

Local Government Forum Report:

Integrating Resilience into Local Planning

Appendices



Appendix A

List of Local Government Forum Participants

2022 Local Government Forum Participants	
Richard Baugh, LGAC, VA Delegation	Ed Martin, WV Resiliency Office*
Peter Boger, Penn State Sustainability Institute	Robert Martin, WV Resiliency Office*
Phil Briddell, LGAC, PA Delegation	Andria McClellan, LGAC, VA Delegation
Peter Buck, Penn State Sustainability Institute	Ben McFarlane, Hampton Roads Planning District Commission*
Phillip Cane, DE Emergency Management Agency	Debbie Messmer, Virginia Department of Emergency Management
Laura Cattell Noll, Alliance for the Chesapeake Bay	Brianne Nadeau, LGAC, DC Delegation
Shirley Clark, Penn State University	Chris Nafe, PA Department of Environmental Protection*
Jen Cotting, University of MD Environmental Finance Center	James Pappas, DE Department of Transportation
Ola-Imani Davis, Alliance for the Chesapeake Bay	Don Phillips Jr., LGAC, DE Delegation
Richard Deal, PA Emergency Management Agency	Megan Porta, PA Department of Environmental Protection*
Mark Dobbins, LGAC, MD Delegation	Kelly Porter, LGAC, MD Delegation
Brandy Espinola, University of MD Environmental Finance Center*	Holly Quentrill, WV State Resiliency Office
Lara Fowler, Penn State Law*	Brandi Robinson, Penn State University
Kate Fritz, Alliance for the Chesapeake Bay	Kristen Saunders, University of MD Center for Environmental Science
Jim George, MD Department of the Environment*	Christopher Scott, Penn State University
Jasmine Gore, LGAC, VA Delegation	Lisa Shaefer, LGAC, PA Delegation
Elizabeth Grant, Cumberland County	Virginia Silvis, Penn State University
Penny Gross, LGAC, VA Delegation	Jake Solyst, Alliance for the Chesapeake Bay
Amy Handen, EPA, Chesapeake Bay Program Office	Phil Stafford, MD Department of Natural Resources
Josh Hastings, LGAC, MD Delegation	Jennifer Starr, Alliance for the Chesapeake Bay
Michael Helfrich, LGAC, PA Delegation	Kathy Stecker, MD Department of the Environment
Debbie Herr Cornwell, MD Department of Planning*	Skip Stiles, Wetlands Watch*
Allison Homer, Fairfax County, VA*	James Sullivan, DE Department of Natural Resources and Environmental Control
Nora Jackson, Northern Virginia Regional Commission*	Ernest Szabo, PA Emergency Management Agency
Jessica Lassetter, City of Alexandria, VA*	JaLeesa Tate, Tetra Tech*
Neely Law, Fairfax County, VA*	John Thomas, LGAC, PA Delegation
David Maginnes, Maginnes Productions	Erin Trouba, Penn State University
Alexa Maione, Alliance for the Chesapeake Bay	Julia Wakeling, DC Department of Energy and the Environment

Bruce Williams, LGAC, MD Delegation	Tree Zuzzio, PA Department of Community and Economic Development
Sacoby Wilson, University of MD Environmental Finance Center	

Additional Planning Team Representatives <i>(who were unable to attend the Forum)</i>	
Lindsay Byron, PA Department of Environmental Protection	Tom Hughes, PA Emergency Management Agency
Chris Carrick, Central NY Regional Planning and Development Board	Sasha Land, MD Department of Natural Resources
Christine Conn, MD Department of Natural Resources	Matt Meyers, Fairfax County, VA
Caroline Cunningham, Stantec Inc	Annie Vest, Freese and Nichols Engineering
Jason Dubow, MD Department of Planning	

**served on the Forum Planning Team*

Appendix B

BACKGROUND NFWF/LGAC Local Government Forum Integrating Resilience into Local Planning September 29, 2022

This document is intended to provide participants in the Local Government Forum with foundational information and an understanding of the preliminary recommendations for addressing the problem identified below. We ask that all participants review this information in advance and that you come to the meeting prepared to contribute to the development of specific actionable recommendations.

