

# NYC WASTEWATER RESILIENCY PLAN

## CLIMATE RISK ASSESSMENT AND ADAPTATION STUDY



Cover photograph: Newtown Creek Wastewater Treatment Plant, Brooklyn, New York



Carter H. Strickland, Jr.  
Commissioner

Dear Friends:

The New York City Department of Environmental Protection (DEP) is proactively planning for climate change, from reducing greenhouse gas emissions to preparing for the impacts of extreme weather to drinking water and wastewater infrastructure. When Hurricane Sandy hit in October 2012, DEP was already in the process of studying the potential impacts of storm surge and sea level rise, to consider measures to protect the low-lying wastewater treatment plants and pumping stations that help drain our streets and keep our waterways and beaches clean for the enjoyment of millions of New Yorkers. After Sandy's surge caused damage to wastewater facilities, resulting in millions of gallons of untreated and partially treated wastewater spilling into the harbor, DEP quickly reacted to repair damage and to develop resiliency measures—such as elevating and flood-proofing equipment—to ensure the highest levels of protection from future storms.

*The NYC Wastewater Resiliency Plan* presents a comprehensive assessment of facilities at-risk from future storms, potential costs, and suggested measures to protect critical equipment and reduce the risk of damage and loss of services. The report follows the recent release of Mayor Bloomberg's *A Stronger, More Resilient New York*, which committed the City to harden its wastewater treatment plants and pumping stations. With 14 wastewater treatment plants and 96 pumping stations, prioritizing the most at-risk facilities included an extensive and in-depth assessment of the height of critical assets in relation to projected flood heights.

In determining the benefits of resiliency measures and the level of acceptable costs, DEP considered not only the value of wastewater assets, but also the population and critical facilities in the service areas and potential impacts on beaches. Resiliency measures were then selected based upon costs and level of risk reduction. The result is a portfolio of strategies that will be “shovel ready” for funding opportunities and implementation as part of planned capital projects.

Investing in our wastewater infrastructure today will ensure the continuity of critical services well into the future. By implementing these strategies along with initiatives to improve energy reliability, build green infrastructure, improve and expand drainage infrastructure, and promote redundancy and flexibility of our water supply, DEP will continue to be a leader in proactive planning for climate change, to ensure the resiliency of New York City's water resources.

Sincerely,

A handwritten signature in black ink that reads "Carter H. Strickland, Jr." in a cursive script.

Carter H. Strickland, Jr.  
Commissioner



# ACKNOWLEDGMENTS

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## **Executive Acknowledgments:**

Carter H. Strickland, Jr.	Commissioner
Angela Licata	Deputy Commissioner, Sustainability

## **Development Team:**

Pinar Balci	Director, Bureau of Environmental Planning & Analysis
Alan Cohn	Director, Climate & Water Quality
Sydney Mescher	Environmental Analyst, Bureau of Environmental Planning & Analysis
Julie Stein	Former Director, Wet Weather Planning & Water Quality Policies

## **DEP Contributors:**

Gregory Anderson	Kenneth Moriarty
Luis Carrio	James Mueller
Kevin Donnelly	Patrick O'Connor
Anthony Fiore	John Petito
Ryan Fleming	James Roberts
Caroline Forger	Vincent Sapienza
Jason Galea	John Sexton
Kathryn Garcia	Prakash Shah
Oscar Gonzalez	Arthur Spangel
Paul Kiskorna	Dennis Stanford
Robert LaGrotta	Hortense Taylor
Pedick Lai	Candice Tsai
Chris Laudando	Constance Vavilis
Anthony Maracic	Jerry Volgende

## **Consultant Team:**

### **Hazen and Sawyer:**

Laura Bendernagel  
Rebecca Carmine  
Tim Groninger  
Anni Luck  
Sandeep Mehrotra  
Karen Norgren  
Arnie Weitzman

### **CH2MHill:**

Klaus Albertin  
Adam Hosking  
Kate Marney  
Gary Ostroff  
Vin Rubino  
Emma Smith  
Peter Sokolow

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# Pumping Stations

163	Conner Street
165	Co-op City North
167	Douglaston Bay
169	Eltingville
171	Ely Avenue
173	Flushing Bridge
175	Gildersleeve Avenue
177	Hannah Street
179	Hollers Avenue
181	Howard Beach
183	Hunts Point Market
185	Kane Street
187	Linden Place
189	Marble Hill
191	Mason Avenue
193	Mayflower Avenue
195	Melvin Avenue
197	Nautilus Court
199	Nevins Street
201	New York Times
203	Old Douglaston
205	Orchard Beach
207	Paerdegat
209	Richmond Hill Road
211	Rikers Island North
213	Roosevelt Island Main
215	Roosevelt Island North
217	Roosevelt Island South
219	Rosedale
221	Sapphire Street
223	Seagirt Avenue
225	South Beach
227	Throgs Neck
229	Van Brunt Street
231	Victory Boulevard
233	Warnerville
235	Zerega Avenue

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