporation into their design. The EPA's Environmental and Climate Justice Community Change Grant program for \$18,414,572 is at risk for impoundment at the federal level. .
- Fort Meade MIRR, Anne Arundel County | The formal request for assistance under the Office of Local Defense Community Cooperation (OLDCC) program has been accepted, with the Program Director confirming a basis for the project. An OLDCC Project Manager has been assigned to guide the effort. Currently, the Resilience Authority is coordinating a site visit involving Anne Arundel County, Fort Meade, and the Military Department's Headquarters. This visit will focus on reviewing project priorities and ensuring alignment with the Installation Commander's support for the expression of interest. This milestone represents significant progress in advancing resilience initiatives for Fort Meade and surrounding communities.
- Nature Based Infrastructure, Kochi Japan | The Resilience Authority of Annapolis and Anne Arundel County was invited to join a delegation that included the Smithsonian Environmental Research Center, at the invitation of the Ecosystem Research Institute of Japan. Representing the Resilience Authority, the Director provided technical, scientific, and administrative insights on nature-based infrastructure, leveraging experience in the Chesapeake Bay region and in Anne Arundel County as a strategy for climate risk reduction. The Director participated on numerous site visits and risk assessments and had an opportunity to engage in knowledge exchange with officials from the Japanese Government, Kochi Prefectural Government, local municipalities, scientists, university professors, policymakers, and community representatives. The Director delivered presentations at the National Symposium co-hosted by the Ecosystem Research Institute and the Kajima Institute of International Peace on March 4 and 5, 2025, as well as at a Study Group meeting on March 6, 2025.

WHAT IS OUR IMPACT (Through FY24)



\$38 Million

Mobilized for climate resilient infrastructure projects since inception.



4580% ROI

Annual operating costs leveraged to secure infrastructure project funding in FY2024.



\$7.02 Million

Total investment in climate infrastructure projects since inception.



\$48.26 Million

Savings in avoided losses and damages due to investments in resilience.



1372 Tons of Carbon

Lifetime GreenHouse Gas emissions reduced since inception.



\$2.63 Million

Invested in clean transportation projects since inception.



36 Communities

Assisted with a climate infrastructure project since inception.



1 Completed

Number of climate infrastructure projects completed since inception.



\$1.75 Million

Capital committed to projects in underserved communities to date.



5 Acres

Of natural infrastructure restored, enhanced or protected since inception.

WHAT IS CURRENT

City of Annapolis:

- of Annapolis in partnership with the Resilience Authority of Annapolis and Anne Arundel County to guide the transformation of the famed former segregation-era resort. Internationally-recognized Mitchell J. Silver, of McAdams who was named one of the top 100 urbanists in the world in 2023 and Kate Orff from SCAPE the first landscape architect to be named a MacArthur Fellow will lead a team that includes MBP, Creative Urban Alchemy, Underwood and Associates and Synergy Solutions. Under the Master Plan, the five-acre site will become a new park designed to acknowledge and celebrate Chesapeake Bay's historic Black beaches. The work will involve landscape design as well as shoreline restoration to protect the new park and its beach from the impacts of climate change. When completed, the 5.17-acre property will provide stormwater management, opportunities for walking paths and public water access where public water access is currently limited.
 - Status ~ Design
- Resilient and Efficient Codes Implementation | The Resilience Authority and the City of Annapolis, along with a
 team led by ClearlyEnergy, was granted a \$1.7m award from the U.S. Department of Energy's Resilient and

Efficient Codes Implementation grant program. When complete the project will produce a model code, a pilot program, and tools to implement the project recommendations. As a result of the change in leadership at DOE, a communications pause has been put into place for this project. Despite this setback, contracting with project contractors and subrecipients progresses.

