

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in manufacturing and cleaning agents by dry-cleaning facilities that contaminate groundwater in localized areas and outdated water systems that combine sewer and stormwater treatment. These combined sewer systems often dump untreated sewage into our waterways during heavy rainstorms. Also of concern are "nonpoint sources" of pollution such as parking lots, farms and subdivisions, which can produce polluted stormwater runoff that contaminates 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 using "green infrastructure" that captures water where it falls, will improve water quality and help recharge water supplies, as will comprehensive efforts to address the problem associated with combined sewer systems. For example, local governments can act on a 2019 state law that enables the creation of local stormwater utilities that can collect fees from property owners based on how much their property contributes to stormwater runoff. These fees can encourage onsite stormwater retention while also raising funds for much-needed repairs to stormwater systems. Repairs and replacements are often most needed in historically disadvantaged communities with limited financial and technical resources. Improving our region's water systems must include funding strategies that do not overburden these communities with high costs for safe and reliable water supplies.

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 the quality of life for current and future residents, businesses and agriculture. Improved stormwater management provides important benefits that are crucial to maintaining clean water and 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 "green infrastructure," modernizing "grey" infrastructure systems such as drinking water and wastewater treatment plants and pipes, and assisting communities in replacing lead service pipes and eliminating combined sewer overflows.



STRATEGY 14.1: Improve management of stormwater runoff

Stormwater runoff is water from rain or melting snow that “runs off” across the land instead of seeping into the ground. As a result, 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, collecting stormwater fees through local stormwater utilities, and putting in place more stringent state regulations. Municipalities should also be encouraged to revise stormwater control ordinances so that they exceed recent NJDEP requirements for the inclusion of onsite stormwater retention and green infrastructure in development.

STRATEGY 14.2: Protect water supplies through planning and enforcement

Water supply protection focuses on infrastructure, state and regional planning, wetlands protection, water conservation, lead service pipe replacement, 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, municipalities, property and business owners and developers. Coordinated statewide lead testing and public data sharing about lead levels must play a large part in maintaining safe drinking water.

STRATEGY 14.3: Reduce or eliminate combined sewer overflows (CSO)

Eighteen municipalities in the region are served by wastewater treatment plants with 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, and in 2020 these entities submitted long-term control plans that describe how they will upgrade their systems. Once approved, the plans must be implemented, which will be costly and may place a large financial burden on low-income residents of CSO communities. Our region should pursue CSO solutions that enhance resilience, reduce flooding, improve customers’ wastewater services, and promote economic development. We need to communicate 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. Establishing stormwater utilities, enhancing state and federal water infrastructure financing programs, and collecting a statewide water assessment can help to raise needed revenues.

