

Q and A with the Mystic River Watershed Association

Clean Water Campaign

How much do you know about water quality and the Mystic River? It is not unusual for residents and decision leaders in the twenty two Mystic River Communities to think that “someone else” is taking care of it. All of us are busy and it is easy to forget that our daily actions have a direct impact on the health of the river.

Here are recent comments made by EkOngKar Singh Khalsa, or “EK”, Executive Director of the Mystic River Watershed Association when I asked him to discuss the river, its future and the Association’s recently announced *Mystic River Clean Water Campaign*.

- Beth MacBlane
Outreach Coordinator
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Q. What are you announcing?

A. The Association is announcing a new initiative - a Mystic River Clean Water Campaign - based upon a new Water Quality Policy Statement and designed to guide the way to a healthier river. This policy statement outlines clear objectives that, when implemented, will move the Mystic River Watershed toward much improved water quality. The new Policy states that all storm water discharges to the river shall meet established State and Federal water quality standards and that human sewage will no longer be discharged to the Mystic River, or its lakes, streams or tributaries.

Q. How big of an issue is poor water quality in the Mystic River Watershed?

A. Poor water quality is a seminal issue for the Mystic. The river received a “D” water quality rating from the US EPA two years in a row based upon watershed wide water quality monitoring results. Since 2006, this water quality rating has fluctuated between C- and D-.

The D grade indicates that water quality met swimming standards only 46 percent of the time, while boating standards were met 87 percent of the time. This low grade reflects high levels of bacterial contamination and polluted stormwater runoff.

Q. Who is responsible for the pollution?

A. We all are. Many of the cities and towns in the Mystic simply have outdated infrastructure, that is, unfortunately, quite costly to repair. Town and city systems designed to move sewage to the world class MWRA treatment at Deer Island treatment leak like crazy. In addition, sewage overflows that occur when the system is overwhelmed with rain water cause untreated sewage to be discharged directly to the rivers and streams of the Mystic River system. Bacterial contamination from these sources pollutes the otherwise clean water of the river, everyday. This, of course, is harmful to water quality, aquatic life, and poses as a health risk. As an example, Alewife Brook in Cambridge frequently receives untreated waste overflows (as a result of permitted Combined Sewer Overflows). Combined Sewer Overflows (CSOs) also occur along the Mystic River and Chelsea Creek. The river and all its tributaries are also impacted by a steady drip of bacterial contamination from leaking pipe systems in up-stream communities.

In addition, unpermitted Sanitary Sewer Overflows (SSOs) discharge regularly in the main channel of the Mystic River and throughout the river system. During a heavy rain, millions of gallons of untreated sewage mixed with rain water are discharged directly to the Mystic River from the regional sewer trunk lines managed by the MWRA (Massachusetts Water Resources Authority). There is no permit for these activities and these discharges are essential emergency responses to a system that becomes overwhelmed by storm events. This is of particular concern as we look forward to more frequent and severe storm events as a result of climate change.

Although warnings are issued to advise people to stay off the river during some of these events, most Mystic River residents appear unaware that raw sewage is being discharged to the river and that sewage regularly spills out onto the streets of their towns and cities.

Q. What are other major sources of pollution in the Mystic?

A. Another major source of pollution in the Mystic River Watershed is stormwater runoff, a type of non-point source pollution. Polluted stormwater runoff results from rainfall or snowmelt running over impervious surfaces such as parking lots and roads, where it sweeps various pollutants such as chemicals, gasoline, and oil, and excess fertilizers to a stormdrain that empties into a nearby body of water. In the Mystic, a densely developed and largely impervious urban watershed, stormwater runoff is a problem throughout the 22 communities.

As was previously mentioned, raw sewage also finds its way to the river on a daily basis due to leaking municipal infrastructure. This occurs throughout the watershed, and speaks to the need of significant infrastructure improvements. Finally, because the Mystic River Watershed has a long history of industrialization a legacy of contamination continues to affect our waterbodies today.

Q. How does this impact me?

A. A polluted river in your community is a public health concern and prevents full enjoyment of the natural environment by residents. For example, blooms of cyanobacteria can send you to the hospital and bacterial contamination can make you ill. A polluted river also impacts home values, economic growth, and the aesthetic of the river.

Conversely, it is also well established that a healthy river provides great benefit to the communities through which it flows, eliminating public health issues, providing a greater variety of recreational opportunities to residents, improving the public's sense of well being and raising real estate values.

Q. Tell us briefly about the watershed and the work of the Mystic River Watershed Association.

*A. The **Mystic River Watershed** connects 22 cities and towns from Burlington to Boston where surface and ground water drains into the Mystic River. The Mystic River Watershed contains more than 500,000 residents or nearly 8 percent of the state's population.*

*The Mystic River Watershed Association is a registered non-profit organization that celebrated its 40th anniversary in 2012. The **Mystic River Watershed Association (MyRWA)**, with its dedicated staff and volunteers, monitors water quality, removes invasive species from the river, provides public education and serves as a consistent advocate to assure a healthy future for the river and to promote water quality improvement.*

The Mystic River is a marvelous urban treasure enjoyed by paddlers, runners, walkers, and fisherman. Each spring MyRWA's Annual Herring Run and Paddle attracts more than 250 runners and paddlers from all over New England to celebrate the spring return of migrating herring. The thriving natural life on the river remains vibrant and well established. In fact, a national federation recently held a bass fishing tournament on the upper portions of the river and lakes and enjoyed a great turn out and great results. The Mystic River Watershed Association is dedicated to the protection and preservation of this wonderful natural resource.

