

GUIDING PRINCIPLES

A water infrastructure crisis looms in 21 of New Jersey's oldest and all of its largest cities – cities that comprise nearly a fifth of the state's population and are projected to absorb much of its future growth. Aging and degraded water supply, wastewater and stormwater infrastructure threaten to disrupt daily life. commerce and industry in these communities. To stave off severe crisis and position New Jersey's cities for prosperous futures, public, private and nongovernmental partners need to collaborate to ensure the necessary investments are made to design, construct and maintain 21st century water infrastructure that:

Strengthens Cities. Protects public health and the environment and enhances the attractiveness, livability and safety of cities, while making them more resilient to extreme weather events and natural disasters.

Enables Economic Growth. Reliably and efficiently delivers safe and adequate drinking water, wastewater and stormwater management services that meet the needs of city residents and businesses today and into the future.

Leverages Modern Practices. Employs state-of-theart technologies and best management practices that generate multiple benefits - economic (cost savings, job creation, new businesses), environmental (improved water quality), and social (better quality of life).

Reduces Flooding and Energy Use. Reduces localized flooding from storms, water-main breaks and sewer overflows, and enhances energy efficiency to reduce both water utility costs and air pollution.

Draws on Multiple Funding Sources and Maintains Affordability. Establishes adequate, sustainable funding streams to support improved water infrastructure and services while ensuring affordable rates over time for city residents and businesses.

THE DRIVER FOR **ACTION**

While many components of New Jersey's urban water infrastructure are past their useful lives and inadequately maintained, the most immediate driver for action is the federal and state regulatory requirement that 21 cities must control combined sewer overflows (CSOs) - a problem caused by aging combined (sanitary and stormwater) sewer systems and exacerbated by increasingly intense rainfall events. In late 2014, the New Jersey Department of Environmental Protection (NJDEP) is slated to issue final permits requiring the responsible cities and utility authorities to develop, adopt and initiate the implementation of CSO Long-Term Control Plans (LTCPs). The NJDEP has proposed a three-year time frame, but will consider a longer time frame for parties that

collaborate across jurisdictions on comprehensive plans. This permit process cannot be avoided, and it can be leveraged to bring attention not only to the CSO issue but to urban water infrastructure problems in general.

While New Jersey is behind most other states in requiring the development and implementation of CSO LTCPs, the timing of the forthcoming permits presents a significant opportunity for the state's urban areas to learn from and adapt CSO control strategies implemented in cities across the country. New Jersey's cities can draw on proven approaches that meet regulatory requirements for clean water while generating additional benefits, including improved public health and environmental quality, enhanced resilience to extreme weather events, new local jobs, greater private investment and revitalized communities. On the other hand, cities that fail to comply with the permits will be vulnerable to lawsuits and ultimately federal court sanctions that impose a specific course of action and may eliminate the opportunity to achieve broader community improvement goals.

RECOMMENDED ACTION STEPS

Participants agreed that the looming regulatory mandate for CSO LTCPs presents an opportunity to focus attention on the full suite of New Jersey's urban water infrastructure challenges. The group coalesced around the following recommended Action Steps, which it believes can catalyze the transformation of urban water infrastructure throughout the state.

Educate and Raise Awareness.

Key stakeholders should design and implement a multi-faceted education and outreach program to raise awareness regarding the importance of clean water and the multiple benefits that sustainable water infrastructure solutions can generate for cities, surrounding communities and the state as a whole. A key objective of such a program should be to identify and engage champions at the state and local levels. Target audiences include elected and appointed leaders, utility executives and professional staff, state and local agency personnel, ratepayers, the business community and schoolchildren. Academic institutions and community-based organizations such as environmental commissions, green teams, faith-based institutions and watershed associations can play an important role in delivering educational messages and information to target audiences, as can decision-support tools that illustrate clearly the costs and benefits of various water infrastructure projects, including the costs of inaction.

INTEGRATED WATER LEADERSHIP FOR **INFRASTRUCTURE SOLUTIONS FOR SUSTAINABLE CITIES**

Participants in the May 20–21, 2014, convening believe that the New Jersey cities that seize the opportunity to address CSOs using innovative and integrated solutions consistent with the Guiding Principles and Action Steps presented in this Agenda for Change can leverage those investments to become sustainable cities with healthy environments, vibrant economies and an excellent quality of life.

