



# Mystic River Watershed

## INITIATIVE

Working together to improve water quality, public access and recreation throughout the watershed.



## WHAT IS THE INITIATIVE?

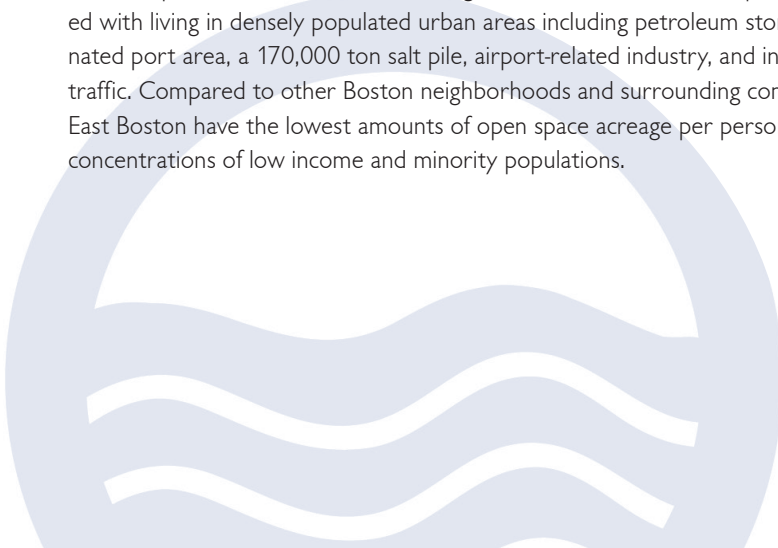
The EPA Mystic River Watershed Initiative is a collaborative effort with a goal to improve water quality and environmental conditions as well as create and protect open space and public access to the Mystic River and its tributaries through safe public pathways and access points. The Initiative is guided by a steering committee composed of 22 organizations including not-for-profit community groups, local, state, and federal governmental agencies and is co-chaired by U.S. EPA and the Mystic River Watershed Association.

## WHY IS THE INITIATIVE NEEDED?

The Mystic River Watershed is a collection of rivers, streams, lakes, and ponds that drain an area of approximately 76 square miles and 21 municipalities north of Boston. The Mystic River proper, which flows from the Mystic Lakes in Winchester and Arlington through Medford, Somerville, Everett, Charlestown and Chelsea to Boston Harbor, is one of the great urban rivers of New England and one of the most densely populated urban water riversheds in the country. The river and the watershed that feeds it served as an epicenter of much of the activity from which sprung settlement and economic activity in the colonies: mills, shipyards, and villages.

Unfortunately, settlement and industrial activity have not always been kind to the Watershed. As the towns and cities in the watershed developed, fields were replaced with parking lots, footpaths with highways, and pastoral river banks with polluting industrial activity and shipyards with oil storage facilities. All of these alterations have contributed to the decline of the Watershed and water quality in the Mystic River.

In the Mystic River Watershed, residents are exposed to significant, cumulative environmental and public health impacts every day including contaminated urban rivers, fish and sediment. The Chelsea Creek, a tributary of the Mystic River, connects the lowest income, most diverse areas of Chelsea, Revere and East Boston. These areas share recreational, health, cultural, community and transportation services as well as significant environmental and public health risks associated with living in densely populated urban areas including petroleum storage terminals, designated port area, a 170,000 ton salt pile, airport-related industry, and intensive truck and road traffic. Compared to other Boston neighborhoods and surrounding communities, Chelsea and East Boston have the lowest amounts of open space acreage per person and have significant concentrations of low income and minority populations.



## REPORT CARD

Each year, EPA Region 1 issues a report card for the Mystic River Watershed based on sampling data from the previous year. The grade is determined after comparing bacterial water quality data at 15 sampling points throughout the Watershed to Massachusetts' swimming and boating water quality standards.

2006: D	2010: D-
2007: D	2011: D
2008: C-	2012: D
2009: C-	

During 2012 sites met boating criteria most (75%) of the time, but swimming criteria were met only 47% of the time. Overall, water quality standards were met only 61% of the time, and therefore a grade of "D" was assigned. Improving dry-weather water quality continues to be a focus of EPA's efforts, and such efforts will result in an improving grade over time. For more information about how this grade was calculated, see the 2012 Mystic River Watershed Report Card Frequently Asked Questions online at [www.epa.gov/mysticriver](http://www.epa.gov/mysticriver).

