Carroll County Water Resource Coordination Council

Hampstead * Manchester * Mt. Airy * New Windsor
Carroll County Health Department

* Sykesville * Taneytown * Union Bridge * Westminster
Carroll County Government

WRCC Meeting Summary

August 23, 2023

Attendees:

Municipalities:
☒Kevin Hann, Chair, Hampstead
☒Jim Wieprecht, Vice Chair, Taneytown
☐John Dick, Westminster
☒Gary Dye, New Windsor
☐Delbert Green, Manchester
☐Mayor Perry Jones, Union Bridge
☐Rodney Kuhns, Manchester
☒Alex Perricone, Manchester
☐ Jim Roark, Hampstead
☒Kevin Rubenstein, Sykesville
☐Kevin Smeak, Taneytown
☒Dick Swanson, Mount Airy

CC LRM:
☒Brenda Dinne
☒Glenn Edwards
☒Chris Heyn, Director
☒Claire Hirt
☐Mary Lane
☐Byron Madigan
☐Kelly Martin
☒Denise Mathias
☒Zach Neal
☒Janet O'Meara
☐Ed Singer

Health Department:
☒Richard Brace

CCG Others:
☒Andy Watcher, CC DPW
☐Bryan Bokey, CC DPW
☒Jason Green, CC DPW
☒Lydia Rogers, CC M&B

Guest Speakers:
☒ Eileen Singleton, BMC

1. **Opening Statement**

Chair – Kevin Hann

Mr. Hann opened the meeting at 2:30 PM.

Vice Chair – Jim Wieprecht

None.

2. **Approval of Meeting Summary – July 26, 2023**

Approval of the July meeting summary was discussed. No changes were made.

APPROVAL OF MINUTES: Motion was made by Jim Wieprecht and seconded by Alex Perricone to approve the July 26, 2023, meeting summary as written. Motion carried.

3. **BMC Climate Change Resource Tool for Local Jurisdictions Follow-Up – Eileen Singleton, BMC**

- Eileen Singleton presented follow-up documents to the *Climate Change Resource Guide*, on which she provided an overview to the WRCC in November 2022. The follow-up documents that accompany the Guide focus on strategies for local governments to identify and implement resilience measures. The first document, *Climate Resilience Guidance for Local Jurisdictions*, was developed to further assist departments of transportation and public works to incorporate climate resilience projects. The second document, *Recommendations for Interjurisdictional Coordination on Climate Resilience*, provided interjurisdictional coordination recommendations.

- Ms. Singleton also shared information regarding the cooperative effort of Baltimore region jurisdictions to take the next step toward the Baltimore toward developing the Baltimore Regional Roadmap to Resilience, or "Baltimore R3." An application for a Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation ("PROTECT") planning grant, if awarded, will be used to develop a Transportation Resilience Improvement Plan ("TRIP") for the region and perform revenue mapping to support fiscal sustainability and implementation capacity.

*Reference/**Attachment**:*

- PowerPoint*: Enhancing Climate Resilience and interjurisdictional Collaboration (BMC)*
- PowerPoint*: PROTECT Program Application: Baltimore Regional Roadmap to Resilience*

4. Water Resources Element (WRE 2024) Update – Brenda Dinne

- Task 1.2: Automation of Portions of Buildable Land Inventory model: Completion is anticipated for early September.
- Task 2: Groundwater Allocability: Comments on a revised technical memo addressing general options for improving groundwater allocability will be provided to Hazen this week.
- Task 3: Emerging Contaminants: Additional data was provided to Hazen. The remaining, outstanding information is clarification of percentage of average daily use figures for wells that are within a certain buffer area from volunteer fire departments. A review, and revision, if needed, was requested from the municipalities by August 18.
- Task 4: MDE TIPP Spreadsheet Comparison: The draft technical memo is anticipated by the end of August.
- Task 5: Climate Change Impacts: Additional GIS data was provided to Hazen, including flood data. The evaluation and draft technical memo are in progress.
- Task 6: Update 2010 WRE Supporting Documents: All capacity and demand (C&D) workbooks were provided to Hazen except for Mount Airy and Westminster. Demand revisions will be made to the Mount Airy workbook before providing to Hazen, and additional data is needed for the Westminster C&D workbook.

Reference/Attachment:

- *N/A*

5. Municipal Stormwater Projects Update – Janet O'Meara

- Janet O'Meara provided an update on the municipal stormwater restoration projects.
- Ms. O'Meara also shared that Ed Singer is leaving to take a position with Citizen Services. Elizabeth Caron is also leaving.

