# Building Local Community Resilience Against Climate- Related Flooding

**September 24, 2020**

## Local Government Forum Report

**Sponsored By:**

**Chesapeake Bay Program**
**Climate Resiliency Work Group**

**Chesapeake Bay Program**
**Local Government Advisory Committee**

**Funding By:**

**National Fish & Wildlife Foundation**

**Prepared By:**

**Alliance for the Chesapeake Bay**
**Local Government Initiative Team**

**Chesapeake Bay Program**
**Climate Resiliency Work Group**

**FORUM OVERVIEW AND OBJECTIVES**

***Background***

In 2019, the Local Government Advisory Committee to the Chesapeake Executive Council (LGAC) raised the issue of significant climate changes and increased local flooding with the Chesapeake Executive Council (EC). At the September 5, 2019 meeting of the Chesapeake Executive Council, LGAC called for the EC to hold a watershed wide summit to consider the dual benefits of flood mitigation coupled with watershed restoration when engaging on local flooding concerns. In response, the Chesapeake Executive Council expressed a willingness to hold a Summit. Meanwhile, LGAC and the Chesapeake Bay Program Climate Resiliency Workgroup (CRWG) agreed to host a Local Government Forum in order to provide the Chesapeake Bay Program leadership with more specific recommendations for addressing climate impacts on local governments.

***What is Climate Resilience?***

In the context of this Forum, climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate. Improving climate resilience involves assessing how climate change will create new, or alter current, climate-related risks, and taking steps to better cope with these risks.

One of the CRWG core values is to increase the resilience of the Chesapeake Bay Watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environmental and climate conditions. Within the CRWG 2018-2020 Workplan is action items 3.4, 3.5, and 3.6, "Target engagement with educators, business leaders, state, municipalities, and local managers to enable incorporation of climate information/impacts into their decision-making."

Local elected officials are tasked with protecting the lives, businesses and property of their constituents. For them, the impacts of climate are visible and frequent. Taking action to make communities more resilient is a powerful and pressing need. Due to climate change, devastating storms and sea level rise will increasingly threaten vibrant communities, critical infrastructure, and vital natural systems. Cities, regions, and states are facing natural disasters that can have devastating effects on life, property, the economy, and ecosystems. Climate change is already having observable effects on public health, the environment, and past conditions are no longer a reliable indication of the type or extent of disasters communities will face in the future.

***Forum and Flooding***

This year's forum focused on the threat of flooding, including nuisance flooding from high tides and increases in water quantity from more intense storms, because of the hazard's compounding risk and its specific threat to the communities in the Chesapeake Bay region. To meet the challenges of flooding, it is crucial that decision-makers act swiftly and in coordination. The LGAC *Building Local Community Resilience Against Climate-Related Flooding* Forum brought together local experts to collaboratively work towards recommended solutions for local governments to address the flooding problem. The Forum also identified barriers to building capacity and resilience and developed recommended actions

for overcoming these barriers. In short, the Forum worked towards actionable solutions to address flooding, which is an incremental threat that puts Chesapeake Bay communities at risk.

***Pre-Forum Planning***

Extensive planning went into developing materials for the Forum that helped structure the discussion and input requested from participants. LGAC staff enlisted a Forum Management Team and a Forum Planning Team[1] to develop materials that included the problem statement, a set of guiding assumptions, preliminary recommendations, program resources, and case study examples. A Backgrounder detailing this information was distributed to Forum participants that helped them to prepare and be knowledgeable of Forum expectations and scope, and promote productive discussion and feedback. In addition to the Backgrounder, a survey was developed prior to the Forum to gain better insights into prioritizing and evaluating primary issues and concerns, and gauge interest in breakout discussions.

The Forum Management Team held six, one-hour conference calls to coordinate input and develop materials. The Forum Planning Team held three one and a half hour calls where their input was taken into consideration. Communication via email was used throughout the planning process to provide extensive input on materials and recommendations on who should be invited to attend to bring a comprehensive group of experts to the discussion. LGAC staff also held many individual phone conversations with members of the planning team who have led the development and implementation of climate related flooding programs and case studies that were highlighted during the Forum.

***Understanding the Effects of Flooding and Climate Change***

While flooding is not a new challenge, it does require a new way of thinking. Communities have been dealing with the potential effects of excessive water quantity for centuries. However, the current and compounding impacts of climate change will continue to dramatically worsen the magnitude, frequency, and extent of flooding events across the globe, and even more so in geographically vulnerable regions like the Chesapeake Bay.