## HISTORY OF THE INITIATIVE

In April 2008, EPA Region 1 held a Mystic River Watershed Summit that focused on Flooding, Industrial Contaminants, Bacteria and Stormwater, and Reconnecting people to the river and was attended by over 150 people. In early 2009, the Mystic River Watershed Steering Committee was created to allow environmental advocates, state and federal regulators, and business and municipal leaders to work collaboratively to promote actions that will improve environmental conditions throughout the watershed. These actions will contribute to the protection, development, and use of water resources in a sustainable manner. In early 2011, the Committee came to consensus around its mission and priorities. The Committee is focusing on restoring and protecting water quality, wildlife and its habitats, while also protecting and creating open public spaces for safe public access to the waterfront. In addition, the Steering Committee will promote sustainable recreational uses on the river and its tributaries with a plan to address overarching environmental justice concerns within the watershed. Members of the Steering Committee will work together to implement these actions and to increase public awareness, participation, understanding, and access to information about the Mystic River Watershed.

### Water Quality:

The Steering Committee plans to make the waters of the Mystic River Watershed fishable, boatable, and swimmable by reducing and eliminating sanitary sewer overflows, assisting municipalities with stormwater management, remediating legacy pollution, decreasing phosphorus loading, and increasing the public's awareness of fish consumption health advisories.

### Open Space and Access:

The Steering Committee plans to increase safe public open space and access to the river and its tributaries (through redeveloping and remediating brownfields, developing walkways, bikeways and trails, etc.) by supporting the development and improvement of open space and access at targeted sites in the watershed while also investigating additional sites in other parts of the watershed system. EPA has partnered with Open Space Work Group, which has identified three initial priority sites where the group is focusing its efforts to improve and increase public access to open space in the lower stretches of the Mystic River Watershed.

## EPA'S SUPPORT OF THE INITIATIVE'S MISSION AND PRIORITIES

- EPA enforcement efforts have stopped over 14,000 gallons per day of sewage from being discharged to the watershed through illicit connections
- In February 2013, as a result of EPA enforcement action under the Clean Water Act, Sterling Suffolk Racecourse LLC (Suffolk Downs) was required to pay a civil penalty of \$1.25 million and will perform three environmental projects that provide water quality monitoring and protection. The settlement required the facility to implement green infrastructure and low impact development techniques to address stormwater discharges from the racetrack and maintenance areas of the facility and all construction is now complete. As part of the settlement Suffolk has agreed to fund three years of water quality monitoring in the Mystic River watershed, as well as fund a monitoring program in the neighboring Saugus River watershed and install a boardwalk in the Belle Isle Marsh. Find out more at: [www.epa.gov/compliance/resources/cases/civil/cwa/sterlingsuffolk.html](http://www.epa.gov/compliance/resources/cases/civil/cwa/sterlingsuffolk.html)
- Under the MOU signed with UMass Boston, EPA hosted an Urban Waters Academic Forum in January 2013. This meeting brought together academic professionals to explore areas for future collaboration on urban water issues in the Mystic River, Neponset River, and Charles River Watersheds.
- EPA Region 1 provided technical assistance to complete a detailed review of the City of Chelsea's existing codes and ordinances with specific recommendations for incorporating green infrastructure in the City; a technical support documents summarizing the range of GI techniques (including costs, operation, and maintenance, etc.) that may best be employed considering the City's constrained urban areas and class C/D soils; and a convenient informational brochure summarizing pertinent information on incorporating GI within the City.

Also, this led to a December 2012 information workshop for the City's officials and board to better understand GI.

- EPA funded the construction of a porous asphalt parking lot retrofit in Arlington, MA that was completed in September 2012. This project was a unique opportunity for EPA to inform municipal practitioners and the general public of this test technology which has promise for densely populated urban areas. We expect the project to also improve water quality in Mill Brook, an impaired waterbody in the Mystic River Watershed. A video detailing the project can be found at: [www.epa.gov/mysticriver/porouspavementproject.html](http://www.epa.gov/mysticriver/porouspavementproject.html)
- EPA Region 1 has loaned over \$14,000 worth of monitoring equipment to the Mystic River Watershed Association in support of baseline and hot spot monitoring programs, as well as microbiology assistance. The agency has analyzed over 2,000 samples from the Mystic River Watershed for E. coli and Enterococcus bacteria. EPA has also conducted real-time monitoring using a remote sensing buoy to track water quality conditions and cyanobacteria blooms at a strategic location in the watershed for the past four years.
- In January 2013 EPA Region 1 hosted the fourth Mystic River Water Quality Science Forum to update stakeholders on water quality and environmental conditions, learn from success stories, and foster discussion on what action will be needed to increase publicity and funding in order to achieve goals in the coming year.

