



I-90 Interchange Project

CRWA's Priorities for Design Decision-Making for the I-90/Allston Intermodal Project (July 2019)

Prior to 1908, the Charles River was an estuary open to the Boston Harbor, with twice daily tide cycles. In what is now the I-90/Allston Intermodal Project area ("Project Area"), salt marshes and freshwater meadows buffered the main stem of this estuary, providing natural flood control by storing excess water volume and filtering out nutrients and pollutants. Today, the Project Area is mostly covered by human-made impervious surfaces that have severely disrupted the natural hydrology, and stormwater runoff drains to a series of outfalls and directly into the River.

As the design and regulatory processes necessary to advance the preferred alternative for the I-90/Allston Intermodal Project move forward, MassDOT, DCR, MassDEP and others will be making critical decisions that will have significant, long-term impacts on the future of the Charles River Basin—both its ecology, water quality and overall resiliency, and the ecosystem of the land bordering the River on both sides. Directly addressing these impacts must continue to be an integral part of the ongoing discussions among all stakeholders involved in the Project.

Charles River Watershed Association ("CRWA") takes the position that up-to-date, robust scientific data should drive the design of what will happen in and along the banks of the Charles River between the Boston University Bridge and the River Street Bridge, including the "Throat Area." **Specifically, the following science-based objectives should be adopted as the measuring sticks by which proponents, opponents, federal, state and local regulators, Task Force members and other stakeholders evaluate all Project design elements that have the potential to impact the River and its banks:**

1. Preventing further River bank degradation.
2. Restoring aquatic and riparian habitat, especially along the River bank, including by re-establishing more natural shorelines, planting vegetation to provide fish habitat, and enhancing floodplain connectivity within the Project Area.
 - a. Much of the existing River bank is degraded and eroding, with the result that once productive fish habitat has largely disappeared. This is a serious problem, because the Charles River is an important fish run for alewives, blueback herring and American shad, all of which are migratory fish that return to the River each year to spawn.
3. Reducing or fully eliminating stormwater runoff that currently discharges to the River via overland flows and outfalls (including 13 outfalls along Soldiers Field Road in the Throat Area).
 - a. The entire Project Area should be treated as a single "stormwater management district" to be addressed through a sub-watershed green infrastructure plan. As CRWA has previously proposed, green infrastructure systems could include "blue greenways" (bioretention/wet weather corridors) and constructed wetlands, which would have the capacity to capture stormwater runoff from 1" - 5" rain storms.
 - b. The stormwater management elements of the Project design must have the ultimate goal of improving water quality in the River by reducing erosion, sedimentation and pollution, and increasing flood storage capacity.

c. Increases in wetland habitat within the Project Area could improve stormwater management by redirecting stormwater flows out of the existing combined sewer overflows (“CSOs”). Wetland enhancements could also serve as habitat for multiple species while naturally treating and retaining water that would normally enter the CSOs, thereby preventing potential contamination of the River.

4. Ensuring compliance with the phosphorus limits established in the state’s Lower Charles River Basin Nutrient Total Maximum Daily Load (the “Nutrient TMDL”)

a. The Project design must include a stormwater management system that achieves the 64% phosphorus load reduction established in the Nutrient TMDL.

5. Providing for flood resilience, control and storage capacity for the precipitation-based inland flooding that is anticipated based on current and expected climate change impacts.

a. As MassDOT recognizes, climate change will result in increased precipitation and overbank flooding in the Project Area. The Throat Area in particular is a critical piece of land for flood resiliency planning. It is already vulnerable to flooding and inundation from extreme storms, and this risk will only increase over time. The Project design must consider both how to protect the Project Area from the risk of flooding and how to utilize the Project Area to increase flood storage and capacity at the sub-watershed and watershed levels.

6. Creating multi-functional blue-greenways (linear open space corridors) and green streets that can filter stormwater runoff to reduce pollution from entering the river, increase groundwater recharge and provide open space to absorb excess precipitation and flood conditions.

7. Addressing historical contamination in compliance with applicable requirements.

a. Historical development in and in the vicinity of the Project Area has resulted in contaminated soils in the landside riparian zone and contaminated sediments in the River bed. These contaminants can be dispersed into the River during flooding, high flow or storm water runoff events, impacting water quality and habitats through ongoing releases.