Frequently Asked Questions

About Haverhill's Requested Emergency Water Supply Declaration

1. What is a Water Supply Emergency Declaration?

A Water Supply Emergency is a declaration approved by the Massachusetts Department of Environmental Protection (MassDEP) that allows a community to take specific actions to protect public drinking water supplies during extraordinary conditions such as severe drought. Learn more about Emergency Water Supply Declarations (generally) by reading the State's Drought Management Plan | Mass.gov.

2. Why did Haverhill request a Water Supply Emergency Declaration?

Haverhill is experiencing a water availability emergency caused by prolonged drought—not an identified drinking water contamination emergency.

- **Prolonged Drought:** Approximately two years of insufficient precipitation and declining water levels have substantially reduced available reservoir storage.
- **Kenoza Lake:** Water levels have fallen approximately 11 feet below normal operating elevation for this time of year and 17.5 feet below full.
- **Millvale Reservoir:** Critically low water levels have made supplemental supply very limited.
- **Crystal Lake:** Drought conditions have limited its ability to replenish Kenoza Lake.
- **Essential Demand:** The City must maintain sufficient water supplies for drinking, sanitation, businesses, essential services, and fire protection.

Regional drought classifications do not reflect Haverhill's specific water supply conditions. Rainfall varies geographically, and Haverhill relies primarily on surface-water reservoirs that depend on adequate precipitation to replenish their storage. Unlike neighboring communities that actively withdraw water from the Merrimack River, Haverhill's existing supply is more directly affected by prolonged periods of insufficient rainfall. As a result, improvements in regional drought conditions do not automatically translate into increased water availability for Haverhill.

3. Did MassDEP declare a Water Supply Emergency?

Yes. On Wednesday, November 18, MassDEP approved the City's request to declare a Water Supply Emergency in Haverhill. **Read the full Water Supply Emergency Declaration.**

4. Is Haverhill running out of water?

The emergency declaration is intended to prevent the City from running out of water by allowing temporary emergency measures to ensure the City does not run out of water. At present, and if no rain or human intervention occurs, the City would have a little more than four months of water supply left.

5. What happens if the emergency is not declared?

Without emergency authorization, the City would have fewer options available to supplement its water supply and could face more severe restrictions or supply challenges if drought conditions continue.

6. Why didn't the City take this step earlier?

The City had been evaluating a variety of options to replenish and strengthen its water supply for some time. Historically, reservoir levels recover through normal rainfall and seasonal replenishment, therefore previous conditions did not warrant an Emergency Water Supply Declaration.

However, after two consecutive years of drought and continued declines in reservoir levels, the City reached a point where relying on natural replenishment alone was no longer sufficient and emergency intervention was determined to be necessary. As the City advanced potential supplemental water supply solutions, it determined that obtaining an Emergency Declaration would help facilitate and expedite the regulatory and permitting processes needed to move potential solutions forward.

7. What has the City done to conserve/reduce water usage as an organization?

Haverhill has been diligent and committed to extensive conservation practices resulting in a current 51 gallons per capita day and unaccounted for water between 3.9%-13% over the past five years. Haverhill has also undertaken the following initiatives: triennial leak detection surveys, improved master metering and meter replacement programs, water use restriction ordinance update and enforcement, WTP upgrades to improve efficiency including process water recycling, low-flow water fixtures made available to residents and businesses, and a soon-to-be-proposed tiered-rate system.

8. Why did MassDEP reference Flint, Michigan's crisis in its letter that accompanied the Emergency Declaration?

Flint, Michigan, serves as a cautionary example of why water quality safeguards, corrosion control, and regulatory oversight are essential when introducing new drinking water sources.