#### Urban Waters Federal Partnership

In early 2013, EPA's Office of Water announced that the Mystic River Watershed was selected as one of eleven new Urban Waters Federal Partnerships. This exciting partnership will reconnect urban communities, particularly those that are overburdened or economically distressed, with their waterways by improving coordination among federal agencies and collaborating with community-led efforts to improve our nation's water systems and promote their economic, environmental, and social benefits. The Partnership will facilitate communication between United States Geological Survey (USGS), U.S. Department of Housing and Urban Development (HUD), United States Forest Service (USFS), Federal Emergency Management Agency (FEMA), and the Army Corps of Engineers (ACOE), among others. Overall, the Partnership will more efficiently use federal resources in order to better coordinate federal investments, build on local efforts and leadership, learn from early successes, and fuel long-term and action.

The Partnership will focus on improved water quality as well as increased access to public open space in the Mystic River Watershed. This Partnership will enhance and strengthen the ongoing efforts of the Mystic River Watershed Initiative Steering Committee and leverage more support and coordination for EPA's Initiative.

For more information on the Federal Partnership visit [www.urbanwaters.gov](http://www.urbanwaters.gov)

## HOW CAN I HELP?

EPA's Mystic River Watershed Initiative website provides background information on the watershed, a list of important contacts, updates of events and activities, and an invitation to become part of the solution. Learn more about our Mystic River Watershed Initiative at [www.epa.gov/mysticriver](http://www.epa.gov/mysticriver)

This initiative is a watershed-wide effort. A watershed consists of the total land area and water bodies that drain into a single river or lake system, and is also the source of groundwater recharge to that system. By focusing on the watershed as a single entity, our approach capitalizes on collaboration between up- and down-stream stakeholders. While priorities can vary throughout the watershed, by working together, Steering Committee members are able to combine resources to address shared issues.

If you are a homeowner:

- Don't litter;
- Participate in clean ups and other river events in your community;
- Pick up after your dog;
- Don't feed waterfowl;
- Don't dump oil, wash water, or other household wastes into storm drains;
- Use rain barrels to capture and reuse water and/or consider planting a rain garden to naturally collect and absorb rainwater;
- Minimize the use of pesticides and fertilizers on your lawn;
- Encourage the development and implementation of your community's stormwater management program (see [www.epa.gov/ne/npdes/stormwater](http://www.epa.gov/ne/npdes/stormwater));
- Report illicit discharges or connections to local and state officials;
- Volunteer to monitor the water in your area by contacting the Mystic River Watershed Association at [www.mysticriver.org](http://www.mysticriver.org);
- And, share your knowledge with others!

## STEERING COMMITTEE

- Alternatives for Community and Environment (ACE), Roxbury, MA
- Charlestown Waterfront Coalition (CWC), Charlestown, MA
- Chelsea Collaborative, Chelsea, MA
- City of Chelsea and Town of Winchester representing all 21 municipalities
- Conservation Law Foundation (CLF)
- Friends of Alewife Reservation, Arlington/Cambridge, MA
- Friends of the Mystic Lakes, Winchester/Medford, MA
- Groundwork Somerville, Somerville, MA
- La Comunidad Inc., Everett, MA
- Massachusetts Department of Conservation and Recreation (MA DCR)
- Massachusetts Department of Environmental Protection (MassDEP)
- Massachusetts Department of Public Health (MDPH)
- Massachusetts Department of Transportation (MassDOT)
- Massachusetts Executive Office of Energy and Environmental Affairs (MA EEA)
- Massachusetts Port Authority (MassPort)
- Massachusetts Water Resources Authority (MWRA)
- Metropolitan Area Planning Council (MAPC)
- Mystic River Watershed Association (MyRWA)
- Neighborhood of Affordable Housing (NOAH), East Boston, MA
- Tri-City Community Action Program (Tri-CAP), Malden, MA
- \*\*University of Massachusetts Boston (UMB), Boston, MA
- U.S. Environmental Protection Agency, Region 1, Boston, MA