*Reference/**Attachment:***

- *Municipal Project Status, August 23, 2023*

6. Other

- A-StoRM: Mr. Heyn shared that MDE requested feedback from the Stakeholder Consultation Group on proposed revisions to the State's stormwater regulations. He sent a comment letter to MDE. A copy will be emailed to the municipalities. Some of the proposed revisions would result in significantly more cost to property developers and local jurisdictions, without necessarily providing a logical benefit. Implementation of any proposed revisions is still several years away, as MDE is planning to propose State legislation to authorize these changes in the 2023 legislative session. Additional time after passage would be provided for local jurisdictions to make the subsequent changes to local codes.
- Lead & Copper Rule: As a follow-up to the June presentation by Mr. Hyde from MDE, Ms. Dinne will send out links to MDE's Lead & Copper webpage, guide, and Association of State Drinking Water Administrators (ASDWA) webinars. Ms. Hirt indicated that GIS-based solutions

are available to help manage this data, and many other counties seem to be using this tool. She will look for a demo video to share.

- NPDES MS4: Ms. Hirt reminded everyone that JotForms are due Friday, August 25. Mr. Edwards shared that a save-the-date email was sent out for the annual NPDES training. The new MS4 and 20SW permits include many changes. The training will take place on November 3 at the Fire Training Center.
- Frank Schaeffer Memorial Run/Fun Run: Mr. Hann noted that the annual memorial event will be held on October 21.

7. Adjournment

The meeting adjourned at 3:27 PM.

MEETING ADJOURNMENT: Motion was made by Alex Perricone and seconded by Dick Swanson to adjourn the August 23, 2023, meeting. Motion carried.

Upcoming Meetings:

☐ *Regular Monthly Meeting – Wednesday, September 27, 2023*

BALTIMORE METROPOLITAN COUNCIL

BRTB
Baltimore Regional Transportation Board

Enhancing Climate Resilience and Interjurisdictional Collaboration

August 23, 2023

Overview

- Recap: Climate Change Resource Guide
- Climate Resilience Guidance for Local Jurisdictions
- Recommendations for Interjurisdictional Coordination on Climate Resilience
- Regional application to FHWA PROTECT Program

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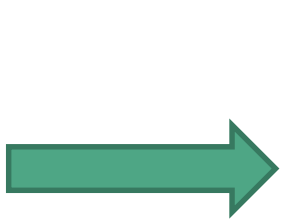
Resilience Planning Activities:

After development of the Climate Change Resource Guide, the region undertook the next step to develop more detailed guidance and develop recommendations to institutionalize ongoing inter-jurisdictional coordination on climate resilience. The following documents were developed in February 2022:

CLIMATE RESILIENCE GUIDANCE FOR LOCAL JURISDICTIONS

RECOMMENDATIONS FOR INTERJURISDICTIONAL COORDINATION ON CLIMATE RESILIENCE

In October 2021, the **Climate Change Resource Guide** was completed to provide a resource to local jurisdictions on adaptation options to consider as they plan, design, operate, and maintain their local infrastructure. The Guide includes an overview of projected changes to the climate, documentation of how the changing climate has already impacted them, adaptation options, and a **Toolkit** that makes the content of each chapter actionable for users. The project also included a summary **presentation** that can be used by any agency to inform them about the Guide.



CLIMATE CHANGE ADAPTATION TOOLKIT

CLIMATE CHANGE RESOURCE GUIDE

FINAL PRESENTATION FOR CLIMATE CHANGE RESOURCE GUIDE

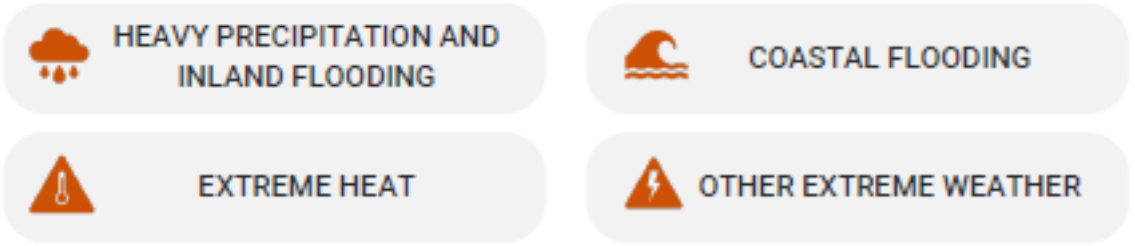
BMC

https://baltometro.org/environment/planning-areas/climate-change-resilience

Recap: Climate Change Resource Guide

- Climate Change Resource Guide and Toolkit support efforts of local DPWs and DOTs to prepare for climate change
- Covers 6 infrastructure service areas:

- Climate impacts:



KEY TERMS

There are two ways to take action on climate change:

- **Adaptation**: Measures to proactively adjust to a changing environment.

  Examples include ensuring sufficient building cooling systems given rising temperatures or siting assets outside future flood zones.
- **Mitigation**: Measures to reduce greenhouse gas emissions to slow or stop the impacts of climate change.

