



City of Cambridge

Executive Department

YI-AN HUANG
City Manager

CMA 2026-267
IN CITY COUNCIL
September 28, 2026

To the Honorable, the City Council:

I am hereby requesting the appropriation of \$2,250,000 from the Water Fund Balance (Retained Earnings) account to the Water Fund Other Ordinary Maintenance account to fund the purchase of supplemental drinking water from the Massachusetts Water Resources Authority (MWRA) in order to maintain reliable service during ongoing drought conditions. As of June 30, 2026 the Water Fund has a balance of \$7,805,202.

Background

Cambridge's water supply relies on three reservoirs—**Hobbs Brook, Stony Brook, and Fresh Pond**—which together comprise a 24-square-mile watershed across Cambridge, Lexington, Lincoln, Waltham, and Weston. Hobbs Brook and Stony Brook Reservoirs are designated **Outstanding Resource Waters**, and Fresh Pond serves as the terminal reservoir feeding the City's treatment plant.

Historically, Eastern Massachusetts experienced consistent precipitation, predictable snowpack, and gradual spring snowmelt. Today, due to rapid climate warming, the region faces dramatic shifts in precipitation patterns. Winter precipitation increasingly falls as rain on frozen ground, storms are fewer but more intense, and saturated or hydrophobic soils limit infiltration. The result is a pattern of **flash floods and flash droughts** that significantly reduces the City's ability to capture and store water. Extended drought conditions in recent years have left portions of Hobbs Brook Reservoir dry during late summer and fall, when demand is highest.

Between 1965 and 2015, Cambridge experienced three major droughts. Since 2016, we have had **five**, including the ongoing drought that began in 2025. Although Cambridge residents are among the lowest water users in Massachusetts—consistently below both the state average and the state conservation goal, the City's reservoir system increasingly cannot fully recharge under present climate conditions.

Despite an 18% population increase since the 1980s, the City has successfully reduced daily water demand by approximately 26% through aggressive water-loss control, leak detection programs, and long-term conservation measures. Nevertheless, demand reduction alone can no longer compensate for climate-driven storage shortfalls. Long-term reliability will require strategic use of MWRA's Quabbin Reservoir supply.

City Response and Current Preparedness

Public Outreach



The Water Department collaborates with the Communications Department and other City agencies to disseminate drought advisories to promote institutional, commercial and household conservation. Outreach reaches more than 60,000 impressions through City digital channels, NextDoor alerts, social media engagement, and physical bill inserts.

Regulatory Measures

An amendment to City Ordinance **13.08.090**, enacted April 7, 2025, enables the City to implement and enforce restrictions on non-essential outdoor water use under the Water Management Act (310 CMR 36.07).

Climate-Ready Actions

Since publishing the 2016 Water System Master Plan, the department has pursued systematic annual city-wide leak detection, rapid repair of major water mains, and infrastructure improvements aimed at minimizing water losses.

CWD is working in collaboration with the city's Office of Sustainability applying for grants to conduct a feasibility study to research and analyze potential ways to increase the city's water supply and/or storage capability.

Financial Considerations

The Water Department is funded primarily through water-rate revenue. During droughts, conservation reduces consumption—and thus revenue—precisely when supplemental MWRA water purchases are most likely to be required. In the future, aligning departmental revenues with these projected climate change associated expenditures will become an essential aspect of ensuring long-term system reliability.

Justification for Appropriation

The requested appropriation will enable the city to maintain essential drinking water and fire protection service throughout the continuing drought period. Cambridge's reservoirs are currently operating near minimum sustainable levels, and supplemental MWRA water is likely to be necessary to meet daily demand over the coming months. Ensuring uninterrupted water service is critical for public health, emergency response, and general municipal operations.

Conclusion

Given the severity and persistence of current drought conditions, the Water Department recommends approval of the proposed transfer of funds. This proactive measure will maintain reliability of Cambridge's water supply and support the City's long-term climate-resilience objectives.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Yi-An Huang', with a stylized flourish at the end.

Yi-An Huang
City Manager