Mr. Michael Boots
Acting Chair
White House Council on Environmental Quality
722 Jackson Place, N.W.
Washington, DC 20503

Dear Mr. Boots:

Last week, the Association of Metropolitan Water Agencies (AMWA) submitted recommendations to the President’s State, Local and Tribal Leaders Task Force on Climate Preparedness. A copy of the recommendations is attached. AMWA has been actively engaged in discussions about resilience on Capitol Hill and at federal agencies. Our drinking water utility members across the United States continue to act to improve their operations and infrastructure to be more resilient to climate change and extreme events.

As a member of the Value of Water Coalition, AMWA joins forces with other associations representing public water utilities, privately owned water utilities and several major water industry consulting and engineering firms in support of maintaining and improving water infrastructure. We appreciated your remarks at the Water Works reception on September 9 at the kick-off of advocacy events related to release of the Water Research Foundation/Water Environment Research Foundation report on “National Economic and Labor Impacts of the Water Utility Sector.”

AMWA would like to meet with you and your staff to discuss more broadly the work that CEQ is doing related to supporting policies to foster climate resilience for the water sector. We look forward to continuing to work with the Administration on removing barriers to resilient investment in water infrastructure and developing information and tools that can best serve the unique needs of each community. Erica Brown, AMWA’s Director of Sustainability and Climate Programs, will contact your office within the next week to make an appointment.

Sincerely,

Diane VanDe Hei
Executive Director

cc: Chitra Kumar

Enclosure
Recommendation 1: Improve collaboration among federal agencies to consider holistic, consistent cross-sector approaches to resilience in federal policy and regulation. Provide ample opportunities for public-input on cross-sector resilience initiatives.

Theme(s)
Water, transportation, energy and facilities infrastructure
Disaster recovery and resilience

Type of policy recommendation
• Removal of barriers to resilient investment

Summary of recommendation
In coordinating and modernizing the federal process related to climate preparedness and resilience, as described in E.O. 13653, Preparing the United States for the Impacts of Climate Change, the federal government should consider how to coordinate permitting processes and other policies across the federal agencies. For example, permitting agencies with jurisdiction over drinking water and wastewater utilities often do not coordinate on ways to holistically support multiple outcomes or cross-sector solutions to resilience. This can often serve to hinder resilient investment.

In addition, different federal agencies often have slightly different mandates and requirements that result in piecemeal solutions and wasted resources. The recent National Academy of Sciences report, Reducing Coastal Risks on the East and Gulf Coasts, provides examples of a similar problem in a different context. Specifically, the report notes that there is no unified vision for coastal risk reduction because responsibilities for managing these risks are borne by several agencies across all levels of government (federal, state and local). As a result, the nation’s efforts have been more reactive than proactive.

As noted in E.O. 13563, Improving Regulation and Regulatory Review, “where relevant, feasible and consistent with regulatory objectives and to the extent permitted by law, each agency shall identify and consider regulatory approaches that reduce burden and maintain flexibility…” Similarly, where multiple agencies are involved to promote resilient investment, these agencies should also work together to consider innovative ways to support resilient infrastructure in light of the policy frameworks that are in place.

In addition to federal barriers, there are other barriers to resilience, such a state regulations that may hinder resilience even though federal barriers do not exist, barriers across sectors and regional barriers. While the federal government may not be able to address these barriers that are outside of its jurisdiction, having an awareness of these barriers should serve to inform federal efforts.
Challenges the recommendation would address
This recommendation would address the piecemeal, often conflicting policies that exist between federal agencies that have slightly different mandates. This recommendation would help to foster a pathway to more innovative, cross-sector solutions for climate preparedness and resilience.

How would the recommendation address the challenge?
This recommendation would help to foster a pathway to more innovative, cross-sector solutions for climate preparedness and resilience.

Steps or authorities needed to address the recommendation?
There are already several ongoing efforts to support climate adaptation and resilience within the federal government. The government should take the steps to ensure that steps being taken in individual agencies are being shared and discussed across agencies and across sectors to ensure that cross-agency barriers are being addressed.