\*UMB serves as the Lead Academic Technical Liaison to the Steering Committee

### CONTACTS

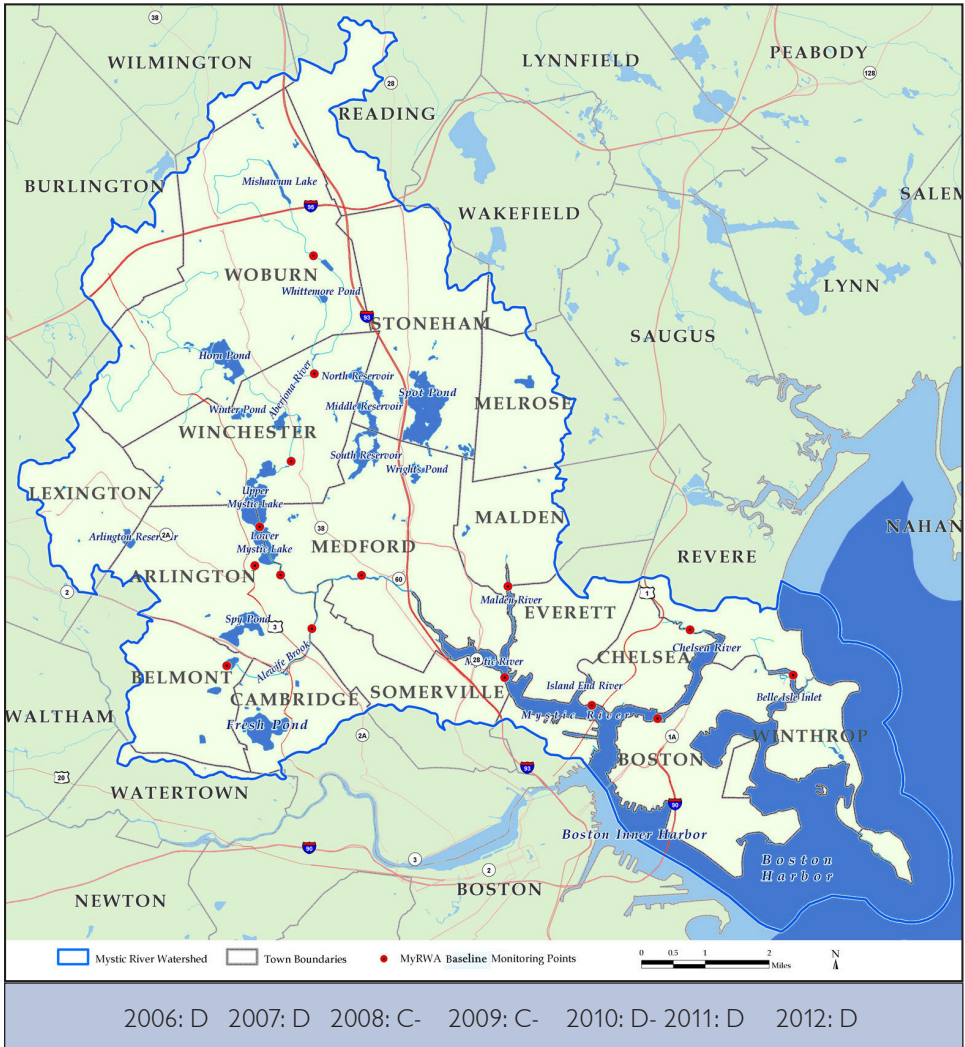
U.S. EPA  
Caitlyn Whittle,  
617-918-1748  
whittle.caitlyn@epa.gov

Mystic River Watershed Assn.  
EkOngKar Singh Khalsa,  
Executive Director  
781-316-3438  
ek@mysticriver.org

### WEB SITE

For more information about the Initiative, visit our website at  
[www.epa.gov/mysticriver](http://www.epa.gov/mysticriver)

# MYSTIC RIVER WATERSHED



## REPORT CARD

Each year, EPA Region 1 issues a report card for the Mystic River Watershed based on sampling data from the previous year. The grade is determined after comparing bacterial water quality data at 15 MyRWA baseline sampling points throughout the Watershed to state swimming and boating water quality standards.