Meeting Goal

By the end of the day, we expect to develop specific recommendations to provide to the Chesapeake Bay Program leadership (Chesapeake Executive Council, Principals' Staff Committee, and Management Board) for their consideration and action. These recommendations will identify and address the highest priority local government needs for facilitating and accelerating the development and implementation of local climate resilience plans. This will include providing examples and best practices to address barriers local governments face when identifying opportunities to build resilience. These plans are needed to support community resilience as well as to ensure continued protection and restoration of the Chesapeake Bay, its tributaries, and its watershed in the face of worsening impacts from climate change.

Introduction and Problem Statement

Local elected officials and leaders serve the public good and represent the interests of all citizens in their community. They are tasked with identifying community needs and determining priorities. As climate change-related extreme weather and natural disasters become more challenging and complex, action at the local level is vital to ensure community preparedness and resilience.

Communities undertake several planning efforts which provide opportunities to integrate resilience principles into existing community initiatives. Planning efforts such as hazard mitigation plans, stormwater management plans, parks and recreation plans, and many more are carried out periodically in communities. Some of these planning processes are mandated to meet laws and regulations. Identifying opportunities to integrate planning processes provides many benefits to a community such as cost savings, economies of scale, partnership building, and development of mutually-beneficial outcomes.

The Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) projects an increase in rainfall intensity and sea level rise on the east coast. The increasing changes in climate in the region necessitate swift action to address the increasing vulnerabilities and risks communities are facing.

Equipping local elected officials and leaders with the resources to make risk-informed decisions is imperative to ensure a comprehensive approach to building resilience. Risk data may be obtained through a variety of resources such as reports, analyses, and interactions with subject matter experts, citizens, and more. Building resilience is not only achieved through obtaining knowledge and identifying the risk but also through identifying methods to successfully implement projects and build partnerships for long-term risk reduction.

Problem Statement:

Local governments face increasing pressure to ensure the safety and health of residents, businesses, infrastructure, and the natural environment in the midst of a changing climate. The development, integration into existing plans, funding, and implementation of actionable resilience plans are key to the success of building this local resilience. However, there are persistent barriers to achieving this success, including staff capacity limitations, lack of funding clarity, and unclear paths to resilience plan implementation. Addressing these targeted, persistent barriers can catalyze the success of these local resilience efforts.

BACKGROUNDER

Background

Resilience can be defined as the ability of communities to rebound, positively adapt to, and thrive amidst changing climate and natural hazard conditions or challenges and to maintain quality of life, healthy growth, durable systems, economic vitality, and conservation of resources for present and future generations.

The need for planning to build community resilience has grown more acute as scientific studies detail with greater specificity how extreme weather events will grow in severity and frequency in coming decades with climate change. In addition, time and money will be wasted if planning is based upon current conditions rather than projected future conditions. Resilience planning is a process that communities can undertake to identify potential hazards and threats and then establish adaptation, hazard mitigation, and recovery plans. Hazard Mitigation Planning can be confused with Resilience Planning, but there are key differences and opportunities for plan integration.

Hazard mitigation planning primarily prioritizes addressing risk from natural disasters and oftentimes does not include considerations for non-climate stressors, which can exacerbate vulnerabilities within a community. Generally, these plans do not include actions or considerations for adaptation, but more often solely focus on how to reduce or eliminate risk. These plans have traditionally focused on historical and past occurrence data of natural disasters and events to analyze hazard risk. Although this approach is currently shifting it remains a limitation of utilizing hazard mitigation plans as a sole source for building community resilience. Hazard mitigation plans are designed to identify short-term actions that can be achieved within 5 years, but that have long-term benefits.

Resilience planning addresses climate change and often includes analyses of the natural and man-made drivers of climate change. These plans prioritize utilizing future projections and data to inform how risk is analyzed. Incorporating resiliency planning into the normal operational plans that already exist for things like stormwater and land use planning is vital for success. The focus is to reduce likely impacts and ensure key infrastructure systems, natural resources, public services, and populations are resilient, meaning able to adapt, respond, and recover from hazard impacts. Resilience planning identifies a suite of actions that may be achieved in short-, medium-, or long-term.

