

## **Use of the Charles River Water Sheet in the Area of the Throat**

The Allston Multimodal Project has brought a lot of attention to how to squeeze automobile, train, bicycle, and pedestrian traffic into a narrow ribbon along the edge of the Charles River between the BU Bridge and the River St. Bridge, the so-called "Throat".

Many of us in the boating community on the Charles River would like to see improvements to the roadways and the Paul Dudley White (PDW) pedestrian/bicycle path along the Charles River. We live in the community and experience the shortcomings of the current roadways and PDW path like everyone else. Many of the initial proposals to modify the roadways and the PDW path seem to view space on the water sheet as "free real estate", naively minimizing the impact upon users of the water sheet. This document is written to explain how the river is used by the boating community to the general community.

The Charles River is not "vacant space". It is probably the busiest recreational river in the country with more than 5000 people enjoying it every day. As the water quality has improved, recreational use has greatly expanded. The bulk of river traffic in the area of the Throat are rowers in singles, doubles, fours, and eights. Additional traffic includes coaching launches, motorboats, kayaks, paddle boarders, and the excursion boats of the Charles Riverboat Company. Passage under the BU Bridge and Grand Junction Railroad Bridge is a bottleneck for this traffic. Any traffic travelling downriver or upriver needs to squeeze into a single file through an arch of the railroad bridge while avoiding any boats near the dock of the BU Sailing Center and BU Rowing Boathouse. Many rowers opt to turn around, rather than pass through the BU Bridge. Wide enough for an 8-person shell to pivot, the area west of the BU Bridge is used as a turning basin. The width of the river here also provides a safe place for smaller boats to move closer to shore as faster boats stay in the center.

CRAB is willing to consider modification of the shoreline that might use a narrow ribbon of the water sheet along the throat if it would yield a better slice of park and pathway while penetrating into river shallows that we can't use. Some have proposed permanent structures extending into the river more than 50 feet and as much as 150 feet. CRAB remains steadfastly opposed to any permanent structure that would extend so far as to interfere with existing use of the river water sheet. Reduction of the usable water sheet along the Allston shore will compress river traffic laterally and potentially create unsafe situations where rowers, paddlers, and powerboaters are vying to use the same space. Of particular concern are conflicts between downriver and upriver traffic. These compressed traffic situations are particularly acute for rowers who aren't facing the direction that they are travelling toward. The margin of safety can be further reduced due to the low-light conditions of early morning and evening when rowers are often on the water.

Any discussion of the Throat on the Allston side needs to be mindful of the potential to restore Magazine Beach and the potential impact on use of the water sheet on the Cambridge side and any further restriction to use of the watersheet. Some congestion is already caused by boats leaving the small boat launch at Magazine Beach, merging with other boats hugging the

shoreline as they go upriver. If a public beach is built near the existing pool, it would likely extend 100 feet from the Cambridge shoreline, creating a major bottleneck, which would be made worse by any encroachment from the Allston shore.

The primary concern for power boaters is passage through the Boston-most arch of the Grand Junction Railroad Bridge. This bridge is the limiting vertical clearance of 13'6" for power boats on the river. Prior to the construction of the walkway under the railroad bridge, boats could more closely approach the Boston shore, where the vertical clearance is 3 inches higher. The impact was that several boats with flybridges that had been members of Newton and Watertown Yacht Clubs could no longer pass under the railroad bridge. Use of the Boston-most arch is also an important safety valve for rowers, especially those going slower such as singles vs eights. CRAB favors removing the walkway and positioning the path on the other side of the bridge abutment as detailed in some of the plans that have been proposed.

For any structure extending into the river, CRAB is very concerned about the potential for injury to a person or damage to equipment due to contact with the structure. Think about people rowing backward and running into things. Any structure that would be at a height that could lead to head injuries would need to be off the table. That might force any walkway structure to be at least 10 feet off the water.

Beyond the potential for injury, CRAB is concerned about the impact of putting a walkway on pilings in the river since it could further reduce flow and encourage further sediment build-up. Our recent depth chart shows a shallow region spanning the entire width of the river that has a maximum depth of nearly 8 feet. Compared to a survey done in 1920, this area is now 4-6 feet shallower. **This area has lost 4-6 feet of water depth in the last hundred years.** While there is still nearly 8 feet of water there, sedimentation is clearly a threat.

CRAB is also concerned about any shoreline modification that could become a magnet for floating trash and maintaining the ability of the Cleanup Boat to access the shoreline and remove such trash.

CRAB is encouraged that MassDOT has indicated that the river bank can be stabilized using natural materials and native vegetation. Since it would reduce wake bounceback, a sloping bank would be an improvement over the existing shoreline wall and the corrugated steel wall of some proposed designs. An important consideration in this project should be the reduction of erosion, sediment and stormwater run-off, loading of nitrogen, phosphorus, and other undesirable nutrients. After decades of improvement in water quality, attention should also focus on restoring and supporting better aquatic habitat. An important aspect of this should be the re-establishment of the natural ecological balance with aquatic flora and fauna by supporting and protecting nursery and feeding habitats of fish, bivalves, worms, and insects.