However, publicly available information and opportunities for stakeholder engagement are limited, making it difficult to assess progress and provide detailed feedback on these initiatives. Bolstering the stakeholder outreach process will facilitate the assessment process and lead to more meaningful feedback, resulting in more robust and effective programs and initiatives. Increased public interaction across a broad spectrum of federal, state and local stakeholders will also enhance incorporation of the types of cross-sectoral approaches that are vital for addressing resilience challenges.

Recommendation 2: Build a federal framework for funding infrastructure that incorporates resilience before it is needed rather than only providing funding for rebuilding post-disaster.

Theme: Disaster recovery and resilience

Type of policy recommendation
- Removal of barriers to resilient investment
- Modernization of grant and loan programs to better support local efforts

Summary of recommendation
A focused effort that aims to both improve access to federal loan and grant funding programs for resilience, as well as remove the barriers to make investments in resilience across sectors, will strengthen communities. This recommendation is relevant for EPA, Interior, FEMA, HUD and other organizations that provide grant funding.

The single federal government framework should support water utilities and other infrastructure owners, such as transportation and housing, to protect these infrastructures from storms, floods and sea level rise by encouraging green infrastructure development through various federal funding programs. While post-disaster funding is critically important, the government should also explore ways to leverage loan and grant funding to improve infrastructure resilience.

For the water utility sector, EPA provides loans to communities through the Drinking Water and Clean Water State Revolving Funds (SRF). In its 2013 Draft Office of Water Climate Change
Adaptation Implementation Plan, EPA identified as a priority action for the Office of Water, “Recognize and encourage climate change consideration in the management of Clean Water and Drinking Water SRF loan funds.” AMWA agrees that EPA can encourage states to fund projects that will enable water infrastructure to withstand or recover quickly from extreme events or other difficult conditions. By doing so, water utilities will lower their risks for adverse public health and water quality impacts.

Similarly, in the future EPA will offer additional loans through the new Water Infrastructure Finance and Innovation Act (WIFIA). As approved by Congress, WIFIA explicitly allows loan funding to be used on several classes of water projects that communities can undertake to help build their resilience (such as desalination, aquifer recharge, and water recycling projects, and projects to repair, rehabilitate, or replace aging water infrastructure). Additionally, as EPA considers WIFIA applications, the law directs the agency to consider the extent to which a project would protect against extreme weather events and help address significant regional water resource challenges. AMWA encourages EPA to take full advantage of the new opportunity provided by WIFIA to direct much-needed loan assistance to projects that will help water utilities become more resilient.

Challenges the recommendation would address
This recommendation would help to provide funding to close the infrastructure gap by allowing for the construction of resilient infrastructure. A single federal framework for water utilities and others to follow to obtain resilience funding would also help local areas and municipalities leverage funding across programs and consider how to build resilience on a community-based, cross-sectoral level.

How would the recommendation address the challenge?
This recommendation would address the challenge by encouraging and allowing federal grants and loans to be used to reduce risks to infrastructure before an extreme event or other disaster strikes. This would save money in the long run.

Steps or authorities needed to address the recommendation?
EPA already has the authority to encourage resilience planning in the administration of the SRF loan program, and the new WIFIA program also provides EPA with additional methods to meet this objective. However, a memo or guidance that clearly identifies the public health and water quality benefits of such investments would be beneficial.

In addition, the federal government must be clear in providing guidance for what would constitute an acceptable approach for addressing resiliency in order for water utilities and others to obtain federal funding for resilience. There is already a robust body of work that exists regarding the understanding, management and decision making process that organizations should take to address climate change and extreme event risk and uncertainty. Specifically, elements of a risk management based approach to building more resilient infrastructure would include the following steps: threat assessment/hazard identification, risk assessment, risk mitigation and management approaches and strategies, implementation of risk management strategies, and an adaptive management approach that is continually assessing and adjusting these steps. The federal government should also recognize that while elements of a process for understanding and addressing risk resilience may be the same across infrastructures or regions, the management and implementation strategies will vary depending on many factors, including an entity’s specific
risks, geographic location, and costs. The government’s single framework should consider the benefit of incremental progress toward resilience, recognizing that it will take many additive steps over a long period of time for the nation to move toward resilience.

