

Neponset River Watershed 2004 Assessment & 2004-2009 Action Plan Completed

The Neponset River Watershed Assessment and Action Plan have now been completed. NepRWA identified numerous problems in the watershed, some of which were unknown to government authorities. The Action Plan we developed lists “priority action items,” as well key locations for implementing them, for state, federal, and municipal governments, as well as for “citizen groups” like NepRWA itself. NepRWA will be organizing efforts in individual watershed towns to implement the Action Plan through activities such as:

- Continuing volunteer-based water quality monitoring, shoreline surveys, and identification of local “hot spots,”
- Educating the public as well as Town Boards on key issues,
- Studying issues and developing model bylaws and best management practices,
- Conducting demonstration projects,
- Establishing citizen/advocate networks to strengthen the constituency for sound watershed management and make their voices heard, and
- Advocating for adequate funding at state and municipal levels.

2004 ASSESSMENT. The Neponset Assessment looked at *water quality, hydrology, physical habitat, land use and open space*. Primary conclusions of the Assessment include:

- **Water quality. Bacteria (pathogens) and nutrients** are the most common and widespread problems in the watershed. Based on samples gathered from 1999 through 2003 by NepRWA’s volunteer Citizen Water Quality Monitoring Network (CWMN), the Assessment identified numerous stream segments that had not previously been categorized as impaired by the Massachusetts Department of Environmental Protection (DEP). Other water pollution problems include *low dissolved oxygen levels* (related to *low flow*); *Metals and Toxics, including PCBs and mercury* (known sites limited); *Turbidity and Siltation; Trash, debris and other “aesthetic impairments”*
- **Hydrology and Physical Habitat. Low streamflows** are having the greatest adverse effects on fish and other aquatic wildlife and habitat, as well as on pollution levels (by failing to dilute pollutants in the water) and on opportunities for boating. Low streamflows are mostly caused by *excessive water use* and the *interbasin transfer* of

Neponset water into Boston Harbor via MWRA sewers. Also, infiltration/inflow and dams play an important role.

- ***Land Use and Open Space.*** The primary problem is that a quarter of the watershed (including open water) is comprised of **impervious surfaces** like roads, parking lots, rooftops, driveways, etc. This leads to increased water pollution and decreased groundwater recharge. In addition, much **vegetated buffer area along waterways** has been destroyed, often by residential lawns. Finally, open space, especially open space providing public **access to waterways**, is very limited in the watershed.

2004 – 2009 NEPONSET RIVER WATERSHED ACTION PLAN. For the most part, NepRWA recommends the **federal and state authorities, as well as MWRA**, greatly **increase funding** for monitoring, research and implementation (paid for by **new user fees**) and that they get **tougher on enforcement** of existing water quality rules. **Local governments** are urged to **fully implement all Clean Water Act requirements** (e.g., stormwater and sewer maintenance rules), to **strengthen** their **local bylaws** (e.g., to require septic pumping, limit lawn watering, and require that new development be done in an environmentally sensitive manner), and to **raise sewer and water rates** to accurately reflect full costs (including environmental costs and the expense of repairing long neglected sewer infrastructure).

Specifically, priority action items covered:

- Sewer system improvements, including
 - Full implementation of Neponset Watershed bacteria TMDL,
 - Banning sewer extensions and capacity expansions until current systems are properly maintained and illegal discharges cease;
- Stormwater management and groundwater recharge, including
 - Adequate funding for local governments to comply with new federal stormwater rules,
 - Decentralized stormwater treatment and mitigation of off-site stormwater problems for new development and redevelopment,
 - Local stormwater by-laws as strict as state rules for wetlands;
- Septic management, including
 - Mandatory septic tank pump outs,
 - Septic as preferred wastewater treatment for homes;
- Management of landscaped areas, including
 - Strict development rules, especially for waterfront property owners;
- Water Supply and Streamflows, including
 - Habitat-based, seasonal minimum streamflow requirements,
 - Classification of the entire Neponset Watershed as “highly stressed,”

- Stricter rules for water conservation;
- Riverine habitat, including
 - Removal of T&H and Baker Dams and risk assessments of removal for other dams,
 - More expenditures from Open Space Bond Fund,
 - Plan for invasive plant species;
- Public access to waterways, including
 - Boat ramp in estuary, more canoe launches for freshwater;
- Watershed assessment, including
 - More state and federal funding for citizen based monitoring,
 - Development of a Nutrient TMDL;
- Innovative strategies of financing, regional collaboration, and adapting general remediation techniques to local conditions, including
 - Sewer Trust Fund modeled on Highway Trust Fund,
 - Water and sewer fees that fully reflect costs, including deferred maintenance costs,
 - Regional collaboratives to achieve economies of scale,
 - Citizen/Advocate Committees for each town.

The Neponset River Watershed Assessment and Action Plan Reports form a part of the larger “*Boston Harbor South Watersheds Assessment and Action Plan*,” which also covers the Fore, Weir and Back River Watersheds as well as direct Harbor discharges by the City of Boston. The Neponset Assessment and Action Plan are available on NepRWA’s web site (www.neponset.org). The entire Boston Harbor Assessment and Action Plan should soon be available at: <http://www.mass.gov/envir/water/publications.htm>

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