IMPLEMENTATION

Implementing the recommendations in this Agenda for Change and transforming New Jersey's urban water infrastructure will require leadership from the private, public and nongovernmental sectors. New Jersey Future and the Geraldine R. Dodge Foundation are developing a work plan to advance specific aspects of the recommendations herein, and strongly encourage other interested organizations and stakeholders across the state to help advance recommendations that align with their respective priorities. Together we can position New Jersey's cities for prosperous futures.

1-See Ripple Effects: The State of Water Infrastructure in New Jersey Cities and Why it Matters, New Jersey Future, May 2014, and D.J. Van Abs, et al., Water Infrastructure in New Jersey's CSO Cities: Elevating the Importance of Upgrading New Jersey's Urban Water Systems, prepared for New Jersey Future, May 2014. Available online at: www.njfuture.org/water.

2-Green infrastructure involves designs and systems that mimic nature via integrated systems that capture and repurpose stormwater at the property or neighborhood scale to reduce flooding and prevent runoff from entering combined sewers or municipal stormwater sewers.

Optimize Existing Systems and Implement Asset Management.

Before seeking ratepayer support for investment in major capital improvements, water utilities and departments should take aggressive action to optimize the efficiency and effectiveness of their existing systems and business practices. In addition, these entities should develop and implement asset management plans that sustain efficiency over time. Taking these foundational steps in a visible and transparent manner, and demonstrating the associated cost savings, will help utilities and departments build trust with ratepayers and establish credibility to pursue necessary but costly infrastructure upgrades.

Build Capacity and Foster Cross-Jurisdictional Collaboration.

The NJDEP's issuance of the new CSO permits offers a significant opportunity for cities and local utilities to coordinate their efforts to learn about and adapt best practices (technical, financing and communications), reduce costs, spread financial risk and enhance their purchasing power. Permittees could benefit from peerto-peer training and other support networks to build technical and management capacity. Incentives and methods for cities and utilities to share services across jurisdictions would also be valuable. Key parties that could be involved in such an initiative include the NJDEP, the U.S. Environmental Protection Agency (EPA), other state and federal agencies, water utilities and departments, municipal agencies, planners, consultants and elected officials.

Leverage Early Successes To Generate Political Support.

Cities and water utilities and departments seeking stateand local-level political support for innovative approaches to urban water infrastructure improvements should focus on achieving early successes with highly visible projects.

Because green infrastructure solutions have the potential to control some of the flows that cause CSOs at the lowest cost with multiple benefits, municipalities should take a "green first" approach, including mapping strategic locations for green infrastructure projects, making local policy changes that facilitate implementation and building demonstration projects that make neighborhood benefits tangible. Organizations including the NJDEP, U.S. EPA, universities and others could provide technical support for project design and implementation. In many situations, more conventional engineering solutions or "gray" infrastructure will be necessary also. Regardless, state and local leaders should be engaged in the planning and rollout of new water infrastructure projects, which will help build broad community support.

Diversify Funding Sources.

Even with optimization and effective asset management, the cost of controlling CSOs and upgrading other aspects of urban water infrastructure will be expensive and will need to be phased in over time, with most cities and utilities ultimately requiring new and/or increased revenue streams to meet these challenges. A range of funding possibilities exists and should be explored, including: legal protection of designated water utility revenues; state pooling of municipal bonds; collecting connection fees consistently; partnering with other local departments (transportation, parks and recreation) to leverage funding for joint projects; leveraging private investment in new development and redevelopment projects; and forming public-private partnerships with investor-owned water utilities, private water services companies or developers. In addition, the New Jersey Environmental Infrastructure Financing Program, administered by the New Jersey Environmental Infrastructure Trust and the NJDEP, can provide subsidized, low-cost funding to accelerate water infrastructure projects and is typically undersubscribed each year.

Meeting Participants

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The following state and federal department and agency representatives took part in the meeting to help inform the discussions. Their participation does not constitute individual or organizational endorsement of the recommendations presented in the Agenda for Change, or any other products from the meeting:

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New Jersey Future is a nonprofit, nonpartisan organization that promotes responsible land use policies. The Johnson Foundation at Wingspread is a catalyst for positive and lasting change leading to healthier environments and communities and the convener of the Charting New Waters initiative. The Geraldine R. Dodge Foundation supports leadership, innovation and collaboration for a better New Jersey. For more information, please visit www.njfuture.org/water.

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