NACWA
A Clear Commitment to America's Waters

February 21, 2013

The Honorable Henry Waxman
Co-Chair
Bicameral Task Force on Climate Change
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Sheldon Whitehouse
Co-Chair
Bicameral Task Force on Climate Change
717 Hart Senate Office Building
Washington, D.C. 20510

Dear Representative Waxman and Senator Whitehouse:

Thank you for your interest in how climate change is and will continue to impact the water sector and for the important work your Task Force is doing to shed light on this critical issue. In response to your request, I would like to bring to the Task Force's attention several actions the federal government should take to help the clean water community more effectively adapt to and prepare for climate change and its related impacts.

Climate change poses one of the most significant challenges to America's wastewater sector and, as such, is a priority concern for the nearly 300 clean water agency members the National Association of Clean Water Agencies (NACWA) represents. Not only must clean water agencies help curb greenhouse gas emissions and fossil fuel use, they must adapt to rising sea levels, increased droughts and floods, and extreme storm events, all of which threaten the vital environmental and public health services they provide on a daily basis. In order to adequately confront the water management related challenges that climate change presents, our clean water agencies must be part of any federal effort to address these challenges.

Reducing Greenhouse Gas Emissions from the Wastewater Sector
Wastewater utilities are one of the largest consumers of power. According to the Environmental Protection Agency (EPA), four percent of national electricity consumption is used in providing water and wastewater services each year. For municipalities, water and wastewater utilities are typically the largest consumers of energy, often accounting for 30 to 40 percent of total energy consumed at the

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municipal level. Making our water systems more energy efficient and less reliant on traditional fossil-based fuels is a critical step towards reducing operating costs and the annual release of millions of tons of greenhouse gas emissions.

Motivated by hefty energy costs and a desire to become more sustainable, many of NACWA's clean water agency members are beginning to generate their own renewable energy from biogas and biosolids produced during the municipal wastewater treatment process. This is indicative of a shift we are seeing among utilities as they transform from basic providers of wastewater services to full blown resource recovery agents, generating renewable energy from biosolids and liquids, capturing waste heat and energy, reclaiming and reusing water, and extracting and finding commercial uses for nutrients. (See the NACWA/WERF/WEF report *Water Resources Utility of the Future. . . Blueprint for Action* for further details.)

Despite this transition, the energy generating potential at wastewater treatment plants is still much greater than current levels of production. For instance, combined heat and power systems, which generate onsite power for utilities using biogas produced by anaerobic digestion, are underutilized. EPA reports that out of the 1,500 utilities that use anaerobic digesters around the country, only 104 are fitted with combined heat and power (CHP) systems. If the remaining 1,351 utilities were to produce onsite power using CHP systems, it would displace more than three million metric tons of CO_2 - the equivalent to taking 600,000 cars off the road.

NACWA has also consistently campaigned for a National Clean Electricity Standard (CES) and other proposals that would credit all energy derived from the wastewater sector as qualifying clean energy sources. This would bolster production at these facilities, making the U.S. more energy independent, saving ratepayers millions of dollars in energy costs, and helping to mitigate climate change. The wastewater sector should no longer be an overlooked energy option. With its consistent, predictable, and sustainable supply of biosolids and biogas, it would be an act of neglect to overlook this clean and energy-rich resource.

Extreme Weather Resilience

As we begin to experience the full impact of climate change, wastewater treatment facilities must be able to continue to provide uninterrupted, high-quality service to their customers. In many cases they will have to expand their facilities to accommodate population growth. In 2009, NACWA, along with the Association of the Metropolitan Water Agencies (AMWA), released a report detailing the impacts extreme weather events will have on wastewater and drinking water utilities. As we witnessed with Hurricanes Katrina, Irene, and Sandy, these impacts include sea level rise and extreme flooding that can inundate treatment facilities and disrupt service. To help mitigate these impacts and avoid rendering wastewater utilities inoperable, many utilities will need to undertake resiliency measures such as raising pump stations, building additional storage capacity so that sewage overflows are better controlled, and even relocating treatment facilities above floodplains. In regions where extreme drought conditions persist, wastewater reuse and recycling operations will need to be expanded and improved. These actions will be very expensive for local ratepayers and early estimates suggest costs related to improving resiliency could reach between $448 billion and $944 billion by mid-century.

It is also important to note that in addition to the costs of damage brought on by extreme weather events, clean water utilities around the country are currently facing an enormous investment need to meet regulatory standards related to combined sewer overflows and nutrient control, as well as other Clean Water

Act requirements. EPA estimates $298.1 billion in wastewater and stormwater infrastructure improvements are needed over the next 20 years. NACWA believes this figure could be even higher, especially if climate change results in precipitation events that are more intense and more frequent.

The *Water System Resiliency and Sustainability Act,* introduced by Representative Lois Capps (D-CA) and Senators Harry Reid (D-NV), Barbara Boxer (D-CA), and Ben Cardin (D-MA), recognizes the critical role our water and wastewater utilities play in helping our nation adapt to climate change by offering competitive grants to help water and wastewater utilities undertake capital projects to develop water supplies or improve water quality, water conservation and efficiency efforts, and utility-specific evaluations to estimate how climate change will impact their sustainability. NACWA has been a strong advocate for proposals like this one to help mitigate the very serious impacts that climate change will have on water resources and infrastructure, and I hope we can work with you to develop broad-based support for this legislation.

Finally, NACWA also has proposed legislation, *The Wet Weather Community Sustainability Act,* to help utilities cope with wet weather challenges in a more cost-effective manner. The proposal would provide cost effective tools to incentivize better planning for heavy precipitation events, enable alternative treatment and management techniques to be utilized that protects the environment and public health, and provide for better overall cost-effective management of wet weather flows. I look forward to sharing this proposal with you and continuing this dialogue about how we can best ensure water quality under the most severe circumstances.

Thank you for your consideration and please feel free to contact NACWA's Hannah Mellman at hmellman@nacwa.org should you need any further information.

Sincerely,

Ken Kirk
Executive Director