- Status ~ Contracting
- The Annapolis Maritime Resilience Initiative (AMRI) | The Annapolis Maritime Resilience Initiative (AMRI) is a nature-based resilience pilot to demonstrate community scale strategies to enhance resilience in the Maritime District of the City of Annapolis, MD. In addition to helping the coastal areas that encompass the Annapolis Maritime District build environmental, economic, and social resilience in the face of climate change, this pilot seeks to demonstrate that resilience strategies, if done at the community scale, can provide more collective protection than when they are done randomly or ad hoc. Moreover, the project aims to demonstrate community-scale strategies that are planned and executed with equity in mind, actively seeking and validating the needs of higher-vulnerability individuals and groups which face historic and current structural barriers to adaptation and thus possess fewer resources to prepare for climate disruption.
 - Status ~ Design
- Annapolis Waterworks Resilience Park | The City of Annapolis (City), in partnership with the Resilience Authority of Annapolis and Anne Arundel County (Resilience Authority) to create new and refurbished environmental, recreational, and community amenities at the existing Waterworks Park located at 260 Defense Highway, Annapolis, Maryland 21401. The Resilience Authority served as a technical consultant and led a solicitation and review process for the City from entities that can clearly demonstrate their ability to assess, finance, maintain, and conduct high-quality operations with regard to climate resiliency and environmental responsibility in order to develop the first sustainable and resilient Waterworks Park in the region (the "Waterworks Resilience Park")
 - Status ~ Contracting

Anne Arundel County

- Jonas Green | This innovative project seeks to build up the park's resiliency to erosion and other climate and
 weather-related impacts. The coastal restoration project will utilize vegetated headlands which mimic naturally
 occurring coastal processes found on the shores of the Severn River. The benefits of implementing this project will
 be to reduce the erosion rate, protect existing beach and shallow water habitat, and protect the walking paths along
 the shoreline.
 - Status ~ Contracting
- Beverly-Triton Nature Park and Beach | The purpose of this project is to design and construct shoreline
 restoration and improvements within the 342 acre Beverly-Triton Nature Park necessary to prevent the loss of the
 County's investment in waterfront property. The project seeks to build up the park's resiliency to erosion and other

climate and weather-related impacts. The coastal restoration project will use breakwaters and beach restoration to dissipate wave energy and stabilize the existing shoreline.

- Status ~ Design
- Chestnut Hill Cove Community Flooding | Tidal and non-tidal flooding has resulted in the degradation of coastal habitat and shoreline stability threatening the Chestnut Hill Cove Community. The project will tie into emergency repairs completed by Anne Arundel County and Baltimore Gas and Electric, and mitigation completed by a commercial developer. Phase III of this project will complete the restoration using a combination of state and federal funds. The Resilience Authority was able to reduce the amount of the grant from the State by seeking funding from the National Fish and Wildlife Foundation's National Coastal Resilience Fund. The original DNR grant was reduced from \$1,388,042 to \$441,625.00, resulting in \$946,417.00 reallocated for other local projects.
 - Status ~ Construction
- Columbia Beach Community Flooding | The project implements a comprehensive, sustainable, and environmentally resilient upgrade of the stormwater conveyance system in the historically Black community of Columbia Beach, Maryland, and provides a mitigation model suitable for similar communities. The project prioritizes efficient mechanisms to remove stormwater from roads and community property, transfer stormwater and runoff to new or existing holding/infiltration devices, and improve water quality before discharge into the Chesapeake Bay. Contracts for field work, design, permitting, and community engagement are in place and the Quality Assurance Project Plan is being developed.
 - Status ~ Design
- Glen Burnie Town Center Urban Resilience Project | The Resilience Authority released two (2) Requests for Qualifications for 1) Building, Design, and Consulting and 2) Program Development. Through this process, qualified applicants will be chosen to assist in the development of a Community Engagement and Collaborative Governance Plan, as well as a Community Strength Plan, which will become part of the Resilience Authority's application for an EPA Community Change Grant. A design firm will also be chosen to assist in developing a concept design for revitalization of the Town Center Plaza. A \$1.05M federal grant from the Department of Housing and Development will be used for design and implementation. Planning and conceptual design will be funded by a \$500k grant from the County. Meetings with HUD have begun to reach a grant agreement. The Project Task Agreement and Funding Agreement Addendum for this project are being drafted.
 - Status ~ Design
- EV Infrastructure | The Resilience Authority will support the County in the installation of Electric Vehicle Charging Stations and services. In 2020, Anne Arundel County Government committed to the immediate replacement of conventional vehicles with more efficient models where possible, and began a long-range planning effort to identify the infrastructure, maintenance, and personnel needed to convert the fleet to all-electric vehicles within the next 15 years. The fleet will be gradually converted as vehicles are replaced with hybrid, plug-in electric, and all-electric

