



Water Resource Impacts of Climate Change

May 20, 2008

Dear Members of Congress:

As the Senate prepares to begin consideration of S. 2191, the “Lieberman-Warner Climate Security Act,” our organizations strongly urge you to recognize the severe impacts that global climate change will likely have on water resources in the United States. Legislation should include federal support and incentives to help drinking water providers, flood and stormwater agencies and wastewater systems confront the impacts of climate change.

There is already strong evidence that climate change is having an impact on the world’s water resources. Most experts believe drinking water providers, flood and stormwater agencies and wastewater systems will experience serious repercussions from climate change, such as reduced snow pack, increased storm frequency and drought, and rising sea levels.

Outlined in the attached statement from our eight organizations are three broad objectives that Congress should include in comprehensive climate change legislation.

Your support of our recommendations would be a significant step toward ensuring that our members can continue to provide critical water service in spite of the effects of climate change.

We look forward to working with you on this important national issue.

Thank you for your consideration.

American Water Works Association
Association of Metropolitan Water Agencies
National Association of Clean Water Agencies
National Association of Flood and Stormwater Management Agencies
National Association of Water Companies
Water Environment Federation
Western Urban Water Coalition
Water Utility Climate Alliance



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Water Sector Statement on Climate Change and Water Resources

To address the water resource challenges that climate change will bring, this coalition of major water associations calls on Congress to ensure that water resources are a central element of any federal legislation that establishes a framework for a comprehensive national response to climate change. The nation's existing drinking water, stormwater, flood management, and wastewater infrastructure is already in need of significant investments to maintain current levels of service over the coming decades, and climate change only exacerbates the need for additional resources. Federal law and policy on climate change must fully consider the effects on water supply and all elements of water management and treatment, and include provisions for increases in federal financial support and incentives to stimulate other forms of investment for responses ranging from research to mitigation and adaptation tools to infrastructure needs. These responses will be most effective when support and investments are undertaken in partnership with states, local governments, and the private sector.

Many of the most critical impacts of global climate change will manifest themselves through the hydrologic system, and there is already strong evidence that climate change is having an impact on the world's water resources. These impacts include changing precipitation patterns that may result in more severe drought or floods, changing snowpack amount and elevation, varying stream flow patterns, and rising sea levels along the coasts. Because the exact effects of climate change on water resources are uncertain and will vary by region, the drinking water, wastewater, flood management, and stormwater utilities responsible for managing water resources for local communities face daunting challenges. These utilities have relied upon historical precipitation patterns to manage source water supplies, stormwater runoff, and wastewater conveyance and treatment. Even as these patterns change, water systems must continue to provide uninterrupted, high-quality service to their present customers, and many must also accommodate rapidly growing populations.

Specifically, our coalition calls on Congress to:

1. Establish a comprehensive, coordinated and federally sponsored applied research program that addresses:
 - Predictive and decision-support tools, including necessary data resources, to help utilities plan for the future impacts of climate change. These tools and resources should include climate models that forecast precipitation changes and address other issues pertinent to water quantity and quality on a national, regional, and subregional scale; climate models

that address sea level rise and its effect on coastal water supplies; and assessments to determine – on a national, regional, and subregional scale – the vulnerability of different regions to the anticipated impacts of climate change over different timeframes.

- Mitigation and adaptation strategies focused specifically on impacts of climate change on water quality and quantity, stormwater and flood control management and wastewater treatment. Examples of areas where research is needed include methods to increase water conservation; energy efficiency management techniques that help water utilities reduce their own greenhouse gas emissions; the development of alternative water sources such as reuse, recycling, and desalination; and multiple benefit quantification analysis of such practices as urban tree cover and green roofs to both control stormwater runoff and help cities adapt to the consequences of climate change.
- Surface and ground water resource impacts of new energy technologies such as biofuel development and mitigation strategies such as carbon sequestration projects.

2. Increase federal and other financial support, including the utilization of greenhouse gas emission auction revenues, to assist drinking water, stormwater, flood management, and wastewater utilities to adapt to climate change and address environmental and public health risks that could result from changes to the hydrologic environment. For example, we anticipate that potential public health risks could result from higher water temperatures breeding higher concentrations of certain organisms, from changes in ambient water quality, or from more intense rainfall events. These factors could compromise treatment processes, restrict wastewater utilities' ability to discharge effluent and cause greater risk of sewage overflows. We also anticipate that drinking water, wastewater and stormwater infrastructure enhancements will be necessary to deal with regionalized impacts of these consequences.

3. Provide federal support and incentives to enable utilities to reduce greenhouse gas emissions when feasible. While most greenhouse gas reductions will come from other sectors, utility managers around the country are nevertheless engaged in a variety of efforts to lower the greenhouse gas emissions of their utilities. Utilities that have taken proactive steps to reduce their emissions should be given credit for these advanced efforts under any new regulatory program that is implemented, including cap and trade programs.

Drinking water, wastewater, flood management and stormwater utilities will be among the principal actors dealing with the challenges that climate change will force upon our communities. Our members already struggle daily in meeting current demands placed on our water infrastructure and climate change will only exacerbate the resources needed to provide safe and clean water to the American people. We call upon our nation's leaders to consider water resources as a key element in upcoming climate change legislation and to provide the necessary support and leadership to ensure that the nation's water utilities have the tools and resources necessary to address the climate change challenge.

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Supporting Organizations:

American Water Works Association

Association of Metropolitan Water Agencies

National Association of Clean Water Agencies

National Association of Flood and Stormwater Management Agencies

National Association of Water Companies

Water Environment Federation

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