  Examples include transition to clean energy sources or electrification of building heating systems.

This Resource Guide and Toolkit focus on adaptation.

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Toolkit Overview

- The Toolkit, within the Resource Guide, is a worksheet that **makes the content from each chapter actionable** for users, by including questions to consider
- Completed Toolkit example is included in Appendix C

Toolkit Questions	Enter Your Responses
Climate science: Chapter 2 and Appendix A	
1. What climate hazards are relevant to your work or project? Use the information about current and future climate change in Chapter 2 (regional summary) and Appendix A (jurisdictional data) to determine relevant climate hazards. For each climate hazard, certain variables may be highly relevant to your service area or project (e.g., number of days above 90°F for worker safety; heating/cooling degree days for facilities; freeze/thaw days for transportation). Review the list of climate variables in Appendix A to identify variables particularly relevant to your work.	**Climate hazards** ☐ Temperature ☐ Precipitation ☐ Sea level rise and storm surge ☐ Other extreme weather **Climate variables**
2. For each of the climate hazards: What are the historical climate conditions? How are the climate conditions changing in your jurisdiction? Use the information about current and future climate change in Chapter 2 (regional summary) and Appendix A (jurisdictional data) to evaluate how the climate hazards are changing. Consider your planning timeframe or asset's useful life when reviewing the projected climate conditions. For example, decisions about maintenance or replacement of facility mechanical components should consider medium-term projections (centered around 2050), while decisions about construction of new long-lived infrastructure should consider long-term projections (end of century and beyond).	**Historical climate conditions** **Projected climate conditions**

Toolkit Questions	Enter Your Responses
Climate impacts: Chapter 3	
3. Given changing climate conditions, what are anticipated impacts to your service area or project? Consider impacts that your service area or project has recently experienced, and use the climate projections from Question 2 along with the information and examples from Chapter 3 to determine projected climate impacts. Which anticipated impacts are priorities to address? Consider prioritizing impacts based on potential damage, disruption of public services, and cost of repair.	**Projected climate impacts**
4. Have climate impacts to your service area or project disproportionally affected vulnerable populations? Review the a) BMC Vulnerable Populations Index, b) Maryland Commission on Climate Change Adaptation and Resiliency Work Group's Justice, Equity, Diversity, and Inclusion Strategic Framework, and c) information on climate impacts from Chapter 3 to consider the uneven impacts to vulnerable populations who may face elevated climate risks. Are there areas where infrastructure investments could both reduce climate impacts and enhance social equity?	
Policies: Chapter 4	
5. Are there state and local policies on climate impacts that affect your work or project? Use the information from Chapter 4 to determine relevant climate policies. Are there policies that would help facilitate climate adaptation measures if approached from a climate perspective? For example, environmental justice policies may help show progress or build support when addressing climate. On the flipside, are there policy or planning barriers that limit your ability to address climate impacts?	
Adaptation options: Chapter 5	
6. Given the projected climate impacts, what are potential adaptation strategies within your service area or for your project, across relevant functions (e.g., design, maintenance)? Use the information and examples from Chapter 5 to begin to identify potential adaptation strategies. What adaptation options are no-regrets (i.e., generate benefits regardless of future climate) and/or could be implemented in the near-term? What adaptation options are no or low cost?	
Funding and financing: Chapter 6	
7. What funding and financing sources are available to help implement the adaptation options? Use the information and examples from Chapter 6 to begin to identify potential funding and financing strategies for adaptation.	
Next steps	
8. What are your next steps to address these climate impacts and plan for these adaptation options? For the selected adaptation strategies, would there be implications to other service areas? Are there other agencies or departments (inside or outside your jurisdiction) your DPW or DOT should coordinate with?	

Resource Guide Overview

- Ch 1: Introduction and Toolkit
- Ch 2: The Changing Climate
- Ch 3: Climate Change Impacts
- Ch 4: Policies
- Ch 5: Adaptation Options
- Ch 6: Funding and Financing
- Appendix A: Jurisdictional Climate Data
- Appendix B: Climate Science Data and Methods
- Appendix C: Toolkit Example