models. By 2032, all non-emergency light and medium-duty vehicles purchased must be all-electric models, and by 2037, all light and medium-duty emergency vehicles purchased must be all-electric models.

- Status ~ Design
- Galesville Community Resilience Initiative | This project seeks to develop a community-led ecological restoration project that will: (a) connect at-risk shoreline points via a shrub, vegetation, and boulder stormwater filtration system; (b) add shoreline to protect against flooding; (c) install green stormwater management infrastructure to protect Galesville's Main Street Corridor and the Ebenezer African Methodist Episcopal Church and its adjacent cemetery; and (d) develop a walkway that facilitates waterfront access for all. This Master Plan will integrate existing stormwater infrastructure with new treatment practices, such as decentralized bio-retention and bio swales well-suited for integration into the Main Street corridor, helping to address runoff discharge. A living shoreline with sand and nature-based beach features will help deter flooding. Reduced sedimentation will create more suitable habitat for oysters and submerged aquatic vegetation and highly valuable nursery and foraging grounds for key Chesapeake species.
 - Status ~Development
- Severn River Private Shoreline Restoration | The pilot projects implement nature-based shoreline erosion mitigation measures to combat erosion and soften the shoreline at two private shorelines on the Severn River. These projects will be funded 50/50 between a grant from the Maryland Department of Natural Resources through the Chesapeake and Atlantic Coastal Bays Trust Fund and funding from the private property owners. The projects will serve as a pilot for the Resilience Authority's public-private partnership (P3) for private shorelines in Anne Arundel County, which comprise more than ¾ of the 500+ miles of shoreline in the County.
 - Status ~ Design
- South County Resilience Initiative | This project seeks to enhance the coastal resilience and environmental benefits for the South County shoreline through beneficial use of dredged material from South County channels. Furthermore, it is anticipated that construction of the sites will result in an approximate 25 percent cost savings over the traditional method of dredged material placement. These concepts will preserve upland DMP Site capacity while reducing overall dredging program cost. It is anticipated that the projects will qualify for funding through the DNR Waterway Improvements Program (WIP).
 - Status ~ Development

Regional Projects

- Sea Level Rise Sensors | The new water level monitoring project will bring better monitoring and data collection to
 help protect coastal communities from the impacts of flooding. The new water level sensors, grant-funded through
 the University of Maryland, will be part of a larger resilience strategy in places around the county. The data
 collected will track and measure flooding to inform emergency management on broad resilience strategies.
 - Status ~ Installation

- Climate Pollution Reduction Grant/Baltimore MSA | This work will leverage the Baltimore Regional Climate Pollution Reduction Grant in which a partnership with Baltimore Metropolitan Council secured a \$1M EPA Grant to develop a shared plan for moving the region forward in addressing harmful greenhouse gas emissions. A Regional Greenhouse Gas Inventory and a Priority Climate Action Plan (PCAP) have been completed and the partnership is working on a larger Comprehensive Climate Action Plan (CCAP) and project portfolio. The GHG inventory provides the County with a baseline for project selection and evaluation.
 - Status ~ Planning