A resilient community (including natural and build systems, public services, and population) can result in:

- Less physical, economic, environmental, and social damage and impact;
- Support of a fuller, more robust, and speedier recovery;
- Preservation and enhancement of community functions, such as health and education;
- Less time and money spent on relief efforts and repairs post-disaster; and
- “Co-benefits,” such as a livable, walkable communities connected to the natural environment.

Assumptions

The Forum Planning Team helped LGAC identify the key barriers to developing local resilience plans. The Team developed a set of assumptions to guide and focus the day, since this is a broad topic that involves many partners and varying local demand and supply.

The following are the guiding set of assumptions:

- Budget constraints challenge local governments to implement resilience-based actions given competing needs now and in the foreseeable future.
- There are challenges with local capacity and adequate resources to address problems related to resilience.
- State policies, funding, and technical assistance and expertise vary across the watershed. When these resources are available they may be unknown or complex, creating additional barriers for local governments to access the resources.
- Collaborative local government planning will result in a more effective, actionable, robust, and comprehensive effort.

BACKGROUNDER

- Promoting effective communication, collaboration, and cooperation for resilience planning and financing across the watershed will aid in these efforts.
- Successful local resilience plans consider local conditions, needs, and capacity. However, they share some attributes that are scalable from small, rural communities to larger, metropolitan ones.
- Successful resilience plans include an implementation component that incorporates both short-, medium-, and long-term actions and investments.
- Federal infrastructure funding offers a unique opportunity to invest in resilience, especially if future conditions are included in the design of projects.
- Currently required plans including floodplain management plans, regional transportation long-range plans, and community economic development strategies, need to be integrated into resilience and hazard mitigation planning efforts to ensure a comprehensive approach to community development and resilience.

The barriers identified by the Forum Planning Team include the challenges below. These barriers present obstacles for local governments to overcome. Developing recommendations to surmount these barriers are expected to result in support for local resilience planning.

- Building buy-in and momentum to embark on the planning process
 - Lack of political and community interest and support
 - Limited staff capacity to oversee and develop plan
 - Lack of funding and staff capacity to seek and obtain funding
- Carrying out the Planning Process
 - Limited staff capacity to oversee and develop plan
 - Limited subject matter expertise and technical assistance
 - Break down silos and build partnerships
 - Empower the community in the planning and decision making process. Address inequities
- Implementing the Plan
 - Large-scale, high cost solutions are more likely to have more beneficial results
 - Limited funding and inability to access funding resources
 - Lack of subject matter expertise to design projects

Appendix C

Agenda



Forum Agenda: Integrating Resilience into Local Planning Thursday, September 29th, 2022 | 10:00 am - 4:00 pm

Location: National Conservation Training Center (NCTC), 698 Conservation Way, Shepherdstown, WV 25443

Email Ola-Imani Davis at odavis@allianceforthebay.org for Zoom access information

Meeting materials and handouts can be found on the meeting page below

https://www.chesapeakebay.net/what/event/hold_local_government_advisory_committee_september_2022

This meeting will be recorded for accuracy of meeting notes.

Meeting Goal: By the end of the day, we will have specific recommendations to provide to the Chesapeake Bay Program leadership for their consideration and action for thoughtfully identifying and addressing the highest priority local government needs for integrating and accelerating the development and implementation of local resilience plans.

10:00 am	Welcome/Introductions	Jasmine Gore, Chair Local Government Advisory Committee
10:15 am	Workshop Overview/Purpose	Jennifer Starr Alliance for the Chesapeake Bay
10:20 am	Problem Statement Discussion	JaLeesa Tate Tetra Tech

DRAFT Problem Statement:

Local governments face increasing pressure to ensure the safety and health of residents, businesses, infrastructure, and the natural environment in the midst of a changing climate. The development, funding, and implementation of actionable resilience plans are key to the success of building this local resilience. However, there are persistent barriers to achieving this success, including staff capacity limitations, lack of funding clarity, and unclear paths to resilience plan implementation. Addressing these targeted, persistent barriers can catalyze the success of these local resilience efforts.

