



The New York Water Environment Association, Inc.
The Water Quality Management Professionals

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Assemblyman Robert Sweeney
NY State Assembly, Legislative Office Building, Room 625
Albany, NY 12248

Senator Diane Savino
NY State Senate - Legislative Office Building, Room 315
Albany, NY 12247

Senator James Sanders, Jr.
NY State Senate - Legislative Office Building, Room 508
Albany, NY 12247

**RE: Assembly Bill A06558A/ Senate Bill S06617A and Senate Bill S07411 –
Future Climate Risk and the Community Risk and Resiliency Act;
NYWEA's Comments**

Dear Assemblyman Sweeney, Senator Savino and Senator Sanders,

The New York Water Environment Association (NYWEA) is a statewide nonprofit organization of 2,500 water professionals dedicated to the preservation, protection and enhancement of New York's water resources. NYWEA has reviewed proposed Bills A06558A/S06617A and S07411 and offers the following comments for your consideration.

NYWEA commends each one of you on your leadership, and supports proposed Bills A06558A/S06617A and S07411 relating to future climate risk including sea level rise projections and other weather-related impacts. We recognize that if climate change trends are not mitigated, a significant disruption to the natural hydrological cycle, rising sea levels and changes in the frequency and intensity of extreme events will increasingly threaten the capabilities and sustainability of our water and wastewater infrastructure. The experiences of Hurricane Sandy and other recent extreme events experienced throughout State of New York revealed those vulnerabilities as well as the dedication of water and wastewater professionals to restore services. The nation's drinking water and wastewater infrastructure is already in need of significant

investment to maintain current levels of service over the coming decades. Climate change will stress the systems further.

Water and wastewater professionals must work to minimize economic, environmental, and public health risks by adapting supplies and systems to projected climate risks. Water and wastewater professionals must adapt to new information, consistently refining their approach to sustainability. They must continually incorporate locally relevant data into long-range planning and recognize that climate change is altering long-held beliefs about climate norms. We recognize that the proposed Bills reflect these professional practices.

We appreciate the specification in the proposed Bills that consideration be made to future climate risk including sea level rise, storm surges and flooding, based on available information on the likelihood of future extreme weather events, including hazard risk analysis data. We recommend that the term “**data predicting**” throughout the proposed Bills be replaced with “**information on**” because global climate change forecasts made by the Intergovernmental Panel on Climate Change (IPCC), most recently in its Fifth Assessment Report (AR5), and forecasts made for the United States by the U.S. Global Change Research Program (USGCRP), most recently this year in the Third National Climate Assessment, are based on data analyses and global climate model and general circulation model calculations for future conditions.

We are, however, concerned that a potential situation could arise where future interpretations of the legislation, especially using the term “consideration,” would be inappropriately applied retroactively to existing infrastructure. For instance, the Farmers Insurance Group recently filed a lawsuit against the Metropolitan Water Reclamation District of Greater Chicago, the City of Chicago and its suburbs for its allegedly failing to adequately prepare for the impact of climate change and prevent flooding and sewage backups. Although subsequently withdrawn, the action demonstrated that such claims and lawsuits may become a trend in the future.

Efforts are being made by water and wastewater professionals in the State to better prepare the resiliency of our infrastructure for future events. However much of our built infrastructure has long life cycles (50 years or longer) and was built based on design parameters that most likely did not consider climate change risk. Best engineering practices include the application of safety factors that mitigate the risk of uncertain conditions but the recent rate of change, variability in meteorological conditions and frequency of extreme events are stressing our systems. It will take time and considerable investment to improve the performance and resiliency of our infrastructure to handle these stresses. We think that New York State water professionals are in the forefront of these efforts by conducting vulnerability analyses and evaluations to identify and protect specific parts of the infrastructure and electrical equipment that are vulnerable to extreme events.

For instance, the City of New York is implementing its October 2013 *Wastewater Resiliency Plan* that will invest \$315 million in cost-effective upgrades at its

wastewater facilities to protect over \$2 Billion of valuable equipment and minimize disruptions to critical services during future storms. Nassau County is moving forward with more than \$800 Million in repairs and improvements to protect the Bay Park Sewage Treatment Plant from 500-year storm surges. We suggest that the proposed Bills better define the term “consideration” such that it is clear that the bill only applies to projects initiated after the bill becomes effective and that there will be no confusion on the limits of liability for the State and funding and permit applicants in the future.

The proposed Bills require the Departments of State and Environmental Conservation to prepare model local laws, guidance on available and relevant data sets and risk analysis tools, and develop additional guidance on the use of resiliency measures that utilize natural resources and natural processes to reduce risk. This will require additional resources for the Departments and we are concerned that is a duplication of what the USGCRP and other federal agencies are doing such as the U.S. Environmental Protection Agency’s Climate Ready Water Utilities (CRWU) program. The CRWU program provides information, data and tools such as its CREAT tool to assess water and wastewater infrastructure assets for climate risks. We suggest that this aspect of the proposed Bills be reconsidered if not replaced with language requiring the Department to provide directions on how to access federal and other information on available and relevant data sets, risk analysis tools and guidance on the use of resiliency measures rather than developing its own.

The proposed Bill A06558A/S06617A also includes Section 58-0101, Sea Level Rise Projections, which requires the Department of Environmental Conservation to “adopt regulations establishing science-based state sea level rise projections” and “update such regulations no less than biennially.” Recognizing the uncertainty in sea level rise projections and the changes in those projections that have been made by the IPCC and the USGCRP over the past 20 years (five IPCC reports and three USGCRP reports), the Department would have to update its projections frequently. The Department would require considerably additional resources to fulfill this requirement. That may then cause considerable confusion on how and when consideration is made for future climate risk in planning, design and construction of water and wastewater infrastructure as required in the proposed Bills. We suggest that this aspect of the proposed Bills be reconsidered.

In summary, we suggest the following:

- The term “**data predicting**” be replaced with “**information on**” throughout the proposed Bills.
- The proposed Bills better define the term “**consideration**” such that it is clear that the bill only applies to projects initiated after the bill becomes effective and that there will be no confusion on the limits of liability for the State and funding and permit applicants in the future. Furthermore, for projects initiated after approval of these Bill(s), any consideration of subsequently

revised or updated climate change projections should also recognize the design life of specific water or wastewater infrastructure facilities and limit liability and applicability of related funding and/or permit requirements accordingly.

- The “**preparation of**” model local laws and guidance be reconsidered if not replaced with “**provide directions on how to access**” federal and other information on available and relevant data sets, risk analysis tools and guidance on the use of resiliency measures rather than developing its own.
- Reconsider the requirement that the Department of Environmental Conservation “**adopt regulations establishing science-based state sea level rise projections.**”

We greatly appreciate your time and attention regarding this critical issue, and thank you for the opportunity to share our thoughts on these important matters. If you would like to discuss our comments on the proposed Bill(s) further please contact our Executive Director Patricia Cerro-Reehil at 315-422-7811. We would be very willing to meet in person at your earliest convenience.

Respectfully,



Steven Fangmann, P.E.
President

cc: Senator Mark Grisanti
Commissioner Joe Martens, NYS DEC
Assistant Commissioner James Tierney, NYS DEC
Joseph DiMura, NYS DEC
Julie Tighe, NYS DEC
NYWEA Board
NYWEA Government Affairs Committee
NYWEA Utility Executives Committee