

The following Action Plan provide detailed strategies and specific actions, serving as a technical guide for implementing the recommendations of The Plan. These action plans are intended to be living documents, being revised and updated as Together North Jersey works with various partners on implementing recommendations in The Plan.



Focus Area 14: Manage water systems to improve water quality and supply.

What and why. Ample, clean water is essential to the health of North Jersey’s residents, economy and environment. But the region’s water supply is currently stressed by inefficient water use and pollution. Problems include industrial processes, such as disposal of toxins in manufacturing and cleaning agents by dry-cleaning facilities, that contaminate groundwater in localized areas, as well as outdated water systems that combine sewer and stormwater treatment. These combined sewer systems often dump untreated sewage into our waterways during heavy rain storms. Also of concern are “nonpoint sources” of pollution such as parking lots, farms and subdivisions, which can produce polluted stormwater runoff that can contaminate our water supplies.

A variety of approaches can help protect North Jersey’s water systems. Proper management of stormwater runoff in urban areas, such as the use of “green infrastructure” that captures water where it falls, would improve water quality and help recharge water supplies, as would comprehensive efforts to address the problem associated with combined sewer systems. For example, stormwater credits could be offered to property owners who retain stormwater on-site. Protecting water-supply sources, including lakes, rivers and underground aquifers involves a multi-faceted approach that addresses water use, development patterns and water infrastructure. Protection of water resources ensures a dependable supply of clean, safe drinking water, supports healthy ecosystems, preserves resources needed for business and agriculture, and helps to maintain quality of life for current and future residents, businesses and agriculture. Improved stormwater management provides important benefits that are crucial to maintaining clean water as well as a healthy living environment. Without it, nonpoint source pollution, flooding and environmental damage will continue.

How. We can improve water quality and protect supplies by improving stormwater management, expanding the use of “green infrastructure” and modernizing “grey” infrastructure systems such as drinking water and wastewater treatment plants and pipes, and assisting communities to eliminate combined sewer overflows.



Strategy 14.1: Improve management of stormwater runoff

What and why. Stormwater runoff is water from rain or melting snow that “runs off” across the land instead of seeping into the ground. It usually flows into the nearest stream or waterway without being treated and carries pollutants and toxins into water supplies. We can mitigate the effects of stormwater runoff through more effective stormwater management practices, including training government officials and planners and putting in place more stringent state regulations. Also needed are

updates to municipal stormwater ordinances, and the adoption of policies that promote “green infrastructure” solutions that manage stormwater with innovative techniques that mimic natural processes.

	<u>Actions:</u>	<u>Suggested Responsibility:</u>	<u>Timeframe:</u>
1.	Improve stormwater management at the municipal level by requiring (through regulation) and providing training for municipal boards and staff on NJDEP’s updated best practices documentation and guidance. Training sessions are currently posted on the NJDEP website.	NJDEP	Ongoing
2.	Improve stormwater management at the municipal level by revising MS-4 permits for all Tier A and Tier B municipalities to establish a strong standard for on-site retention of stormwater runoff for the development and redevelopment of small and large sites; Improve enforcement of these permits and the local and state level.	NJDEP, municipalities	Short term
3.	Conduct community training sessions on the importance of stormwater management and the forthcoming Sustainable Jersey model ordinance.	Sustainable Jersey, nonprofit partners.	Short term
4.	Update the municipal stormwater ordinance to establish a strong standard for onsite stormwater retention and green infrastructure solutions for development and redevelopment, such as recommended by the forthcoming Sustainable Jersey model ordinance.	Municipalities	Short term
5.	Encourage municipalities to participate in audits conducted by NJDEP on the effectiveness of existing stormwater facilities; Encourage the use of NJDEP BMP manual in designing and incorporating facilities using green design	NJDEP	Short term
6.	Promote municipal and county implementation of “green streets” that manage stormwater runoff through green infrastructure by revising the NJDOT roadway design manual and educating local transportation engineers. Implement a “green streets” approach for NJDOT projects.	NJDOT	Medium term
7.	Implement “green streets” that manage stormwater runoff through green infrastructure for new and major reconstruction capital infrastructure projects.	Municipalities and counties	Medium term
8.	Pass and sign legislation to authorize the use of stormwater fees statewide.	NJ Legislature and Governor.	Medium term

Strategy 14.2: Protect water supplies through planning and enforcement

What and why. Water supply protection focuses on infrastructure, state and regional planning, wetlands protection, water conservation and mitigation of contaminated groundwater as measures to help ensure water supply safety. Our region should work to upgrade drinking water and sewer pipes, set limitations on development in septic management areas, and protect wetlands through the Wetlands Mitigation Council. We should also provide financial incentives to encourage water conservation actions by individuals, property and business owners and developers enforcement must play a large part in maintaining safe drinking water.