10:35 am	Assumptions Review	JaLeesa Tate Tetra Tech
----------	--------------------	----------------------------

- Budget constraints challenge local governments to implement resilience-based actions given competing needs now and in the foreseeable future.
- There are challenges with local capacity and adequate resources to address problems related to resilience.
- State policies, funding, and technical assistance and expertise vary across the watershed. When these resources are available they may be unknown or complex, creating additional barriers for local governments to access the resources.
- Collaborative local government planning will result in a more effective, actionable, robust, and comprehensive effort.

Appendix D

Case Study Slides

[Cumberland County, PA Climate Action Plan](#)

Elizabeth Grant, AICP, Planning Specialist, Cumberland County

[Local and Regional Planning for a Resilient Hampton Roads, VA](#)

Ben McFarlane, AICP, CFM, Senior Regional Planner, Hampton Roads Planning District Commission

[City of Baltimore, MD Disaster Preparedness and Planning Project \(DP3\)](#)

JaLeesa Tate, TetraTech, on behalf of Baltimore City Office of Sustainability

Ava Richardson, Sustainability Director

Aubrey Germ, Climate and Resilience Planner

Appendix E

Breakout Session Notes: *Barriers and Recommendations to Resilience Planning* *Breakout Discussion Highlights*

Group #1 - Virtual participants

Virtual participants met via zoom and used the google slides to capture discussions and provide feedback on the barriers to achieving the below goals 1, 2 and 3. [Detailed feedback can be found here.](#)

Group #2 - In-person participants

Goal #1: Building buy-in and momentum for integrating resilience into the local planning process

- *Barrier:* Lack of political and community interest and support
- *Barrier:* Limited staff capacity to oversee and develop plan
- *Barrier:* Lack of funding and staff capacity to seek and obtain funding

Prompts to consider

1. What other issues in communities take precedent over prioritizing resilience?
2. What push back do community members have against resilience efforts?
3. How can we stack different kinds of opportunities/benefits?
4. Are there opportunities to address these issues through resilience efforts?
5. How should resilience plans vary across geographies: from rural, suburban to urban or between inland and coastal communities?
6. Who are partners, community lifelines (continuous operation of critical business and government functions & essential to human health and safety or economic security) and collaborators?
7. Does rural, suburban, urban make a difference as it relates to funding and financing. Can we close the gap between the haves and have nots?

Highlights:

- Separate adaptation (these are the impacts, how are we going to adjust) and mitigation (how do we reduce our carbon footprint)
- Focus on flooding, not climate change
- The words that we use are important, know your audience
- Local government needs rapid guidance, when it rains X amount, we have to close Y road, protect the health and safety of residents
- Reducing bureaucracy, building buy-in from big storms, they see the impact, how do you protect your personal property
- Use an example of an implemented practice that has been impactful
- Impact fee for stormwater, really needed funding because of aging infrastructure, need to be persistent

- Need a local champion, sometimes an elected official, sometimes a resident and sometimes an emergency manager, used language that local residents want to use (sometimes you don't say climate change), focus on what folks know (i.e. agriculture and changes in precipitation) or even multiple champions, you have to put your team together
- These barriers are absolutely correct, for the first one focus on the items that the community was interested in, our local creek, flooding (not the bay and not global warming), localize the issue, had an authority based stormwater fee, so important to have community engagement (and the business community, separately!), tell them what you are doing and why, second barrier - the lack of funding, the fee was set-up to raise the amount of money that we needed, third barrier - fee allowed us to hire the staff that we needed, through this program we have planted hundreds of trees
- Not just localizing, but making it so individuals can make a difference, knowing your audience, going where they are, getting a team of champions
- Many states have grant funding for new projects, but a lack of funding for maintenance (that's where fees can be useful)

Goal #2: Carrying out the Planning Process

- *Barrier:* Limited staff capacity to oversee and develop plan
- *Barrier:* Limited subject matter expertise and technical assistance
- *Barrier:* Break down silos and build partnerships
- *Barrier:* Empower the community in the planning and decision making processes including addressing inequities.

Prompts to consider

1. Who in a community is likely to be tasked with resilience planning?
2. What types of training and support may be required to build local capabilities?
3. How is the community typically involved in the planning process?
4. How could this be improved to encourage participation in resilience focused planning efforts?
5. How might resilience planning duties be shared by local agencies in order to reduce the workload and successfully carry out the planning process?