MassDEP's emergency declaration references the drinking water crisis in Flint, Michigan. While we recognize that this comparison may raise understandable concerns, **the circumstances facing Haverhill are fundamentally different.**

- **Flint's Crisis:** A change in drinking water sources without adequate corrosion control, combined with serious regulatory and oversight failures, resulted in widespread lead contamination and significant public health consequences.
- **Haverhill's Emergency:** Prolonged drought has depleted the City's available water supplies, requiring the evaluation and development of supplemental sources if drought continues.
- **Existing Safeguards:** Haverhill operates an established water treatment facility with filtration, disinfection, corrosion control, and routine water quality monitoring designed to treat surface water.
- **Regulatory Oversight:** MassDEP is actively overseeing the City's emergency response, requiring engineering evaluations, water quality testing, treatment compatibility assessments, and additional monitoring. While direct withdrawal from the Merrimack River has not yet been authorized, the City continues to work closely with MassDEP to address outstanding requirements and obtain the necessary approvals, ensuring that public health and drinking water quality remain protected.

MassDEP's reference to Flint reinforces an important lesson: introducing a new water source requires careful evaluation of water chemistry, corrosion control, and potential impacts on drinking water quality.

About the Merrimack River

9. Why is the City considering the Merrimack River?

Decades of water supply studies have determined that the Merrimack River is the most sustainable long-term water source available to Haverhill.

10. Are other communities already using water from the Merrimack River?

Yes. Neighboring communities including Andover, Lawrence, Methuen, Tewksbury, and Manchester, NH, already use the river as a water source. Per MassDEP, these water treatment system of these communities were designed to treat Merrimack River Water.

11. When will the City begin drawing water from the river?

Once the City performs all necessary testing and regulatory requirements as outlined by MassDEP and receives approval, the City will begin pumping from the river as needed. City

may not need to draw water if weather conditions improve and reservoir levels recover sufficiently.

12. How much water will be taken from the river?

The maximum permitted withdrawal rate is 9 million gallons per day per our request with MassDEP, however, the agency may reduce or increase the amount of water the City can pump a day.

13. Will drawing water from the river affect fish and wildlife?

No, the intake structure will be designed with a screen to protect all wildlife.

14. Is Merrimack River water safe to drink?

Yes. Many communities draw from the river (**Andover, Lawrence, Lowell, Methuen, and Tewksbury**). Any water withdrawn from the river will be treated before entering the drinking water system and must meet all state and federal drinking water standards. The water Haverhill takes from the river will be transferred to reservoirs and then treated at the City's treatment plant before distribution. DEP will also require sampling and testing prior to approval of any withdrawal to ensure the water will be safe to drink.

15. Do CSO (sewage discharge events) events past and present affect the quality and safety of the Merrimack River?

Because the Merrimack is a flowing river, water quality conditions are continuously changing and monitored by regulators and water suppliers. There is no permanent "sewage-contaminated" section of the river from a single incident. Water quality improves over distance through dilution, natural biological processes, settling, sunlight exposure, and mixing. A sewage release upstream does not remain concentrated in one location indefinitely

Although there was a significant sewage discharge to the Merrimack River this past summer, contaminants in a river move downstream and become diluted over time. Any water used by Haverhill would be tested, monitored, and fully treated before entering the drinking water system. Below is a more detailed explanation.

16. Is there salt water in the Merrimack River where the City might pump?

No. The proposed withdrawal location is upstream of where saltwater intrusion would affect river water quality under normal conditions. The City will test and monitor water quality, including salinity levels, to ensure the water remains suitable for drinking water treatment and use.

17. Will my tap water taste different?

It should not.

18. Will water quality standards change?

No. Haverhill's drinking water must and will continue to meet all applicable state and federal standards regardless of the source.

19. Will additional testing be performed?

DEP may require additional testing in the declaration of water supply emergency.

20. Is the water being treated differently than it is today?

The treatment plant process will be the same.

21. Should residents use bottled water?

No, unless specifically advised by public health authorities.

About the City's Water Supply

22. How low are the reservoirs?

Haverhill's drinking water is sourced from three separate reservoirs: Crystal Lake, Millvale Reservoir, and Kenoza Lake, which rely on rain and runoff to replenish supply.