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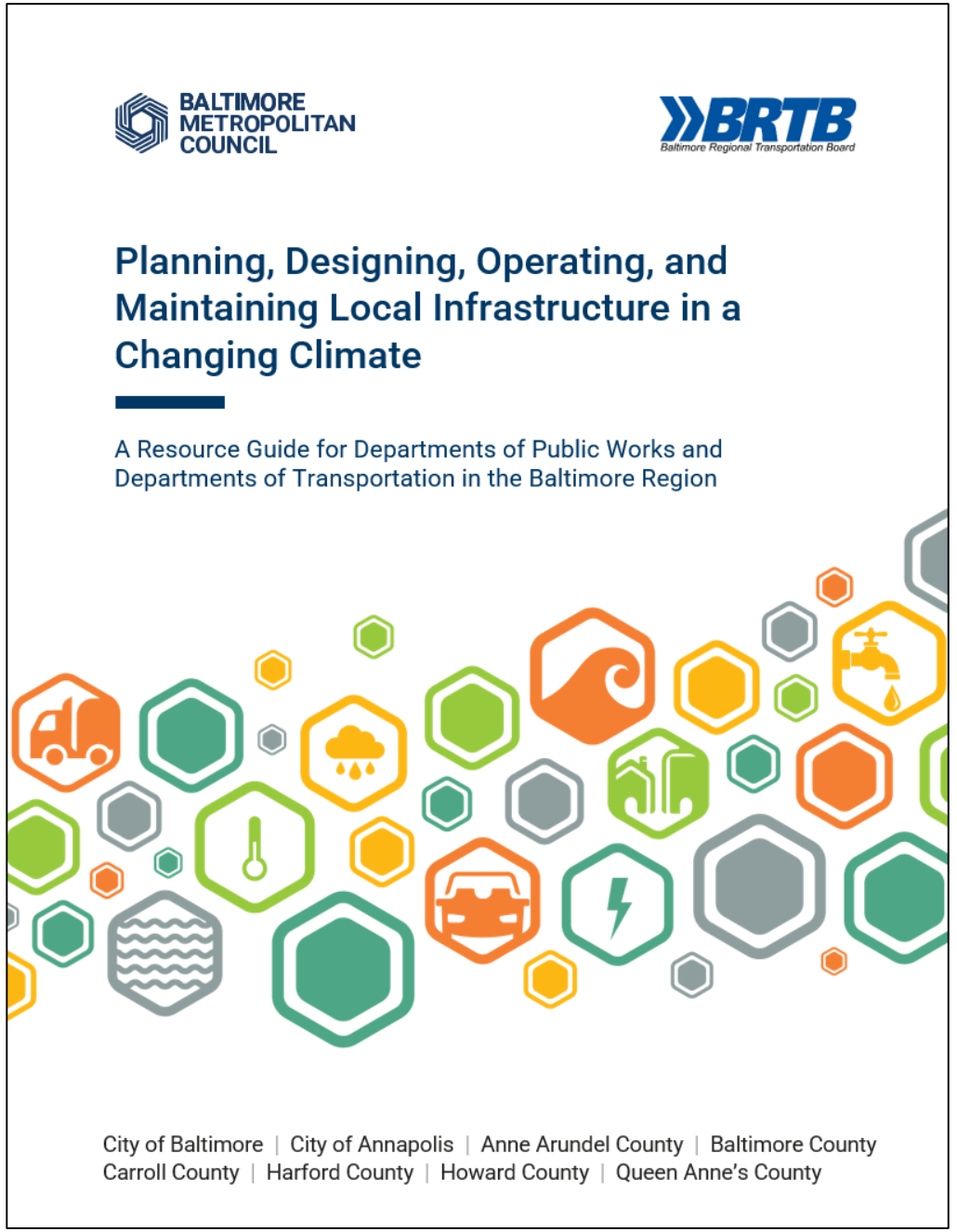

Resilience Planning Activities:

After development of the Climate Change Resource Guide, the region undertook the next step to develop more detailed guidance and develop recommendations to institutionalize ongoing inter-jurisdictional coordination on climate resilience. The following documents were developed in February 2022:

CLIMATE RESILIENCE GUIDANCE FOR LOCAL JURISDICTIONS

RECOMMENDATIONS FOR INTERJURISDICTIONAL COORDINATION ON CLIMATE RESILIENCE

In October 2021, the **Climate Change Resource Guide** was completed to provide a resource to local jurisdictions on adaptation options to consider as they plan, design, operate, and maintain their local infrastructure. The Guide includes an overview of projected changes to the climate, documentation of how the changing climate has already impacted them, adaptation options, and a **Toolkit** that makes the content of each chapter actionable for users. The project also included a summary **presentation** that can be used by any agency to inform them about the Guide.

CLIMATE CHANGE ADAPTATION TOOLKIT

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https://baltometro.org/environment/planning-areas/climate-change-resilience

Climate Resilience Guidance For Local Jurisdictions

- **Document developed to further assist DOTs/DPWs to incorporate climate resilience strategies**
  - Follow up to *Climate Change Resource Guide*
- **Focuses on these service areas:**

Icon	Service Area
	Transportation
	Stormwater
	Water

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Climate Resilience Guidance For Local Jurisdictions

- **Focuses on implementation of resilience strategies, from the Climate Change Resource Guide, prioritized by the project Steering Committee and other transportation, water, and stormwater practitioners across the region.**
- **Processes are different across jurisdictions, but are comparable at a high level.**
- **Strategies**
  1. Develop and adopt climate change resilience design standards and codes, updating existing or creating new standards and codes as needed
  2. Screen new and existing capital projects for climate change risk and opportunities
  3. Identify and obtain dedicated funding and financing for resilience infrastructure and activities
  4. Monitor, maintain, harden, and retrofit assets to promote resilience and prevent damage

Each strategy includes a description of **what it is**, **why it is relevant**, **how it could be implemented**, **resources** to help with implementation, **timeline** for implementing, and relevant **stakeholders**.

