

Muddy River Restoration Project

Maintenance and Management Oversight Committee Post Office Box 470535 Brookline, Massachusetts 02447

www.muddyrivermmoc.org

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MMOC Voting Members

Kelly Brilliant (Chair) The Fenway Alliance Elisabeth Cianciola Emerald Necklace CAC Janice Henderson Longwood Collective H. Parker James Charlesgate Alliance Lisa Kumpf Charles River Watershed Association Arlevn Levee Emerald Necklace CAC Jack Malone Muddy River Restoration Project Technical Advisory Committee Kay Mathew Emerald Necklace CAC Karen Mauney-Brodek Emerald Necklace Conservancy Marilyn Ray Smith Brookline GreenSpace Alliance Fredericka Veikley Emerald Necklace CAC

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MMOC Administrator
Matt Eddy

Secretary Rebecca Tepper Massachusetts Executive Office of Energy and Environmental Affairs 100 Cambridge Street, 10th Floor Boston, MA 02114

Commissioner Bonnie Heiple Massachusetts Department of Environmental Protection 100 Cambridge Street, Suite 900 Boston, MA 02114

Deputy Commissioner Gary Moran Massachusetts Department of Environmental Protection 100 Cambridge Street, Suite 900 Boston, MA 02114

Dear Secretary Tepper, Commissioner Heiple, and Deputy Commissioner Moran,

The Muddy River Restoration Project is a \$92 million multi-decade, multi-jurisdictional riverine rehabilitation project that was undertaken in the mid-1990s after devastating flooding of the Muddy River. The Muddy River runs between Boston and Brookline and is an integral part of the Emerald Necklace, Frederick Law Olmsted's legacy park. The restoration project is of vital importance to the Muddy River, the defining element in one of the nation's most historic urban landscapes. The Project has been managed by the US Army Corps of Engineers in cooperation with the Massachusetts Department of Conservation and Recreation, the City of Boston, and the Town of Brookline, with citizen oversight provided by the Muddy River Maintenance and Management Oversight Committee (MMOC). Members of the MMOC were appointed by the Secretary of the Executive Office of Energy and Environmental Affairs to provide citizen oversight to the Muddy River Restoration Project, with a focus on long-term management and maintenance and public communication about the project. The MMOC represents a consortium of the state, as well as local project stakeholders, together with invested institutional, community and environmental organizations and private citizenactivists, many of whom have been involved since the MMOC's formation in the early 2000's.

As the work draws to a close, the MMOC is extremely concerned about the abnormally low water levels that are an unexpected and environment-threatening result of the construction process. Among the numerous negative impacts of the river's low water levels is the threat of altered river classification from 'perennial' to 'intermittent.' Such a change in this culturally and economically important resource brings with it profound consequences to the citizens of the Commonwealth.

The two phases of the Muddy River Restoration Project have been of tremendous value to the Boston and Brookline area, particularly by increasing water storage capacity, protecting key infrastructure, and providing related environmental improvements. The Muddy River, with its accompanying parks, is critical to the economic and social well-being of one of the most densely populated and culturally important areas of Massachusetts. But, despite major improvements brought by the project, the Muddy River continues to be a significantly challenged waterway, documented by the Charles River Watershed Association as the most contaminated tributary to the Charles River. This ongoing condition, together with low water levels, have serious negative implications for this historic open space and public health resource, serving multiple communities in Boston and Brookline, including several that are low income and historically underserved by open park spaces.

Phase I construction of the restoration project began in 2011. At some point during this construction period, a flood reduction control structure (FRCS) was installed upstream of the Landmark Center area to control water levels during construction. The planned reduction in the height of the FRCS in March 2023 as the project draws to a close revealed that water levels upstream were approximately .5"* lower than originally designed.

For some rivers, such a change of water level may not be significant. For the Muddy River, where the water depth is limited and the elevation drops less than a few feet over its entire three-mile length, such an alteration in the water depth profoundly affect the river's nature, function, and environmental character. Currently in some very shallow areas, the water no longer spans bank to bank, but rather exposes large areas of unsightly mud, extending a considerable distance over the course of the river.

While we understand that the Army Corps of Engineers has agreed with the Department of Environmental Protection to monitor this "unforeseen circumstance" of low water levels over the next two years for flood capacity and water level management, there are critically important potential short and long-term impacts that may need to be addressed much sooner than a two-year period and will need a more immediate plan for remediation.

We anticipate that monitoring will likely be efficacious, but we do not think that data collection should be an end, nor that there should be a delay in the development of viable, sustainable solutions during the 2-year monitoring period. Coordinated solutions should be on-going while the monitoring proceeds or else momentum for this critical project is lost and the water level problem will worsen to the point of crisis.

Importantly, low water level conditions are inconsistent with the Army Corps contract documents as well as with the overall plans and goals for the project among the collaborating partners and stakeholders as stated in the various organizing agreement documents.

^{*}Correction: water levels upstream were approx. .5' (6 inches) lower than originally designed.

Low water levels negate overall project goals - here are current impacts of lower water levels:

1. Reduced Habitat Function:

- a. Low water levels limit the habitat space for migratory aquatic species in the Muddy River, in particular the blueback herring (*Alosa aestivalis*).
- b. Newly exposed mudflats are being colonized by highly invasive wetland plants, such as phragmites, which this project was actually designed to eliminate at great expense to deter impaired storage capacity. Such plants have potential to rapidly overtake newly planted banks, which is wholly inconsistent with the project goals and plan.

2. Public Health Risks:

- a. Lower water levels and less water flow contribute to difficulties in cleaning up water quality.
- b. Newly exposed areas of mudflats provide breeding grounds for mosquitos and other disease vectors.
- c. Large new areas of previously underwater soils, which are likely to contain toxic river sediments, will be now be accessible to public park users.

3. Increased Maintenance Costs and Burden:

- a. Large land areas that were previously covered with water are now exposed, resulting in river edges inconsistent with the project goals and plan for the rehabilitation of this historic landscape. These edges will now require remedial treatments (see 2 above) with cost implications for maintenance.
- b. Exposed river edges may require planning to regrade and replant, again with additional cost implications for sustaining bank stability (see 1 above).
- c. The lower water level will have impacts on the new plantings and restoration areas provided by the Army Corps project.

4. Inconsistency with Historic Landmark designation:

a. Very different and unappealing river conditions with large mudflats for the Muddy River component of the Emerald Necklace would be inconsistent with the designation of this linked park system as a National Historic Landmark of international significance. This would become particularly deleterious if the low water level conditions cause the Muddy River to be downgraded to 'intermittent.'

In partnership with the non-federal sponsors who are entrusted with maintaining the project (the City of Boston, the Town of Brookline and the Department of Conservation and Recreation), the MMOC joins in advocating for imperative and timely mitigation of the needs of this river, for the abutting historic public parks and landscapes, and for communities that depend on them.

We look forward to working with you to mitigate the consequences of this unexpected situation. We hope we can work together to itemize and assess the potential negative impacts listed above, to identify resilient and sustainable solutions in a timely manner, and to find economically viable remediations that are consistent with the original goals of the project.

On behalf of the MMOC, we request a meeting with you to define and implement a more robust strategy that will address this critical issue during the current proposed two-year monitoring period by the Army Corps.

We look forward to collaborating with you for solutions to this immediate, critical problem.

Sincerely,

Kelly Brilliant, Chair

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Muddy River Maintenance and Management Oversight Committee

Tel: 617-697-4362

kbrilliant@fenwaycivic.org