Kenoza Lake

Current Level:	97.1	feet
Level When Full:	114.5	feet
Pumped in 2025	2,085.2	million gallons
Pumped 2026 YTD:	1,732.0	million gallons
Usable Volume:	675	million gallons
Net Pumped Inflow:	-450.59	million gallons

Crystal Lake

Current Level:	145.3	feet
Level When Full:	151.1	feet
Pumped in 2025:	316.07	million gallons
Days Pumped in 2025:	106	days
Current Pumping Rate:	2.0	mgd
Pumped 2026 YTD:	300.51	million gallons
Days Pumped in 2026:	204	days
Est. Days to Pump:	139	days **

** based on current pump rate with no reservoir inflow

Crystal Lake pumping capacity is 3.0 million gallons per day

Millvale Reservoir:

Current Reservoir Level:	39.0	feet
Current Well Level:	39.0	feet
Level When Full:	44.7	feet
Pumped in 2025:	1,310.57	million gallons
Days Pumped in 2025:	234	days
Current Pumping Rate:	2.3	mgd
Pumped 2026 YTD:	980.86	million gallons
Days Pumped in 2026:	230	days
Estimated Days to Pump:	8	days **
	3	days ***
	2	days ****

** based on 2.0 mgd pump rate with no reservoir inflow

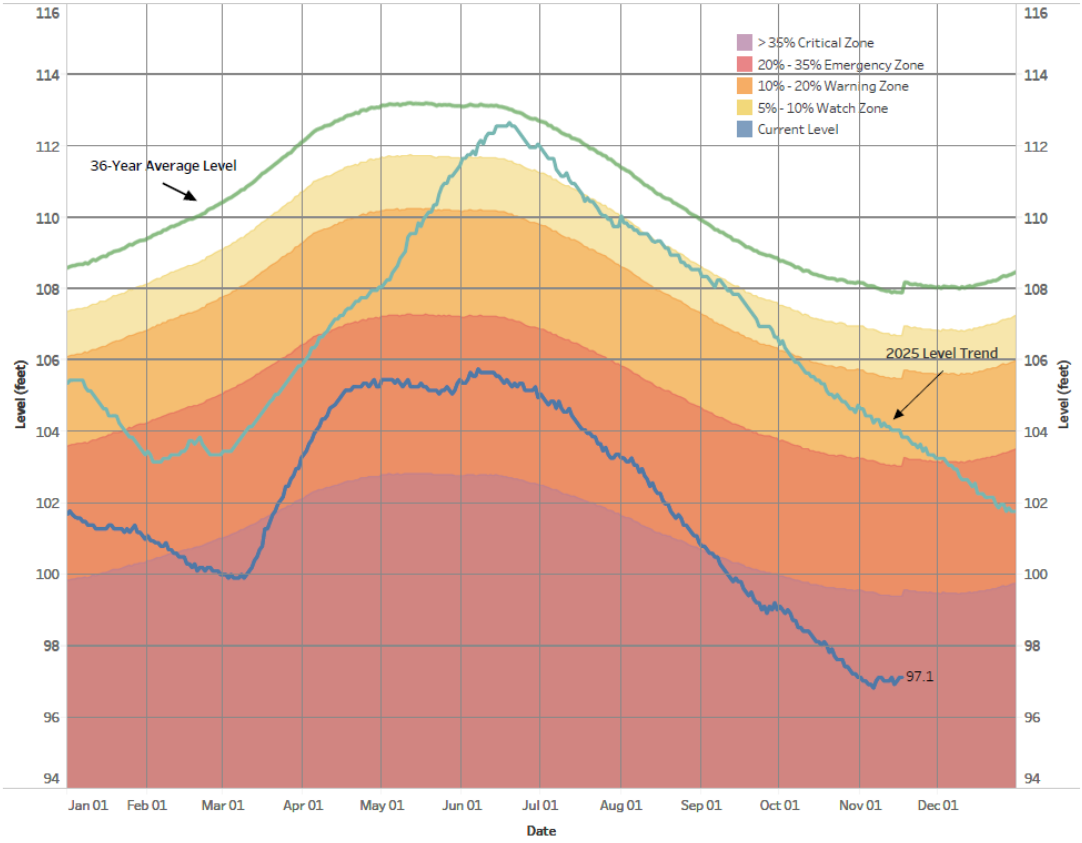
*** based on 6.0 mgd pump rate

****based on 9.0 mgd pump rate with no reservoir inflow

Millvale Pumping capacity is 2.0 - 9.2 million gallons per day

Kenoza Lake, the City's primary drinking water source, is approximately 11 feet below normal operating elevation for this time of year and 17.5 feet below full. This is the lowest level on record.