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Strategy 1: Develop and adopt climate change resilience design standards and codes, updating existing or creating new standards and codes as needed

- Recommended Action #1: Review example climate resilience design standards.
- Recommended Action #2: Identify which design standards and codes can and should be updated, and if new standards and codes need to be developed and adopted to help ensure new infrastructure is designed to be resilient to climate change.
- Recommended Action #3: Identify relevant design inputs for your jurisdiction.

Relevant Resources

US EPA Climate Resilience Evaluation and Awareness Tool (CREAT) Risk Assessment Application for Water Utilities: An interactive tool created by the EPA to assist utilities in understanding and planning for climate risk, including cost-benefit analyses

Example climate resilience design guidelines (Recommended Action #1)

- Philadelphia Water Department Climate-Resilient Planning and Design Guidance
- **MDOT SHA**'s forthcoming **Highway Drainage Manual** update

Relevant industry research includes

- **Stormwater:** Maryland Stormwater Design Manual and research from UMD's Stormwater Infrastructure Resilience and Justice (SIRJ) Lab can serve as a foundation and space for innovation on stormwater infrastructure design
- **Water:** The Water Research Foundation's ongoing project to create a Practical Framework for Water Infrastructure Resilience

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Strategy #2: Screen new and existing capital projects for climate change risk and opportunities

- Recommended Action #1: Incorporate climate considerations into the project development and selection process.
- Recommended Action #2: Improve documentation of internal discussions and knowledge of risks.
- Recommended Action #3: Identify climate resilience projects outside the traditional CIP development process based on vulnerability of infrastructure and communities as well as available funding.

Relevant Resources

Identifying climate risks (Recommended Action #3)

- MD EJScreen Mapper to identify environmental justice concerns across the state

Sources for resilience measures (Recommended Action #3)

- Maryland Department of Planning Best Practices for Integrating Climate Change, Identifying Suitable Receiving Waters to inform Local Comprehensive Plans
- US EPA Resilient Strategies Guide for Water Utilities presents a combination of best practices/potential projects, as well as funding opportunities that are state-specific

UMD Environmental Finance Center and MD Department of Natural Resources Ready for Resilience: Embedding Climate Action into Local Government Operations provides guidance to facilitate implementation of resilience, including for hazard and vulnerability assessments, policies and codes, and infrastructure and asset management

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Strategy #3: Identify and obtain dedicated funding and financing for resilience infrastructure and activities

- Recommended Action #1: Identify relevant opportunities to fund and finance resilience.
- Recommended Action #2: Develop strategies to overcome barriers of technical and staffing capacity in seeking resilience financing and funding.
- Recommended Action #3: Evaluate and communicate lifecycle costs and benefits of resilience to help with financing.

Relevant Resources

Funding and financing opportunities (Recommended Action #1)

- MD Resiliency Partnership has multiple resources, including guidance on grants
- **Federal funds**, including the 2021 Infrastructure Investment and Jobs Act (IIJA) and 2022 Inflation Reduction Act (IRA)
- FEMA Recovery and Resilience Resource Library, an extensive database of FEMA recovery and resilience programs, including funding opportunities
- Inspiration and research on innovative climate financing mechanisms can be found at the Center for Climate and Energy Solutions
- NOAA's Funding and Financing Options and Considerations for Coastal Resilience Projects

Identifying costs of resilience (Recommended Action #3)

- CNT Green Infrastructure Benefits section on Transportation Benefits which help quantify and value the transportation benefits of green stormwater infrastructure

Boosting local climate literacy (Recommended Action #3)

- Maryland Climate Leadership Academy supports the continued climate-related education and training of staff in state and local governments

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Strategy #4: Monitor, maintain, harden, and retrofit assets to promote resilience and prevent damage

- Recommended Action #1: Include climate change in maintenance prioritization frameworks.
- Recommended Action #2: Increase frequency of monitoring of infrastructure for potential damage.
- Recommended Action #3: Prioritize retrofits, repairs, and hardening based on level of risk and criticality.