WHAT IS COMING

- Hawkins Cove, Annapolis | When complete, the Hawkins Cove Living Infrastructure Project will create positive
 change in communities by combining regenerative living infrastructure and new forms of public space. The project
 is adjacent to Annapolis' largest public housing communities which recently completed an ambitious community-led
 Transformation Plan for complete neighborhood revitalization.
- Edgewater Recreation Center | The Resilience Authority is working with the AACO Department of Recreation and Parks to provide design build services to establish the County's first recreation facility designed with resilience at its core, ensuring long-term sustainability and adaptability in the face of climate challenges. This dynamic space will provide residents of all ages with opportunities to gather, play, and connect while integrating features that enhance environmental resilience and community preparedness. Plans include a gymnasium, multi-purpose courts, community meeting rooms, dance and fitness studios, an indoor playground, and other flexible spaces that support health, wellness, and engagement. By incorporating resilient infrastructure and sustainable design elements, the center will serve as a model for future recreational facilities, reinforcing Anne Arundel County's commitment to both community vitality and climate resilience.
- Fort Meade MIRR | The project will result in a Resilience Action Plan with recommended resilience actions and
 prioritized projects, together with recommended funding sources, that focus on shared critical infrastructure,
 programs, and services. Projects may include energy, water and wastewater, stormwater conveyance,
 transportation and emergency evacuation, communication networks, health services, community housing, schools,
 and daycare centers.
- Resilient and Ready Anne Arundel | Working in partnership with the City of Annapolis and Anne Arundel County to develop the region's first integrated portfolio of projects and actions aimed at reducing greenhouse gas emissions, reducing climate risks and accelerating the transition to renewable energy. Similar to the process used in the Gulf Coast that guides investment in the design, implementation, and operation of large-scale restoration and risk reduction projects, this integrated portfolio will help assess, plan, prioritize, and implement resilience and renewable energy projects. The comprehensive framework will be used to evaluate the potential locations, benefits

and costs of proposed infrastructure and renewable energy projects needed to make the region stronger and more adaptable to climate change.

• Cove of Cork Living Shoreline and Stormwater Management | Cove of Cork presents an opportunity to restore a historically significant 'Gem of the Severn'. Threatening erosion at the Route 50 bridge abutment, large amounts of untreated stormwater entering the Severn River from Route 50, a lack of viable habitat, and the vulnerability of the cove to climate threats like sea level rise and storm surge are all serious items of concern. This project will unite local, state, and federal agencies to provide resilience to public infrastructure and create rare and endangered habitat on the Severn through a holistic ecosystem recovery effort that includes two areas of shoreline restoration and two areas of stormwater management. Project partners will include the Authority; the local community; local, state, and federal regulatory agencies; the State Highway Administration; and the contractor. The success of this collaboration will present a model for managing complicated, difficult and cross-sector issues in our waterways.

WHAT IS COMPLETED

- Jabez Branch Floodplain Restoration | On October 24th, 2024, the project, located in Reach III of the Jabez Branch to address a significant erosion and pollution problem was completed. Unchecked erosion was destabilizing the floodplain, resulting in the continuous transfer of sediment, debris, and pollutants downstream with each storm. Climate change was expected to accelerate these effects if left unaddressed. The restoration effort included filling the eroded 10-foot-deep channel with native sands, gravel, and wood chips to reconnect the stream to its floodplain. A system of riffles and pools was introduced to regulate water flow, especially during storm events, and the existing 2.6 acres of wetlands were enhanced and expanded to more than 5 acres. These improvements are designed to slow runoff, reduce pollution, and restore critical habitat. The project was funded by the Resilience Authority of Annapolis and Anne Arundel County with \$8.1 million in funding provided by the Maryland Department of Natural Resources and \$977,640 from the National Fish and Wildlife Foundation.
 - Video
 - Press Release
- Resilience and Mobility Study Tour, Regional | On November 11th, 2023, the Resilience Authority lead a joint
 delegation of City of Annapolis, Anne Arundel County, and State of Maryland officials to the Netherlands to study
 resiliency infrastructure, flood protection, urban planning, alternative transportation (including pedestrian and
 bicycle infrastructure), resiliency financing, and economic development. To see and learn from the world leaders in
 flood protection; resilience infrastructure; alternative transportation and sustainable economic development.
 - Video
- Climate Change and Sustainability Study Tour, Regional | On September 28th, 2024 to October 5th, the
 Resilience Authority hosted a Climate Change and Sustainability Study Tour made possible through the generous support of the MHE and Denker Foundations. A delegation of representatives from the State's Departments of