Kenoza Lake Drought Stages with Current, 2025, and Average Levels



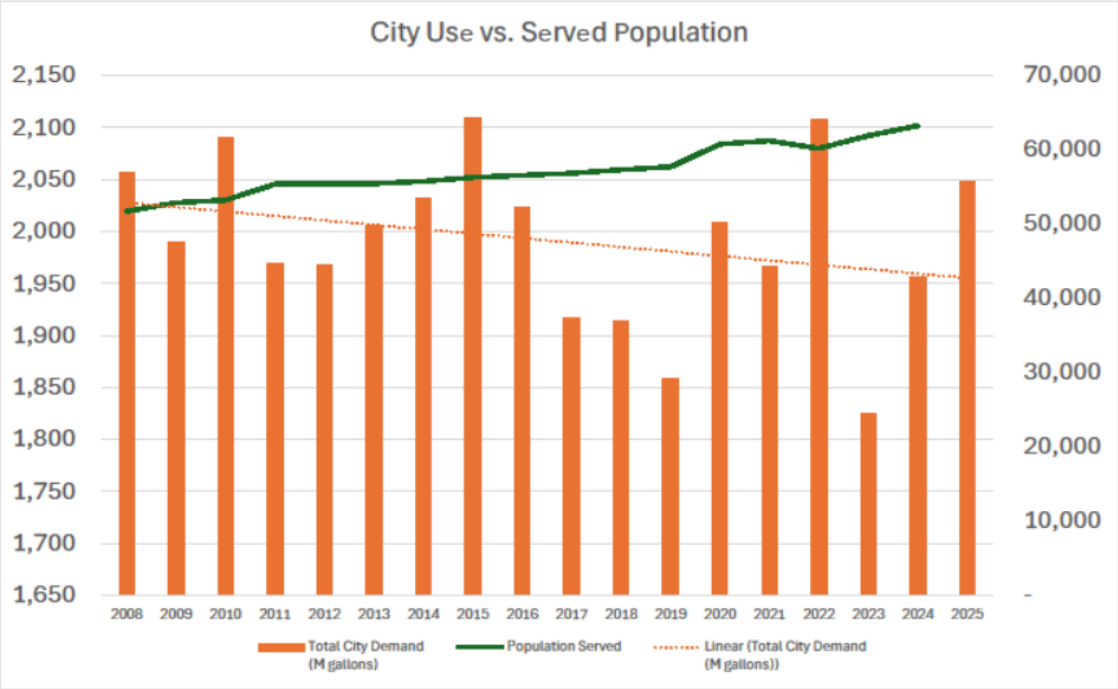
23. How long has the drought been affecting the City?

On and off for several years, but the most recent string of droughts, which began in 2024, have resulted in an inability to replenish Haverhill's already dwindling water supply.

24. Have new developments/buildings caused Haverhill's water use to increase/this drop in supply?

No. Haverhill's water use has reduced since 2022 despite any new growth, and Haverhill's drop in supply is caused by a longstanding, two-year drought that began in 2024. The following is a graph that shows Haverhill's population growth overtime in comparison to Haverhill's water usage over the same period.

Haverhill Water Usage vs. Population



25. How *did* Haverhill's water supply get here?

The City first identified it would have future water supply challenges in the 1960s. Since then, under multiple administrations, the City conducted numerous water studies over several decades: in 1971, 1987,1996, 2000, 2003, 2010, and 2011. The consensus of the studies is that the Merrimack River is the most sustainable long-term drinking water source for Haverhill.