Relevant Resources

UMD Environmental Finance Center and MD Department of Natural Resources Ready for Resilience: Embedding Climate Action into Local Government Operations provides guidance to facilitate implementation of resilience, including for infrastructure and asset management

Examples of effective monitoring systems and protocols that consider climate change (Recommended Action #2)

Baltimore County's Asset Management System incorporates climate change into its preventative maintenance decision making framework

MDOT SHA has started tracking frequently flooded structures to build out a Climate Change Vulnerability viewer. They are also developing an emergency relief data tool to capture real time emergency events, impacts, costs, and areas of concerns to better inform preventative maintenance and retrofits

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Resilience Planning Activities:

After development of the Climate Change Resource Guide, the region undertook the next step to develop more detailed guidance and develop recommendations to institutionalize ongoing inter-jurisdictional coordination on climate resilience. The following documents were developed in February 2022:

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Recommendations for Interjurisdictional Coordination on Climate Resilience

- Developed to enhance interjurisdictional resilience coordination

Recommendations for Interjurisdictional Coordination on Climate Resilience

Climate impacts are not constrained by jurisdictional boundaries, and so resilience measures are sometimes most effective at mitigating those impacts when implemented collaboratively across the region. In addition, one jurisdiction's decisions to enhance resilience could have cascading effects on other priorities or decisions made in the region. **As the climate continues to change and the local and regional climate resilience initiatives in the Baltimore region continue building momentum, it will be important to put in place strategies for ongoing interjurisdictional coordination.**

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Recommendations for Interjurisdictional Coordination on Climate Resilience

Institutionalize regional coordination for ongoing consideration and support of resilience solutions

1. Develop a resilience strategy to be implemented collaboratively
2. Consider opportunities to build on ongoing efforts of interjurisdictional collaboration
3. Create a new and cohesive group specific to climate efforts, such as an internal technical group or regional compact
4. Create information-sharing databases on climate impacts and resilience efforts at the state, regional, and local levels

Funding

1. Identify opportunities for sharing state/Federal grants and funding

Role for the State and BMC

BMC

Navigating Regional Resilience Resources

- **Three resources developed to support regional resilience efforts:**
  1. Climate Change Resource Guide
  2. Climate Resilience Guidance for Local Jurisdictions
  3. Recommendations for Interjurisdictional Coordination.
- **Checklist is a high-level guide to navigate these resources**
  - Provides steps for how these resources can be used to understand and create an approach to increase resilience within and across jurisdictions.
  - Each checklist item addresses different aspects of this process.
  - Jurisdictions are encouraged to refer back to the checklist regularly to track progress and identify next steps.

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	Step	Who?
✓	**Get the Big Picture**	
	Read the Climate Change Resource Guide (or read this presentation providing an overview)	Staff involved in DPW/DOT planning and design
	Answer the **Toolkit** questions	Point person(s) coordinating across DPW/DOT planners and designers
✓	**Take Action**	
	Read this document, **Climate Guidance for Local Jurisdictions**	Staff involved in DPW/DOT planning, design, project management, and maintenance
	Create an approach to documenting climate risk and identifying recommended projects, policies, and procedures that will increase resilience across DPW/DOT infrastructure • Your local Climate Action Plan, Hazard Mitigation Plan, capital improvement plan, stormwater management plan, etc. can provide insight on climate risks and ideas for projects or policies	Point person(s) coordinating across DPW/DOT planning, design, project management, and maintenance staff
	Identify one or more strategies from this **Climate Guidance for Local Jurisdictions** to pursue	Leadership and staff teams (planning, project management, maintenance)
	Identify relevant stakeholders for each selected strategy and associated recommendations (more details in strategies below)	Planning teams
	Create a timeline for implementation	Project teams
	Identify resources necessary for implementation	Leadership and staff teams
	Meet with decision-makers/department heads/elected officials to make the case for needed changes	Leadership and staff teams
✓	**Coordinate Regionally**	
	Read the Recommendations for Interjurisdictional Coordination document	Staff involved in DPW/DOT climate-related efforts
	Identify the most relevant actions for implementation	Staff involved in DPW/DOT climate-related efforts
	Participate in regional coordination discussions	Point person(s) for DPW/DOT staff involved in climate-related efforts
	Maintain regular communication with other jurisdictions to share information and lessons learned, and build regional resilience	Point person(s) for DPW/DOT staff involved in climate-related efforts
	Work with others to create regional dashboard and achievable, meaningful performance measures to track progress on climate initiatives	Point person(s) for DPW/DOT staff involved in climate-related efforts

Next Steps

- **Should the region develop a proposal to the PROTECT Program for a Regional Resilience Improvement Plan?**
  - Submitted August 17, 2023: Baltimore Regional Roadmap to Resilience
- **How can the region coordinate with/support state resilience efforts, such as A-StoRM?**
- **In evaluating existing committees, where should this discussion continue?**
  - Is a new group needed?
  - How should regional coordination be integrated with state coordination (currently MDEM, DNR, MDOT, MDP, and MDE are discussing collaboration)?