Highlights:

- The resiliency committee is staff of each local government in the region to collaborate and share best practices, it takes time, we've been having these discussions for a decade now, we need to make a meeting that is worth attending, fortunate to have that system
- Identifying a regional entity that can act as a convener for sharing best practices
- Expand limited staff capacity, it's a specific skillset - facilitation, dialogue, subject matter expertise speaking at a common denominator level, community engagement

- The circuit rider addresses all of these problems that we talked about, the important thing is that they have a relationship, they are a trusted source, my second thing is matching grants, if a town is small, they don't have the funding
- Ensure match can be done through in-kind, more creative ways of fulfilling match
- How do you breakdown the silos in your community/government?
- Don't create a resilience plan, make your plans resilient
- How is the community typically involved in the planning process?
- In a small community, you go to the folks having the impacts, if people are at a community meeting, it's because they are mad about something, break down those perceptions
- We rely on volunteer boards and getting folks to volunteer is difficult, pressure on people's time - what impact do they see from their volunteer system, much is going to be taking on by volunteers
- Guided options during public engagement, not just open discussion
- In Takoma Park, they now pay people to join committees
- What types of training and support are needed to build those local communities? Penn State has opened student resources up to municipal and county planners
- Pop-up surveys, someone who just goes out into the community to ask folks to complete the survey, share a draft with some structure, but we've gotten great input with that technic, because it's not just the same activists or businesses, collected demographics on survey respondents and they were wealthier/more highly educated
- Go to where communities are already meeting (not a resilience meeting)
- Door to door surveys is the only way to get equitable survey completion
- Another way to include groups that haven't been as vocal is working through trusted sources, like churches
- Cautionary tale: if you have to cut costs, don't cut community engagement!

Goal #3: Implementing the Plan

- *Barrier:* Large-scale, high cost solutions are more likely to have more beneficial results
- *Barrier:* Limited funding and inability to access funding resources
- *Barrier:* Lack of subject matter expertise to design projects

Prompts to consider

1. How can we stack different kinds of opportunities/benefits (and therefore different funding sources)? example: certain types of "green infrastructure" can help reduce flooding, promote biodiversity, build a sense of place, etc.
2. How are partners engaged during the planning process to ensure they are set up for success and supported during the implementation phase?
3. What are some of the reasons local governments aren't prioritizing funding and financing towards local resilience planning on a regional/local scale?
4. Who are your partners, community lifelines and collaborators for planning, zoning and permitting leverage?

5. Are there less well known grant programs that may be better options for resilience focused projects?

Highlights:

- Master Watershed Education program - create a network of people that can help with implementation
- If we all think that funding is the biggest barrier, who makes the decision on funding? Educating those folks. An example is the peer to peer tours, educate the decision makers, building social capital, celebrating your wins and foster peer pressure for other local governments to follow suite
- Make resilience sexy, it's marketing, did you all see 'Don't Look Up'? It's a parody of climate deniers, I think it should be called 'Don't Look Down', where it is ACTIVELY FLOODING, this is a now issue
- It needs to be framed/it exists as an immediate concern, it's not just the marketing, it's a real thing, takes it to a 'this is a problem in my community, in my backyard'
- "Stop with the tragedy and lead with the opportunity", it's an economic driver, how do we make money off of these solutions?
- Tension between water quality and water quantity issues sometimes
- What about when we are using old data for future projections? A solution could be the need to update projections based on the changing environment
- Capital is easy to fund and maintenance is not
- Can we simulate events as a way to build buy-in?
- Lab X is tool that does this, simulating human decisions in the face of a disaster, the point is to foster collaboration
- We have a billion worth of stormwater, but we don't have a rubric of how to choose which ones, Solution: rubric to help with prioritization
- Celebrating our wins and our champions
- Federal and state leadership controls most of the incoming federal funding
- Dual benefits or multi-benefits should always be highlighted, nature based solutions that bring those benefits
- Celebrate the process, can be challenges with siphoning funds away because the process (the coastal master plan) keeps the focus sharp
- Ensure transparency for the decision making process
- Persistence pays off, what can we advocate for at the federal level → NOAA data collection, big gap between data and information and between information and actionable information