NACWA
A Clear Commitment to America's Waters

April 14, 2009

The Honorable Henry A. Waxman, Chair
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20510

The Honorable Edward J. Markey, Chair
Subcommittee on Energy and Environment
Committee on Energy and Commerce
U.S. House of Representatives
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Dear Chairman Waxman and Chairman Markey:

The National Association of Clean Water Agencies (NACWA) thanks you for your leadership in addressing climate change and the challenges it poses to our water resources. NACWA represents the nation's publicly owned clean water agencies that treat and reclaim more than 18 billion gallons of wastewater every day. Climate change will severely impact the operations of these utilities, which is why we strongly support comprehensive legislation to mitigate and reduce greenhouse gas emissions and the overall approach taken in the *American Clean Energy and Security Act of 2009* (*ACES*).

The most critical impacts of global climate change will appear through the hydrological system, such as more severe drought or floods, changing snowpack amount and elevation, varying stream flow patterns, aquifer level changes, saltwater intrusion and rising sea levels, among others. Though the exact effects of climate change on water resources are uncertain and will vary by region, wastewater treatment utilities charged with protecting public health and the environment can anticipate daunting challenges, including:

- In regions where extreme drought persists or where saltwater intrusion compromises freshwater supplies, wastewater reuse and recycling will become a greater part of the water supply solution, at a substantial cost to ratepayers. Already, California lawmakers are considering legislation mandating fifty percent water reuse by wastewater facilities along the coast by 2030;

- Extreme storms in certain regions of the country will likely result in greater sewage overflows in rivers, lakes and coastal beaches from treatment plants that were not designed for climate change-induced conditions, potentially

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resulting in greater public health risks and economic losses to commercial fishing and recreation-based economies; and

- Wastewater treatment facilities located along the coast and vulnerable to sea level rise will need to either buffer their infrastructure or relocate altogether to avoid being inundated.

As we begin to experience the full impacts of climate change, wastewater treatment facilities must continue to provide uninterrupted, high-quality service to their customers and in many cases expand their facilities to accommodate population growth. In order to adequately confront the water-related challenges that climate change presents, water-related infrastructure and our water resource agencies must be part of the solution.

Adaptation: The *ACES* discussion draft goes a long way toward addressing the devastating impacts climate change can have on water resources and on our members' ability to continue to provide clean and safe water for their communities. We especially welcome provisions in the draft bill requiring the National Oceanic and Atmospheric Administration (NOAA) to perform a national vulnerability assessment, including impacts on infrastructure systems, and then authorizing funding for state, local, and tribal projects to assist communities with adapting to these vulnerabilities. However, we believe that these provisions can be strengthened and clarified to specifically call out publicly owned treatment works (POTWs) and community water systems as components of what is meant by "local governments," and therefore directly eligible for the relevant funding.

NACWA also supports the inclusion of a separate adaptation title focused explicitly on water quality, reuse, recycling, energy efficiency and other water infrastructure activities. It is critical that adaptation funding, provided either through Title IV or as a separate water title, be available to:

- Retool wastewater treatment systems to accommodate water reuse and recycling in regions where water supply is threatened due to climate change and droughts;

- Reinforce, enhance, protect, and, if necessary, re-locate existing wastewater treatment infrastructure vulnerable to rising sea levels, extreme wet weather events and accelerated deterioration due to corrosion resulting from warmer water temperatures and drought induced decreased flows; and

- Install less energy-intensive treatment technologies to accommodate changing effluent limitations for meeting water quality standards in climate compromised water bodies.

Mitigation and Energy Efficiency: NACWA is pleased that Title III, Part D, of the discussion draft makes clear that the buying and selling of emissions credits "is not restricted to owners and operators of covered entities," allowing POTWs and community water systems to create allowances or offsets that are real, verifiable, additional, permanent and enforceable for trading in the carbon emissions market. A number of clean water agencies already capture methane and use it as a fuel source for their facilities. We believe these activities and others employed by our members that reduce greenhouse gas emissions should be eligible for credit under the offset trading program proposed in the *ACES*.

In addition, electricity usage currently consumes between ten and thirty percent of total operational and maintenance costs of wastewater treatment utilities depending on the size of the plant and treatment technology used. According to the EPA, wastewater and drinking water treatment utilities account for approximately three percent of national energy consumption or the equivalent of approximately 56 billion kilowatt hours (kWh) annually. Strategies for reducing energy demand from the grid and/or becoming energy self-reliant by producing renewable fuels on-site and lowering the GHG emissions footprint of wastewater utilities should be

supported. NACWA supports including funding low emission and energy-efficient power generation technology and carbon-neutral wastewater treatment technologies and biosolids management strategies, such as biosolids energy conversion projects or methane capture and reuse utilizing fuel cells. And, as a major electricity consumer, wastewater utilities will be hit especially hard by rising electricity costs. If auction proceeds are returned to consumers to defray anticipated higher electricity costs, wastewater utilities should receive a portion of cap-and-trade proceeds to reinvest in energy-efficient plant upgrades.

Research: NACWA also notes that although large amounts of research on the global effects of climate change is available, less research exists on specific climate change impacts at a scale useful for water resource managers. For example, while sea levels are expected to rise significantly over the next century, few data are available on the rate of sea level rise and when vulnerable coastal communities will be affected. Downscaling national models of climate change impacts on water resources and making them accessible and understandable is critical so that local water resource managers can begin preparing their communities and rate payers for these impacts. The *ACES* should fund research to:

- Develop predictive and decision-support tools, including necessary data resources (inputs) on a national, regional, and subregional scale, to help utilities plan for the future impacts of climate change and defend capital-intensive decisions to accommodate those changes;

- Study water quality impacts of climate change including impacts from soil erosion and increased turbidity; changes to aquatic life and vegetation; changes in pathogens, algae, and nuisance organisms due to warmer water temperatures; and other potential adverse impacts to watersheds due to extreme weather events, sea level rise, and warmer temperatures; and,

- Examine infrastructure impacts and implications for wastewater treatment facilities and their collection system network of underground pipes from rising sea levels, extreme wet weather events, droughts, and warmer water temperatures.

NACWA looks forward to working with you and your staff to ensure that comprehensive climate legislation that addresses the devastating impacts climate change will have on our water resources is enacted by this Congress. Please do not hesitate to contact Pat Sinicropi, NACWA director of legislative affairs, at psinicropi@nacwa.org or (202) 533-1823, if you have further questions or want more information about the impacts of climate change on clean water agencies.

Thank you for your consideration,

Ken Kirk
Executive Director

Cc: Members, House Energy and Commerce Committee
Congressman James Oberstar, Chairman, House Transportation and Infrastructure Committee
Congressman John Mica, Ranking Member, House Transportation and Infrastructure Committee