BMC

For More Information

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BRTB
Baltimore Regional Transportation Board

PROTECT Program Application: Baltimore Regional Roadmap to Resilience

Presentation to Carroll County Water Resource Coordination Council
August 23, 2023

Agenda

- Overview of PROTECT Program
- Overview of Baltimore Regional Roadmap to Resilience Application

BMC

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program

"The vision of the PROTECT Discretionary Grant Program is to fund projects that address the climate crisis by improving the resilience of the surface transportation system, including highways, public transportation, ports, and intercity passenger rail."

PROTECT Program highlights need to focus on disadvantaged/overlooked communities

Category	Approximate Funding Available this Round (Discretionary Funds)
Planning Grants	Up to $ 45 million
Resilience Improvements	Up to $ 638 million
Community Resilience and Evacuation Route Grants	Up to $ 45 million
At-Risk Coastal Infrastructure Grants	Up to $ 120 million

BMC

Identified Interest and Need in the Region

- **Builds on local, state and regional work, including the regional documents:**
  - Climate Change Resource Guide
  - Climate Resilience Guidance for Local Jurisdictions
  - Recommendations for Interjurisdictional Coordination on Climate Resilience
- **Interjurisdictional coordination recommendations included:**
  - Develop a resilience strategy to be implemented collaboratively.
  - Consider opportunities to build on ongoing efforts of interjurisdictional collaboration.
  - Identify opportunities for sharing state/Federal grants and funding.

BMC

Overview: Baltimore Regional Roadmap to Resilience (R3)

- Includes entire Baltimore region
- Application submitted by the Resilience Authority of Annapolis and Anne Arundel County
- Application development support from all jurisdictions, Resilience Authority, MDOT, MDE, MDEM, and South Baltimore Gateway Partnership
- Letters of support: BMC, BRTB, MDEM, South Baltimore Gateway Partnership
- Request: $1,302,650

Baltimore R3 Proposed Scope of Work

- **Preliminary Task: Develop and Implement a Stakeholder Engagement Plan**
  - Develop and implement a deep and meaningful stakeholder engagement effort that identifies the full breadth of program stakeholders, generates program awareness, fosters collaboration, builds trust, identifies opportunities, and creates equitable and mutually beneficial outcomes.
- **Phase 1: Develop the Baltimore Region Transportation Resilience Improvement Plan (TRIP)**
  - The Baltimore Region Transportation Resilience Improvement Plan (TRIP) will be developed using a systemic and collaborative approach to planning for system resilience and will include three parts:
    - Regional Infrastructure Vulnerability Assessment: to provide a regional understanding of transportation system vulnerability to natural disasters;
    - Regional Infrastructure User Vulnerability Assessment: to provide a regional understanding of transportation system user vulnerability to natural disasters; and
    - Regional Transportation Resilience Action Plan: to prioritize strategies to build system resilience and enhance safety for all system users.
- **Phase 2: Revenue Mapping**
  - Develop a portfolio based on the anticipated timing of impacts and the corresponding need for investment. The resulting sustainable revenue plan will address short-, mid- and long-term implementation needs and time horizons to ensure regional transportation resilience for infrastructure and all users in the long-term.

BMC

Requirements for a Resilience Improvement Plan

Resilience Improvement Plan: The application provides detailed information about how the planning project will:

- Identify short- and long-range planning activities and investments with respect to the multimodal resilience of surface transportation;
- Include input from Tribes or Federal Land managers as well as local governments; and
- Include a systemic approach to transportation system resilience and critical needs including a risk-based assessment of vulnerabilities of transportation assets and systems to current and future weather events and natural disasters.

Source: PROTECT Program Notice of Funding Opportunity

BMC

Benefits of a Resilience Improvement Plan

- **Match requirement can be reduced for other resilience projects**
  - by 7% if a Resilience Improvement Plan is in place and the proposed project is prioritized in the RIP.
  - by 3% if the Resilience Improvement Plan has been incorporated into the metropolitan transportation plan or long-range statewide transportation plan.

Reduction of Non-Federal Share for Resilience Grants			
Project is Prioritized in a Resilience Improvement Plan (23 U.S.C. § 176(e)(1)(B)(i))		**Resilience Improvement Plan is Incorporated in Other Planning** (23 U.S.C. § 176(e)(1)(B)(ii))	
7% Reduction		**3% Reduction**	
Eligible Entity (Applicant)	**Requirements**	**Eligible Entity (Applicant)**	**Requirements**
State or MPO	1. Developed a Resilience Improvement Plan in accordance with 23 U.S.C. § 176(e)(2); and	**State or MPO**	The Resilience Improvement Plan developed in accordance with 23 U.S.C. § 176(e)(2) has been incorporated into the