Commerce and Natural Resources, Anne Arundel County, the City of Annapolis, Anne Arundel County's Economic Development Corporation, Visit Annapolis, and the Resilience Authority traveled to Sweden, visiting Stockholm and Gothenburg. The Delegation examined alternative transportation methods, including electric ferries, with a focus on their economic potential and contribution to climate goals as outlined in the Climate Solutions Now Act. The tour included site visits and discussions with manufacturers, transportation experts, urban planners, and government leaders, providing opportunities to learn about sustainable infrastructure, resilient solutions, and environmental research programs. The trip provided an opportunity for learning about sustainable urban design, funding mechanisms, and environmental research programs as well as scaling up successful environmental and transportation solutions. From the trip, the City and County are currently collaborating with the Resilience Authority on near term and long term actions to put into practice.

- o Final Report
- o <u>Video</u>

Looking Forward/Upcoming Events and Activities				
Date	Time	Event Name	Description	
3/24/25	5:30-7:30pm	Eastport Business Association Presentation, Annapolis Maryland	Present project progress and seeking community input for Annapolis Maritime Resilience Initiative priorities.	
3/24/25	5 to 7pm	Maritime Industry Advisory Board Meeting, Annapolis Maryland	Discuss infrastructure funding opportunities for marinas and other water dependent economies.	
3/25	11 to 12 pm	CERF Galesville Design Competition	Kick off meeting for the CERF Design Competition with Galesville community members and CERF committee co-chairs. The CERF (Coastal and Estuarine Research Federation) Design Competition is a forward-thinking initiative that encourages students and faculty to collaborate on designing solutions and strategies to enhance the resilience of coastal environments facing climate change and other challenges.	
3/29/25	11-12pm	Columbia Beach Citizens Improvement Association Meeting, Anne Arundel County	Presenting project progress and overview to the CBCIA and Columbia Beach community.	
4/2/25	11-12 pm	Whole Watershed State Management Team Meeting	Meeting with WW project sponsors to get input on project priorities - to be funded in FY26	

4/2/25	5-7pm	RAA&AAC Board of Directors Meeting, Annapolis, Maryland	3rd Quarter Meeting of the Resilience Authority Board of Directors and Advisory Committee Members.
4/3 - 4/4	All Day	2025 Mayors Council Meeting, Lancaster PA	Participating on behalf of the Resilience Authority and representing the City of Annapolis in discussion of water and climate policy regulations and the new administration. Opportunity to tour nature based climate infrastructure used in Lancaster, PA to reduce contaminants and address flooding.
4/5	9 to 10:30	Jabez Restoration Stream Walk	Second Watershed Walk of 2025 in the Severn River headwaters! This tour will showcase the Jabez Branch Stream & Wetland Restoration in Millersville. This is a great opportunity for anyone wanting to celebrate International Beaver Day by exploring a project designed for, and already inhabited by, our local ecosystem engineers.
4/7	3 to 4 pm	Building Performance and Energy Standards Kick Off Meeting	This is the kick-off call for our Incorporating Climate Resilience into Building Performance Standards RECI Project.
4/10	2 to 5 pm	LAA Environment Day	LAA, a nonprofit 501c3 organization, has been the premier leadership training and networking institute in Anne Arundel County since 1993. The Resilience Authority will be featured as part of their Environment Day and will tour Carrs Beach.
4/14	8 to 1 pm	USNA's 14 th Annual Capstone Day	Several Resilience Authority projects were worked on as part of the USNA's Annual Capstone project. Opportunity to receive presentations and recommendations for Carrs Beach and sea level monitoring for Eastport.
6/11	5 to 7 pm	RAA&AAC Board of Directors Meeting, Annapolis, Maryland	4th Quarter Meeting of the Resilience Authority Board of Directors and Advisory Committee Members