In October 2016, the City Council authorized a $17.2 million loan to advance the construction of Radial Collector Well project that would sustain Haverhill's water supply for generations to come, however, the prior mayoral administration prioritized other initiatives and did not execute the project.

More recently, Haverhill has experienced varying levels of droughts on and off for nearly a decade, and for the past two years, has endured critical drought conditions, causing the reservoirs to drop to critically low levels:

- November 2024: A drought watch began.
- March 2025: Declared emergency drought.
- May 2025: Declared end of drought emergency.
- September 2025: Drought watch began.
- December 2025: Drought emergency declared.

- February 2026: Critical drought status.
- March-Present 2026: Haverhill remains in Level 4 Drought Emergency Stage
- November 5, 2026: Haverhill sent a request to MassDEP declare a Water Supply Emergency in Haverhill, which included a request to expedite the multi-agency permitting and approval process for the construction of the new RCW.
- As of November 16, 2026, Kenoza Lake—Haverhill's primary drinking water source—is approximately 11 feet below average, reflecting the severity of the ongoing drought.
- November 18, 2026: MassDEP declares a Water Supply Emergency in Haverhill.

26. Is the City still providing water to Groveland and Plaistow?

Yes. We supply 28 houses in Groveland on Center Street. This is a continuation and goes back decades to when the City used Johnsons Pond as a water supply source. Haverhill has an agreement with Stateline Plaza in Plaistow to supply water and sewer service. The amount of water supplied to these communities represents a very small portion of Haverhill's overall water demand and is not the cause of the City's current water supply challenges. The primary cause of current conditions is the prolonged drought and lack of reservoir replenishment.

27. Can the City ask businesses like car washes to stop usage?

Yes, the City can ask businesses to stop usage, however, businesses like car washes use about 70% recycled water on average, and Haverhill's water usage is not the issue: Haverhill's water usage has reduced since 2022.

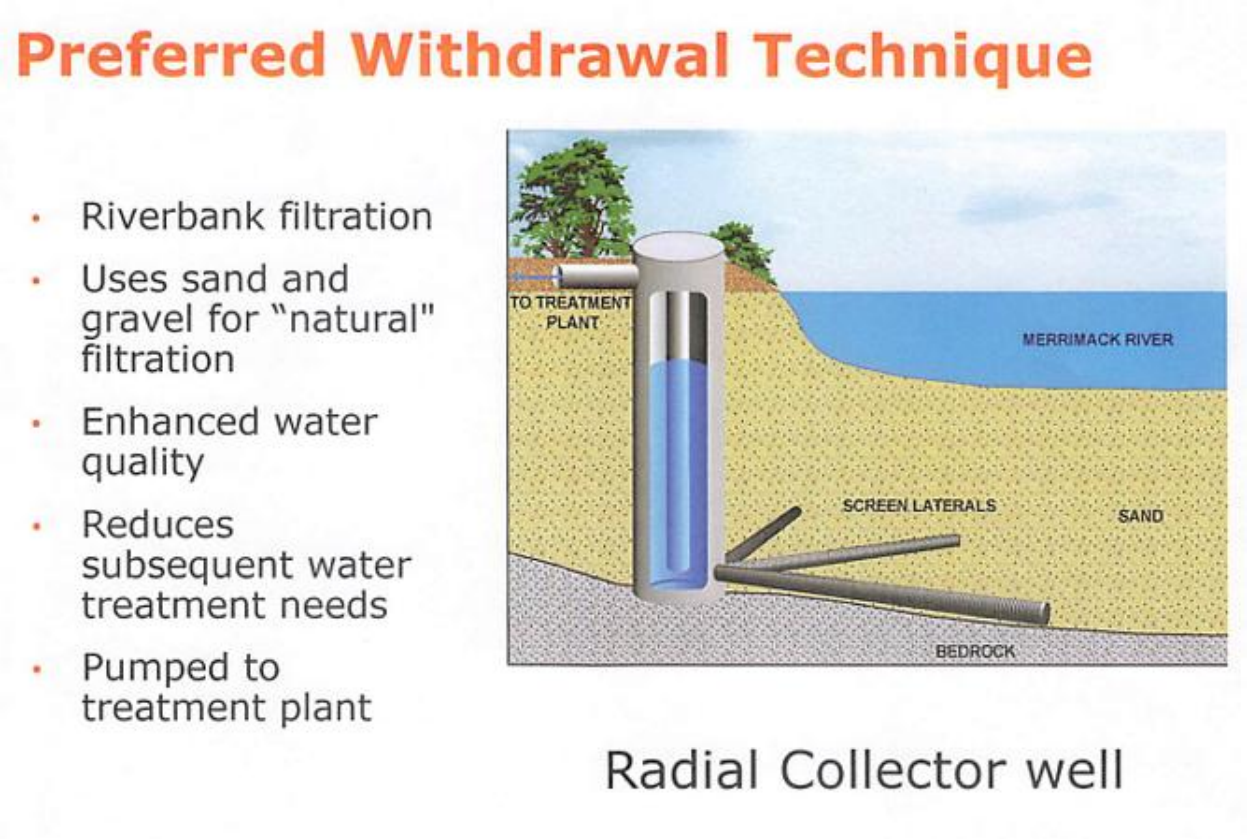
28. Will the Fire Hydrants be affected in anyway?