**Recommendation 3:** *More clarity and streamlining is needed in the application and administration of disaster relief funding to ensure that rebuilding is done in such a way as to reduce infrastructure risks to future extreme events and disasters.*

**Theme(s)**
- Disaster recovery and resilience
- Water, transportation, energy and facilities infrastructure

**Type of policy recommendation**
- Removal of barriers to resilient investment
- Modernization of grant/loan program
- Development of information and tools to better serve communities

**Summary of recommendation**
Federal agencies, such as FEMA, HUD and others that administer disaster relief funding, should make it clear to both the implementers of the disaster relief grant funding programs and to applicants that rebuilding efforts will be required to consider improved long-term infrastructure resilience against future disasters to be eligible for funding (although resilience justification for proposed infrastructure should not be overly burdensome). This can be achieved by policy memos, guidance, webinars or other means.

As noted in the recent report from the Georgetown Climate Center, *Preparing our Communities for Climate Impacts* (http://www.georgetownclimate.org/sites/www.georgetownclimate.org/files/GCC%20-%20Recommendations%20for%20Federal%20-%20September%202014.pdf, pages 19-20), “FEMA, HUD, and other federal agencies that administer disaster relief funding have sufficient authority to allow communities to rebuild to be more resilient to future climate impacts” and to allow innovation for resilient rebuilding. However, red tape abounds and local grantees need more guidance about the opportunities, allowances and requirements within these programs that already exist to fund long-term resilience-building projects.

The Georgetown report also states that federal agencies have sufficient authority to require that rebuilding decisions account for climate change projections. However, AMWA urges the government to recognize that because a range of climate projections exists for every region of the country, any resilience “requirement” must also consider the qualitative nature and inherent uncertainty of these projections and set clear guidance for what would constitute “sufficient” resilience. In addition, AMWA urges the government to allow flexibility in how a utility or community is considering different climate futures and not limit an assessment to the use of only one kind of climate projection or scenario (such as the use of GCMs). For example some utilities develop design storm/drought scenarios using the longest duration of drought from paleoclimate record, and apply magnitudes based on the most intense droughts from the historic record.
Many groups, such as the National Academies Disaster Resilience Roundtable, are actively discussing how to develop measures for resilience, and are recognizing that given the complexity and variety of communities around the country, developing such measures is a challenge.

There should be government-wide guidance on how a community should measure resilience, or what a resilience baseline measure should be, so that different government agencies (that may all be providing funding for one municipality’s project) are not requiring different levels of resilience for the same project.

As mentioned in our recommendation for building a federal framework for funding infrastructure that incorporates resilience before it is needed, there must be a singular approach for how the government will assess what constitutes an acceptable approach for projects that aim to help a utility or community become more resilient.

**Challenges the recommendation would address**
The National Climate Assessment and various other recent scientific studies indicate that the U.S. will see an increase in the frequency and severity of extreme weather events – i.e., the kind that will likely be classified as disasters eligible for federal disaster relief funding. This recommendation would help streamline the federal disaster funding process to enable water utilities and others in local and state government to rebuild critical infrastructure in smarter and more innovative ways that increase resilience to future disasters that will undoubtedly occur.

More can be done to administer federal disaster relief grant programs to reduce red tape, which is often a disincentive for agencies to repair damaged facilities beyond like-for-like replacement. A singular voice from the federal government via guidance on the application and administration of disaster grant funding will help to encourage and educate state and local grantees about the opportunities and requirements to use disaster relief programs to build long-term resilience.

**How would the recommendation address the challenge?**
It would reduce red tape by educating federal personnel on the kind of resilience-building that is allowed, desired and required, and encourage state and local grantees to use disaster relief programs to build long-term resilience.

**Steps or authorities needed to address the recommendation?**
The authorities already exist, however, guidance/memoranda should be issued from the proper offices to those in FEMA, HUD and other disaster relief agencies to require consideration of resiliency as part of the approval process for applications that aim to improve water utility infrastructure.

As mentioned above, this guidance should be a singular approach across the federal government for how it will assess what constitutes an acceptable approach for projects that aim to help a utility or community become more resilient.

In order to better understand how the administrative “red tape” burden may be a disincentive to utilities in building infrastructure that is more resilient, the government should consider conducting an analysis of where utilities and others have not been successful in replacing damaged facilities with more sustainable infrastructure. Such an analysis would help the government in more full understanding the barriers that currently exist.