Q. You have announced a campaign to improve water quality. What is different from the past efforts?

A. The river's water quality is compromised. While we have been carefully monitoring what is going on and reporting on it, we now need to fully engage the public and our elected officials to think more carefully about what is happening to the river and to make the changes that will bring improvement. We have a "D" water quality rating according to the US EPA because of high levels of bacterial contamination that enter the water through municipal sewer and stormwater infrastructure. This grade

indicates that water quality met swimming standards only 46 percent of the time, while boating standards were met 87 percent of the time. A “D” grade is unacceptable for this important component of the Boston Metro region.

As part of its Mystic River Clean Water Campaign, the Mystic River Watershed Association unveiled a new Water Quality Policy Statement. This policy statement outlines clear objectives that will, when implemented, move the Mystic River Watershed toward much improved water quality. The new Policy states that all storm water discharges to the river shall meet established State and Federal water quality standards and that human sewage will no longer be discharged to the Mystic Rivers, or its lakes, streams or tributaries. These are simple and achievable objectives.

In recent years, improvements made in the Mystic River Watershed have helped to support a growing consensus that the Mystic River is a treasure that must and can be preserved.

It is easy to look nearby to see great examples of successful water quality restoration. Recently, there have been remarkable improvements in water quality achieved in the nearby Charles River which now routinely earns a “B” water quality rating or better. Also, the Boston Harbor Clean-up has brought new life to harbor front neighborhoods in Boston and to the harbor islands.

Although there have been many improvements completed in the Mystic River Watershed the Mystic needs similar attention, funding, financial resources and citizen involvement to move above its “D” grade status.

Q. What is the difference between a D and a B grade? I understand the Charles River has a B water quality grade.

A. *The difference is the level of bacterial contamination, and the number of times that the water quality samples meet national swimming and boating standards.*

Q. I thought the Federal Clean Water Act corrected the abuse of our rivers. What has happened?

A. *Well, the law as written proposes to do just that. However, after 40 years of enforcing the Clean Water Act, the EPA now issues waivers to municipalities that enable them to discharge untreated waste to the river during heavy rain storms. There are also violations of the law that are not addressed by regulators and that occur because of aging systems and city infrastructure that is long overdue to be rebuilt – especially in older Massachusetts towns and cities.*

Q. How does sewage get into the river?

A. Most sewage in the Mystic River Watershed travels to Deer Island where it is properly treated. Some substantial portion of this sewage, however, never makes it to Deer Island. This is the case because ancient and failing municipal sewer pipes leak and because during larger rain storms rain water infiltrates into the sewer system due to illicit connections and cracks in the infrastructure and causes the pipes to overflow!

In the case of heavy storms, where there is nowhere for the water – now a mix of stormwater and sewer water – to go, this water is discharged into local rivers and streams and sometimes directly onto city streets and property. Alewife Brook in Cambridge frequently receives these untreated waste overflows, through the Combined Sewer Overflow systems in Somerville and Cambridge. Warnings are issued by some cities and by MyRWA when this happens to advise people to stay off the river – and dogs too. For other overflows in the Mystic there is no public notification at all.

Q. You have a massive task in front of you, even with the law on your side. How do you proceed?

A. There is an old saying. A steady drip can change the shape of any rock. We plan to work very closely and deliberately with communities that are regular polluters. We intend to negotiate and set achievable goals with them and will establish benchmarks to track the progress toward achieving these goals. We will continue that process on a progressive basis until the river gets a “B” water quality rating. In addition we plan to work with legislators to secure legislative support for the effort to locate funding solutions.

Q. What else can be done? How can I help?

A. We need to renovate our cities. Almost 74% of the land in Somerville is impervious. That means the surface of the city does not allow rainwater to infiltrate. Impervious surface includes lots of the built environment including amenities such as parking lots, roads and roofs. This is true throughout the watershed. We need to make the land more “pervious”. Rain water needs to get back into the earth directly where it falls and not be sent down the drain where it floods storm and sanitary sewers. Examples of ways to accomplish this include rain gardens, rain barrels, and permeable pavement.

And the public needs to know what is happening! If, for instance, people could take shorter showers, hold up on doing the laundry until off peak hours, and could flush toilets less frequently during storms, overflows of raw sewage could be minimized and perhaps even prevented.

Q. Where can I go to get more information?

A. Our website www.mysticriver.org holds a wealth of information. And – if people want to join us in our efforts, we welcome their membership! That can also be done online. Feel free to contact the association at 781-316-3438.