No, all Fire Hydrants will remain operational and ready for use by the Haverhill Fire Department in an emergency. The City's water flow rate (pressure) will not and has not been affected by water supply issues.

About the New Radial Collector Well

29. What is a radial collector well?

A radial collector well (RCW) (sometimes called a Ranney well) is a specialized groundwater extraction system designed to produce large volumes of water, often from riverbank or lakeside aquifers (an underground layer of rock, sand, gravel, or other sediment that stores and transmits groundwater).



30. When will construction of the RCW begin?

Construction is expected to begin in early 2027.

31. When will the new well be operational?
The City is accelerating engineering and construction of the permanent radial collector well along the Merrimack River to establish a reliable additional drinking water source. The City system is anticipated be online by or before July 2028.

32. Once online, how much water will be pumped from the well into Kenoza Lake?

5 to 10 million of gallons per day.

About the Methuen Connection

33. What is the emergency connection with Methuen and when will it happen?
This will be a direct connection to Methuen's water system and will deliver treated water to Haverhill. The City expects to connect with Methuen's system by mid-December.

34. How much water can Methuen provide?
1 million gallons per day, much less than Haverhill's current daily usage (Average Usage: 5 to 5.5 million gallons per day

35. Could Haverhill simply buy water from neighboring communities?
Methuen is our only viable option to temporarily take from their supply. Our immediate neighboring communities do not have adequate supplies to meet Haverhill's daily needs for the short- or long-term.

About Round Pond

36. Can't the City pump from Round Pond, or another body of water like Pentucket Lake instead of the Merrimack River?

Round Pond is a small body of water that does not have a significant amount of water. If the City does pump from this source, the volume of water in Round Pond would supply the City for approximately 2-3 days. However, the City is evaluating opportunities to maximize available water supplies from its existing water resources including Round Pond.

About Available Water Sources, by Numbers

37. How much water will be pumped from Methuen?

1 million gallons per day. This may be less in the summer when Methuen's demands increase.

38. How much water is projected to be pumped from the Merrimack?

The City has asked permission to pump 9 million gallons per day, but ultimately MassDEP will decide how much water, if any, the City can pump.

39. How much water is projected to be pumped from the East Broadway Test Well?

400,000-500,000 gallons per day, though MassDEP set a withdrawal rate limit of 600,000 gallons per day.

40. How much water is projected to be pumped from the Radial Collector Well once it comes online?

5 to 10 million of gallons of water per day.

40. How much water does the City need to pump every day to replenish Kenoza Lake?

Because the City needs to pump at least 5 million gallons of water a day to meet the water usage demands of our community, the City would need much more than that to replenish our supply. As a result, the City has requested to withdraw a minimum of 9 million gallons of water a day from the Merrimack River.