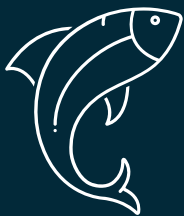


# THE CASE FOR REMOVING WATERTOWN DAM.

The Watertown Dam is a 180-foot long, 8-foot high concrete weir structure in the Charles River in Watertown, MA. Created in the 1600s to power grist and paper mills, the Watertown Dam served active mill power and passive electricity power into the 1900s, but **today serves no purpose for power or flood control**. Charles River Watershed Association, the Watertown Conservation Commission, and others have long expressed interest in evaluating the potential to remove Watertown Dam and restore the river.

In 2016, an inspection report found that **Watertown Dam is in "poor" condition** and Charles River Watershed Association applied to the Department of Ecological Restoration for support in conducting a feasibility study to investigate the removal of Watertown Dam. **Dam removal is becoming increasingly favorable in Massachusetts** as our aging dams impede migratory fish passage, degrade river ecosystems, and are susceptible to failure as climate change brings more frequent extreme weather events. In 2021, the Feasibility Study confirmed dam removal would be beneficial for all.

- Pre-1600s Indigenous use as fish weir
- 1634 Stone dam constructed
- 1700-1800s Used as active mill power
- Early 1900s Passive dam for electricity
- 1966 Rebuilt with current spillway
- 1972 Fish ladder constructed
- 2015 DMF finds fish unable to pass
- 2016 Inspection: "poor" condition
- 2017 Feasibility Study accepted by DER
- 2021 DER Completes Feasibility Study



## Impede Fish Passage

The Watertown Dam is a major barrier to fish and eel passage during critical migrations. Migratory fish such as blueback herring, alewife, rainbow smelt, and American shad migrate to and spawn in the Charles River each year. According to a study from DMF, the fish ladder is not effective at passing female American shad + rainbow smelt.



## Degrade River Ecosystem

When dams are constructed, they raise water levels upstream, creating an impoundment and submerging the natural floodplain around the river. Water quality degrades because slow flows allow for temperatures to rise, harmful pollutants to accumulate, and oxygen levels to decrease. **These threats lead to invasive species growth, cyanobacteria blooms, and habitat destruction.**



## Susceptible to Failure

The dam is a significant hazard to because of the densely populated area downstream. If the spillway failed during a storm, downstream flooding would damage homes, businesses, and infrastructure, or could lead to potential injuries or deaths. **With increasingly intense storms due to climate change, dam failure is an even greater concern.**

# THE CASE FOR REMOVING WATERTOWN DAM

## HYDROLOGICAL ASSESSMENT

Dam removal would restore the floodplain upstream of the dam. This would increase the area's resilience to flooding, as more water could be stored within the restored floodplain area, reducing flood elevations up to 6 feet. Flooding risks downstream of the dam would also be reduced without the hazard of potential failure.

## SEDIMENT ASSESSMENT

Dam removal has the potential to release contaminated sediments downstream. The sediment assessment found that there are contaminated sediments behind the dam, and that further testing will need to be done to create a sediment management plan. Initial testing found that about 170 truckloads of sediment may need to be removed for proper disposal offsite. Removing this contaminated sediment from the Charles River system will ultimately improve the ecosystem.

## DESIGN CONSIDERATIONS

Designing the look and feel of the river corridor after dam removal can be tailored to the needs of the site and the community. Since the dam is located at a natural elevation change, a rocky riffle with rushing water sounds would be appropriate to replace the location of the current spillway. Upstream, the water level will be drawn down, and native vegetation would be planted on the newly uncovered land to restore a healthy river bank. In this area, the Charles River Greenway trails and overlooks could be extended and repositioned closer to the water for all to enjoy.

## REMOVING WATERTOWN DAM IS FEASIBLE & WOULD IMPROVE THE AREA FOR PEOPLE + NATURE ALIKE!

With support from residents and elected officials, we can remove this derelict dam and restore a natural, free-flowing Charles River.

SUPPORTERS INCLUDE... [American Rivers](#), [Watertown City Council](#), [Watertown Conservation Commission](#), [Newton Conservators](#), [Green Newton](#), [Weston Conservation Commission](#), [Wellesley Natural Resources Commission](#), [Dedham Sustainability Committee](#), [Waltham Conservation Commission](#), [Waltham Land Trust](#), [Natick Sustainability Committee](#), [The Nature Conservancy](#), [Mass Audubon](#), [Massachusetts Rivers Alliance](#), [Native Fish Coalition Massachusetts](#), [Sierra Club Massachusetts](#), [Trout Unlimited Greater Boston](#), [Charles River Regional Chamber](#)

## THE NUMEROUS BENEFITS OF DAM REMOVAL:

- Improved habitat connectivity for fish and wildlife
- Improved river ecosystem water quality and habitat quality
- Restored floodplain and floodwater storage
- Removal of contaminated sediments
- Elimination of hazard of dam failure
- Improved opportunities for wildlife observation, recreational fishing, and boating
- Eliminated dam maintenance and liability for the owner
- A free-flowing, uninhibited Charles River

**LEARN MORE >> [crwa.org/dam-removal](https://crwa.org/dam-removal)**