***Storm-related Flooding:*** Storm events across the U.S. East Coast have worsened in recent decades as changes in the water cycle (due to rising atmospheric temperatures and more evaporation of water) and rising seas have resulted in powerful storms that hit coastal and inland communities with heavy rainfall and potentially devastating storm surge. Storm surge, the additional sea water pushed on shore from a storm, is a significant issue for the Chesapeake Bay coastal communities.

***Nuisance Flooding:*** While extreme weather and storm surge present significant acute challenges for coastal and watershed communities, nuisance flooding (repeat flooding driven by tidal activity) is a much more common occurrence that presents a chronic risk to coastal communities, as well as those farther inland. Nuisance flooding is a recurring phenomenon with the potential for cumulative damage that can eclipse massive storm events.

[1] See Appendix A

### *Obstacles & Barriers*

As with any natural hazard, local governments face challenges in mitigating the threat of flooding in their communities. Potential challenges, obstacles, and barriers to municipalities and counties include the following:

- Increasing challenges (due to climate change, sea level rise)
- Property ownership (public vs. private, local vs. state/federal)
- Funding constraints/competing issues in budgeting
- High cost projects
- Personnel limits or capacity constraints
- Need for more education/outreach (regulatory/cultural, etc.)

## FORUM PROCEEDINGS[2]

### *Problem Statement*

Forum participants reviewed the draft problem statement developed by the Forum Planning Team and provided input to refine it based on the wide range of identified local needs, existing programs, and resources. The problem statement is directed towards local government. The following is the agreed-upon problem statement:

*As communities face the increasing challenge of climate-related flooding, there is a growing need for local decision makers to harness public support and resources necessary to effectively prepare for, manage, and ultimately reduce/mitigate local flooding impacts. Making the case to state and federal partners for funding actions tied to improving community resilience is paramount. Climate-related inequities need to be addressed as well as protection of social, economic, and natural infrastructure assets. Managing water quantity challenges caused by flooding must be prioritized along with meeting water quality requirements. There is a cost to no action compared to securing resources to prepare for and better respond to flooding impacts.*

### *Assumptions*

Whether by storm or by tide, flooding introduces large amounts of water affecting the safety and property of our coastal and inland communities. Rising seas and changing climate push water farther inland where it damages infrastructure and residential/commercial property. The effects of flooding are both extensive and significant, both direct and indirect. Not only does it degrade public infrastructure and overwhelms or damages utilities (water, electric), but it can cause property damage, pollution and decreased overall water quality, damage to natural systems and habitat, erosion, and significant economic losses. There are many other negative impacts caused by flooding including that it disproportionately impacts socially vulnerable populations and can be a significant public health risk.

Understanding the extent of flooding also required Forum participants to develop a set of assumptions that would help inform and guide the recommendations. The following are the guiding set of assumptions developed by Forum participants:

[2] See Appendix C for full agenda

- The amount of research and modeling related to climate impacts is significant and recognized. Extensive research shows increasing concern over more frequent, dramatic flooding, high tides and sea level rise.
- There are quite a few regional planning efforts in regards to climate change but translating that information at the local level and then collaborating regionally to implement comprehensive strategies that can more greatly benefit the overall area instead of patch-work designs is a challenge.
- Local government planning for these climate impacts will result in a more efficient, actionable, cost-effective and comprehensive strategies.
- Partnerships are critical in helping many local governments to effectively address flooding by improving funding and capacity.
- Promoting effective communication, collaboration and cooperation for climate planning and financing across the watershed will aid in this strategy.
- There is no one size fits all approach when it comes to flooding resilience as communities are all unique.
- Focusing on flood mitigation efforts including green infrastructure/nature-based implementation need time and funding.
- Local economies and budgets are being challenged now and in the foreseeable future.
- Pursuing projects to mitigate flooding yield multiple benefits including water quality and natural resource benefits which are a wise use of limited resources. Tying these multiple co-benefits together can lead to local support and broader funding opportunities.
- There is a lack of incentivizing properties that can privately benefit or benefit the greater community from flooding events.
- State policies and assistance to address flooding vary across the watershed.
- Regional partnerships and collaboration do occur and can be effective.