Source: PROTECT Program Notice of Funding Opportunity

BMC

Proposed Baltimore R3 Partners

- **Local jurisdictions**
  - Transportation, Public Works, Planning, Emergency Management, Sustainability, and Equity
- **State agencies**
  - Transportation, the Environment, and Emergency Management. Other state agencies that will be invited to participate in the project include but not limited to: Departments of Planning and Disabilities.
- **Other community organizations**
  - South Baltimore Gateway Partnership Sustainable Transportation Work Group of the Baltimore City Sustainability Subcabinet, Central Maryland Transportation Alliance, Chesapeake Bay Foundation, Interfaith Partners for the Chesapeake, Maryland Silver Jackets Team, and Baltimore Urban Waters Partnership

Proposed Schedule

SCHEDULE	Year 1				Year 2		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
ADMINISTRATION AND CONTRACT MANAGEMENT							
Resilience Authority of Annapolis and Anne Arundel County/Contract Management							
Baltimore Metropolitan Council							
STAKEHOLDER ENGAGEMENT PLANNING AND OUTREACH							
Develop Stakeholder Engagement Plan							
Implement Stakeholder Engagement Plan							
PHASE 1 DEVELOP THE BALTIMORE REGION TRIP							
Conduct Regional Infrastructure Vulnerability Assessment							
Conduct Regional Infrastructure User Vulnerability Assessment							
Prepare Regional Transportation Resilience Action Plan							
Compile Regional Transportation Resilience Improvement Plan							
PHASE 2 REVENUE MAPPING							
Perform Revenue Mapping							

BMC

For More Information

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MUNICIPAL STORMWATER PROJECT STATUS

August 23, 2023

FUTURE PROJECTS:

Michael's Property (Hampstead) – Project is on hold until Town has obtained approval from property owners to move forward.

Meadow Ridge Basin 2 (Westminster) – Retrofit of existing facility to provide water quality through a surface sand filter. This site is adjacent to the pump station at the edge of the City limits.

Hampstead Valley 2/3 (Hampstead) – Hampstead Valley facilities 2 and 3 will be retrofit as a stream restoration project to decommission Sycamore Drive as a roadway embankment. The design will include a stream restoration beginning immediately downstream of the proposed Hampstead Valley 1 facility and continue to Sycamore Drive.

CONCEPT DESIGN:

Hampstead Valley 1 (Hampstead) – Retrofit of existing detention basin to a surface sand filter. Site is located just south of Lower Beckleysville Road near a production well. CLSI recently completed the ultimate condition modeling. We anticipate refining the design and a resubmittal in early September.

Manchester East (Manchester) – We are looking into opportunities for a new stormwater facility north of Manchester Valley High School, adjacent to the pump station. Engineering was awarded to CLSI. Several sketches were submitted for review but unfortunately none met the required dewatering time given the Use class III stream. We anticipate a concept submittal in September.

New Windsor Wetland (New Windsor)- A new wetland facility is proposed adjacent to the Maryland Midland Railroad tracks and Dickenson Run. The proposed improvements include removing the existing inlet adjacent to the intersection of Water St and Church St, replacing it with a diversion structure that will route the 1-year storm discharges to the proposed wetland

facility. We are working through the design with the engineer for a structure to balance the facility on both sides of the sewer main. A concept plan was submitted July 12th for review.

Public Safety Training Center (Westminster Well)- A retrofit for the Public Safety Training Center pond is in progress for the facility design and PFAS remediation. WRA is finalizing the concept plan for the surface sand filter this week. Tetra Tech will provide guidance for the PFAS remediation. The concept plan submitted July 13th was reviewed, and comments have been returned to the engineer. An RFP for soil borings was sent out and proposals were received on August 11th. They are currently being reviewed.

PRELIMINARY DESIGN:

Hampstead Valley 4 (Hampstead) – A new surface sand filter and stream restoration project is proposed between Century Street and Downhill Trail. Culverts at Downhill Trail require realignment into the HOA parcel for dam breach approval. A preliminary submittal was reviewed by stormwater and sent back with comment. We anticipate a resubmittal in September.

Roberts Field Wet Facility (Hampstead) – Retrofit of wet pond to new hybrid wet pond/submerged gravel wetland. The recent concept submittal was approved with comments from the Town and Stormwater Management. Wallace Montgomery & Associates (WMA) is beginning the preliminary phase of design this will include removal of the retaining wall and grading of an area that could be utilized as a pocket park.

FINAL DESIGN:

CONSTRUCTION:

PLANNING PROJECTS:

Little Pipe Creek Restoration Opportunities – The County has executed the grant agreement with the National Fish and Wildlife Foundation (NFWF). CWP has developed an outline for identifying priority restoration areas, this is currently being reviewed internally. CWP and County staff went out together for an assessment of Little Pipe watershed in late June.

TREE PLANTING PROJECTS:

All the municipal plantings have completed their maintenance period and are now the responsibility of the municipalities. Please make sure that these areas are being mowed at least three (3) times per season.