	<u>Actions:</u>	<u>Suggested Responsibility:</u>	<u>Timeframe:</u>
1.	Require municipalities and municipal, county and regional utilities to use asset management planning, including facility condition assessments, to ensure leaking drinking water and sewer pipes are upgraded in a timely basis to maintain a state-of-good repair.	NJDEP, NJ-DCA	Short term
2.	Employ asset management planning to establish a schedule of prioritized upgrades to drinking water and sewer pipes to maintain them in a state of good repair.	Wastewater departments and utilities	Short term
3.	Educate ratepayers, businesses and utilities on the benefits of asset management and why acting now is important.	NJDEP	Short term
4.	Adopt an updated Statewide Water Supply Plan that incorporates public comment in order to protect New Jersey's drinking water supplies.	NJ Legislature and Governor's office	Short term
5.	Support the Highlands Council and Pinelands Commission by appointing commissioners who support the agencies' mission and maintaining their budget allocations.	Governor and Legislature	Short term
6.	Prioritize protection, restoration and recreation of wetlands in areas where they can be utilized for flood prevention stormwater management and hazard mitigation.	NJDEP	Short term
7.	Identify and develop a credible database of future needs projections.	NJDEP	Medium term

8.	Identify ways in the DEP Continuing Planning Process pursuant to the Clean Water Act to protect ground water quality in septic management areas where development densities may threaten nitrate levels.	NJDEP	Medium term
9.	Appoint new members to the Wetlands Mitigation Council as a means of protecting and promoting wetlands.	Governor	Medium term
10.	Encourage the Wetlands Mitigation Council to spend down its existing funds on projects in the watershed where the disturbance occurred or, if not feasible, in a comparable community.	NJDEP	Medium term
11.	Adopt water conservation ordinances.	Municipalities	Medium term
12.	Provide residents with rebates for the purchase of low flow fixtures and efficient watering systems.	NJBPU and water utilities	Medium term
13.	Research and adopt new pricing structures that encourage water conservation.	Drinking water providers- either Water departments or utilities, depending on local specifics	Medium term
14.	Clean up contaminated groundwater, especially where it is a public health issue, by undertaking remedial investigation, enforcement, and clean up actions. Prioritize clean-ups based on number of residents affected and level of contamination.	NJDEP	Long term
15.	Institute a water consumption fee to be used for water resource protection efforts, including mitigation and stewardship efforts in critical water supply areas as well as infrastructure improvements in distressed urban areas.	NJ Legislature	Medium term

What and why. Eighteen municipalities in the region are served by wastewater treatment plant that have outdated combined sewer and stormwater systems that discharge raw sewage into the region's bays and rivers during heavy rains. The DEP issued final permits to these entities in January

2015, providing three to five years to develop and adopt long term control plans that describe how they will upgrade their systems. Once approved, the plans must be implemented, which will be costly. Our region should pursue CSO solutions that enhance resilience, reduce flooding, improve wastewater services to customers and promote economic development. We need to establish best practices and engage local leaders, residents and businesses through education campaigns. As typical CSO communities are among the region's less affluent and may lack technical capacity, we should provide municipalities, utility operators and community groups with technical assistance and training. Stormwater fees and a statewide water assessment can help to raise needed revenues, and a certification program that rewards wastewater utilities for using best practices will help ensure low-cost, high-performance systems.

	<u>Actions:</u>	<u>Suggested Responsibility:</u>	<u>Timeframe:</u>
1.	Continue to hold training conferences and meetings to educate a broad audience in CSO municipalities and wastewater utilities, including elected and appointed officials, utility managers, the departments of planning, transportation and parks, and community groups.	NJDEP, in partnership with EPA and nonprofits	Ongoing
2.	Continue to educate residents and businesses on the need to upgrade CSO systems and engage them directly in water conservation and on-site stormwater management such as through rain barrels, rain gardens and green roofs.	State and local environmental organizations and partnerships	Ongoing
3.	Direct the consultants and staff responsible for preparing Long Term Control plans to utilize best practices, as identified by nonprofit organizations like New Jersey Future and government groups like the EPA. Consider best practices such as climate resilience, regional shared services, water conservation, pipe repairs, asset management and green infrastructure.	CSO cities and wastewater utilities.	Short term
4.	Demonstrate the value of water infrastructure upgrades by installing green infrastructure projects that enhance nearby properties and neighborhoods and create green jobs, while reducing flooding and sewage back-ups.	CSO cities and wastewater utilities.	Short to long term
5.	Establish best practices for water utilities and recognize accomplishments through a certification program; Offer extra points to certified utilities when they apply to the NJ Infrastructure Treatment Trust Program.	Sustainable Jersey, utility trade associations, NJDEP.	Medium term

6.	Adopt stormwater fees in CSO areas to create incentives for stormwater retrofits on private property and to raise funds for needed infrastructure repairs. Offer stormwater credits for property owners who retain stormwater on-site.	CSO cities and wastewater utilities	Medium term
7.	Educate residents and businesses on ways to manage stormwater, including on approaches with ancillary community benefits.	CSO municipalities and sewer utilities	Medium term
8.	Adopt a state water assessment to raise funds for preservation of headwaters in rural areas and upgrades to water infrastructure in urban areas.	NJ Legislature and governor.	Long term
9.	Educate the public (including ratepayers) about the value of clean, plentiful water and the importance of modern water infrastructure by generating stories in both traditional and social media. Stress the value of stormwater as an asset not a burden.	Public and private water utilities, and NJDEP	Long term
10.	Determine (via new or current studies) how to finance CSO upgrades and encourage support from ratepayers.	NJDEP with utilities	Long term