**INNOVATIVE CASE STUDIES**

***Discovering What Others Have Done***

Some communities have been very effective in addressing the threats of flooding around the Chesapeake Bay region. The Forum Planning Team believed it was important to feature positive examples to inspire ideas, inform the dialogue, and set up the foundation for potential recommendations. The following case studies were highlighted at the Forum to show how communities with significant vulnerabilities to flooding were innovatively approaching mitigating their current and future risk.

- ***Community Capacity Building – Hudson River, New York.*** Municipalities in the Hudson Valley region of New York are very typical of other local governments experiencing limited capacity and budget constraints making it difficult to plan and fund climate change adaptation measures. The solution in New York was to utilize the academic resources of Cornell University including the use of a tool known as Climate Adaptive Design (CAD) Studio. This effort resulted in an inclusive process that considered socio/economic impacts and opportunities to create thriving equitable communities in the future. This case study illustrated the benefits of building capacity

through collaboration and partnerships, use of innovative approaches, and a method to address climate justice concerns.

- ***Regional Collaboration – Eastern Shore, Maryland.*** There was a general lack of alignment and coordination across the Eastern Shore region when it came to addressing the impacts of climate change. The solution was to establish the Eastern Shore Climate Adaptation Partnership (ESCAP) for local government representatives who could come together and collaborate on climate initiatives, learn from experts, and apply collectively for grant funding. Gaining buy-in from elected officials and limited capacity around the region poses some local challenges. Thanks to the work of ESCAP, there is now recognition that aspects of climate change are woven throughout most local initiatives and that approaching this important issue as a regional effort will lower hurdles for the collective group and offer an opportunity for funding and other resources. This case study showed the benefits of regional collaboration, funding, capacity building, and technical assistance.

- ***Financing and Planning – Anne Arundel County, Maryland.*** This county is home to a number of local, state, and nationally critical institutions and facilities, including Maryland's state capital, the U.S. Naval Academy, Fort Meade, Baltimore-Washington International Airport, the National Security Agency, and the U.S. Cyber Command. Additionally, it has over 520 miles of shoreline along the Chesapeake Bay that includes five major rivers and access to the capital city of Annapolis. In recent years, several natural hazards, such as flooding, have become more frequent and impactful within the county that threaten these important assets. The combination of increased tidal flooding from sea level rise with more intense storm events required a comprehensive effort to plan, prioritize and finance climate resilience projects. After developing a robust draft climate action strategy to address climate impacts, the county, in collaboration with the City of Annapolis, developed the framework of a local law to allow for financing adaptation and mitigation projects. Maryland Senate Bill 457[3] authorizes local governments to create a Resilience Authority by local law. This case study showed the benefits of collaboration, financing, and the use of innovative approaches.

- ***Local Ordinances – Norfolk, Virginia.*** With the nation's largest concentration of military and federal assets, protecting the Norfolk region from flooding is extremely important. With access roads impacted by nuisance flooding and sea level rise, Norfolk responded to these challenges through the adoption of "Rise Above the Risk" approach with new freeboard requirements and also looked at local ordinances to address the problem. After a three-year process, a new zoning ordinance with resilience features was adopted in 2018. The process was not without its challenges, including pushback from the building community. The city responded by providing flexibility to developers and property owners to use resilience tactics that work best for the specific project while contributing to the city's resilience strategies. This was known as the "Resilient Quotient" that created one of the most resilience-focused zoning ordinances in America by encouraging the use of resilient technologies, stormwater management, risk mitigation, and energy resilience. This case study showed the benefits of doing a needs

[3] https://legiscan.com/MD/text/SB457/2020

assessment and developing new ordinances to help protect important assets. It also demonstrated how to gain buy-in and cooperation from key stakeholders.

- ***Comprehensive Efforts – South Wilmington, Delaware.*** As a way to mitigate and reduce local flooding, improve water quality, and restore a functioning tidal wetland, South Wilmington is using a combination of innovative gray and green infrastructure strategies. They are installing real time control to monitor water levels and maximize storage for their combined sewer overflow (CSO) system and constructing a wetland park to clean-up and replace a brownfield site. This wetland park will also serve as a passive recreation feature with a walking path for the nearby local community. The project design reduces flooding by concentrating excess water in the Wetland Park. It is projected upon completion that the project will decrease 2.1 million gallons of sewer backup and decrease over 12 acres of flooding in Southbridge. This case study showed the benefits of effective collaboration, innovative approaches, and a way to address environmental justice concerns.

**LOCAL NEEDS IDENTIFICATION**

***Information Gathering and Survey Results***

Based upon significant feedback collected from the Forum Planning Team as well as the results of an LGAC survey conducted prior to the Forum, local needs were categorized into the following six topic areas:

- Understanding the funding and financing gaps, opportunities, and resources;
- Developing stronger local and regional collaboration and cooperation;
- Conducting a needs assessment and developing ordinances;
- Building capacity and technical assistance;
- Promoting more innovative approaches; and,
- Climate and environmental justice concerns.

Using these topic areas as the core focus of the day's discussion, Forum attendees went into six virtual breakout rooms with a designated facilitator who was a subject matter expert to lead the conversation. The results of each breakout session are summarized below.

***Understanding the funding and financing gaps, opportunities, and resources.*** One of the top challenges facing local governments is insufficient funding and dedicated financing necessary to effectively manage local flooding. Grant funding is highly competitive, and often comes with tight timelines for mostly "shovel ready" projects that may not be in the areas of greatest need. With limited local capacity able to pursue, manage, and provide cost share match on grants, local government staff are often reluctant to use limited resources to apply for grants. Flood mitigation projects, either funded through grants or local financing, compete with other budget priorities, exacerbated even more so by the current pandemic. When funds are available, it is important to know exactly where to take action and invest strategically so that every dollar spent will have the greatest impact on mitigating local flooding.

Dedicated revenue streams are needed to address flooding problems, but it is often difficult to put in place in the absence of a mandate or regulatory driver. Opportunities to better engage the private sector in public/private partnerships exist but can require a great deal of upfront work with some level of risk. Federal funds focus on recovery with little effort to shift funding towards pre-disaster mitigation allowing local governments to be proactive, design a plan to prevent a disaster, and help save money in the long term. Centralized advocacy is lacking to help push for greater investment and create more of a demand from residents and businesses.

***Developing stronger local and regional collaboration and cooperation.*** There are many reasons for building stronger collaboration and partnerships, especially when local resources are limited. Smaller communities with insufficient resources struggle to get ahead on issues like flooding, but can achieve more when teaming up with other like-minded communities.

Each state in the Chesapeake Bay works differently from one another so the ways they collaborate will also be unique. The best examples of collaboration are often those with strong leaders who can be the defining factor in achieving success (see, for example, the leadership provided in the Regional Collaboration case study above). Without strong leadership and goals, formal collaboration can bog down and result in long term setbacks and potentially failure.

Informal networking, rather than formal collaboration, can also work as a way to show cooperation and limit the concern of whether it's worth the time and resources to become involved. Groups that come together organically around an issue, such as flooding, can become more organized into something that has a clear mission and process needed to succeed over time.

Incentives to collaborate must be clear for each partner involved with a level of commitment coming from the local leadership so support exists for the outcomes developed by collaborative efforts. One example of successful collaboration is LGAC itself, made up of six states focused on problem solving, able to overcome regional differences, and to share common interests with goals and a mission that binds them together on important issues. It shows how multi-jurisdictional collaboration comes in all shapes and sizes for the purpose of building consensus, gaining buy-in, and developing recommended actions.

***Conducting a needs assessment and developing ordinances.*** As local governments strive to meet regulatory requirements and invest in pollution control measures for water quality management and drinking water quality, it is difficult to shift focus towards addressing local flooding needs, especially with the uncertainty of the frequency and intensity of storms. Intensity, Duration, Frequency (IDF) curves use historical observations but accurately incorporating climate change into stormwater planning and design to address increased flooding remains very challenging at the local level. Developing a planning process with scenario analyses that incorporates adaptive management and planned steps is useful to better address extreme storm events and flooding as is better documentation of the extent of floods and flooding.

There are formidable technical challenges to accessing data, including climate modeling and projections, for predicting the frequency and magnitude of future flooding events and impacts. Local

ordinances to better manage flooding are needed to support more direct local action. Flooding education is also needed at every level, from the citizen to the elected official so all can fully understand and talk about flooding in terms of a flood plain and what it means at the local level. Education includes community awareness of what flooding means to the homeowner, the renter, and businesses.

***Building capacity and technical assistance.*** Capacity to manage flood mitigation is a significant challenge for local governments. Flooding issues are just one of many competing priorities for which small municipalities are responsible. In addition, local governments are challenged with continual learning on climate issues, access to the latest climate science and data, and decision making on appropriate actions and next steps. The knowledge and expertise for climate resilience actions are generally with technical assistance providers, academics, federal and state agencies, NGOs and consultants rather than directly within the local governments.

Municipal government staff often work in "silos" within their departments without focusing on making flooding a cross-cutting issue affecting all aspects of government. For example, public works and engineering staff may seek out gray infrastructure as the first solution without having the background and training to consider green solutions as an alternative. Local governments may struggle to prioritize long-term thinking, which can result in actions with short term benefits such as allowing real estate development in flood plains - or development in future flood plains - to augment the tax base.

Centralized groups that address flooding issues are limited. Given the unique issues and diversity in the Chesapeake Bay Watershed, it may take multiple voices to represent the broad array of issues that exists within the region.

***Promoting more innovative approaches.*** Flooding is and will continue to be a persistent threat to communities. It will take innovative approaches to address flooding issues that build in resilience and adaptation strategies for increasing precipitation, sea level rise, and extreme storm events while also considering implementation costs. Innovative approaches can take the form of inventive technological gray and green infrastructure designs, creative funding and financing strategies, out-of-the-box legislative and regulatory policies, and novel partnerships. Examples of innovative approaches related to technology include the re-design of building infrastructure and community safety procedures to endure flooding events (e.g., "living with water" concept), combining gray and green infrastructure strategies, developing green spaces that serve a multi-use function (e.g., flood protection, outdoor recreational space, habitat for fish and wildlife), time-controlled stormwater discharge and storage, and promoting technology competitions to encourage public-private partnerships. Examples of innovative approaches from a policy perspective involve forming resilience authorities through legislative action, using vulnerability assessments to formulate zoning plans, and restructuring responsibilities of local government agencies (e.g., having a water utility be in charge of urban forest management).

When it comes to promoting more innovative approaches, seeing is often believing. In the case of flooding, seeing the problems first-hand significantly improves the understanding of possible solutions and natural processes as mechanisms to better manage and control water. Encouraging more site tours and using pictures and videos whenever possible will help to better explain a concept and can

encourage new ideas and promote collaboration. Because of the constraints of the permitting process, agencies may be limited in their flexibility for considering and utilizing innovative best practices. There is no database for innovative flooding approaches currently available and adopting new approaches will require training for engineers and other staff to clearly be able to identify and consider options.

***Climate and environmental justice concerns.*** It is essential that all properties are protected and citizens are served equally with social justice concerns integrated throughout the project identification and selection process. Climate justice is both a rural and urban issue. Flood mitigation projects are often funded by prioritizing areas based on a cost-benefit analysis that rarely takes into consideration the social aspects of a community and quality of life issues. The projects that are the easiest and fastest to complete are often the ones that get funded, while underserved communities may be overlooked. Funds for flood mitigation should benefit all but tend to lean towards wealthier communities who have sufficient resources to apply for grants and provide adequate support.

Low income communities may struggle with the resources necessary to submit a competitive application for limited funding. Many grants focus on communities able to generate sufficient data to support grant applications making funding even further out of reach for those with limited resources. Although there are now an increasing number of grants being offered that focus specifically on environmental justice communities. The "red tape" and length of time involved with getting projects approved is a barrier to implementation in many low-income communities. Municipalities that have limited capacity and resources with many competing priorities won't be able to address the inequities that exist and will go to the quickest and easiest way to get projects approved.

**KEY RECOMMENDATIONS**

***LGAC recommends encouraging and incentivizing more dedicated funding, financing, and revenue streams for flooding projects.***

Support can come by way of streamlining and targeting additional funding through easily navigable "one stop shop" grant programs that include more support for enhancing technical capacity of resilience planning and financing efforts at the local level. Funding and financing should prioritize projects that promote good asset management that will help to create long term sustainability and achieve more immediate cost savings. In addition, consideration can be given to some infrastructure investments that may be more costly today but yield both immediate and long-term benefits. For example, spending more today on combined sewer systems that have enough capacity to deal with intense storm effects now and in the future will likely be more costly than those that only build enough capacity to deal with intense storms under current climate. Smart investments might still be made in the more costly systems (especially if they are investments in long-lived gray infrastructure) to ensure they are effective now and in the future. Provide support for dedicated technical liaisons who could serve as generalists to help multiple communities close identified resource gaps, and provide additional capacity to communities both in the pursuit and management of funds, and in coordinating on-the-ground projects and partners. A number of these technical liaisons can be found at universities. By creating additional funding streams for specifically addressing flooding, a much-needed pipeline can be created that helps transition local governments from mapping, assessment, design and planning,

implementation, and maintenance. Shift more funding into pre-disaster efforts that increase resilience of communities, and recognize and allow for the differences among communities so that it's not a one-size-fits-all solution. This will provide flexibility for communities to consider different types of solutions relevant to their situations and allow for much needed investments that better protect citizens and important local infrastructure.

***LGAC recommends supporting efforts that improve the incorporation of engineering, education, and documentation into local ordinances.***

Currently, there is no consensus as to what methods are preferred or considered to be best practices in different situations. There is a need for better data and modeling to inform the planning process. There is also an overall need for more engineering guidance on how to set appropriate levels of protection from changing flood risk frequency in order to guide investments in mitigation measures. Engineering needs to focus on new IDF curves, new data, new designs, and new concepts to handle excessive rain now and in the future. LGAC recommends incentivizing and encouraging municipalities to adopt climate resilient ordinances and policies that include flood resilient zoning, and encourage the use of innovative green and gray infrastructure designs to protect residential and commercial properties from flooding that could also provide a multi-use function for the community (e.g., water quality improvement, habitat creation for natural resource assets, outdoor recreational space, shading from tree canopy to reduce heat, etc.). Targeted resilience education is also recommended for local elected officials, municipal staff, land and property owners, and constituents. State and federal governments are encouraged to conduct an evaluation of their regulations to focus on water quantity, not just water quality. Better documentation is needed and, as discussed earlier, a technical liaison (circuit rider) for funding and financing would also play an essential role addressing water quantity issues at the local level. Better tools are needed to quantify the ability of stormwater management strategies like green infrastructure to help reduce flood risks since design standards are not always scaled for extreme precipitation.

***LGAC recommends promoting more innovative partnership opportunities that result in stronger collaboration and cooperation.***

There are many new potential partners interested in collaborating on flooding issues related to climate at the local level such as councils of government, national flood insurance representatives, the Department of Defense, local resilience and transportation authorities, environmental and public health agencies, the nonprofit community, and the private sector. Now, more than ever is the time to promote more local and regional collaboration, especially when it relates to grant opportunities, as funders find collaborative programs are more cost effective. There is support for the development of more flood advocacy groups who can help with education and build awareness that can enhance collaboration and cooperation, specifically among the underserved and underrepresented communities. Easy access to technical assistance is needed to build local competencies and increase the understanding and application of available research.

LGAC recommends promoting more partnerships that result in adopting more innovative approaches. These partnerships should also be with federal, state, and philanthropic partners to develop new funding formulas to support community investment strategies.

***LGAC recommends that local elected leaders make social justice a platform and that we prioritize equity on important issues like flooding.***

LGAC officials intend to lead by example on this issue by communicating the importance to other policy makers and funders the need for a paradigm shift that frames climate resilience around a better way of life for all.

LGAC recommends increasing funding, fairness, and efficiency of flood mitigation programs by expanding the cost benefit analysis to include consideration of social equity based on projected damaged and based on future conditions. Furthermore, it is necessary to increase support of organizations whose work focuses on protecting the people hardest hit by the impacts of flooding; and, advocate for flood zone disclosures to renters. Addressing flooding issues will require working closely with state and federal funders to limit the "red tape" found in the typical grant process that restricts those with limited resources from apply for funding. Social justice elements should continue to be incorporated into the grant funding evaluation process and included in all decision-making on projects and funding.

**CONCLUSION**

This Forum allowed local elected officials throughout the Chesapeake Bay region and subject matter experts to come together and highlight that we are at a critical time for local governments to consider how to act more deliberately about climate related flooding. It is a serious and ongoing threat that will only continue to worsen if not addressed. Municipal officials have a unique opportunity to champion local mitigation steps to limit the impact of flooding and fully support and influence local implementation. While there are many challenges related to flooding, local governments can take advantage of their unique community position by focusing on mitigation actions that protect physical, social, public health and environmental public assets. LGAC cannot do this without the support and engagement of important stakeholders including federal, state, academic, philanthropic, and private sector partners to make LGAC's key recommendations a reality.