



FY2025 EEA Drought Resiliency & Water Efficiency Grant

- Municipal public water supply needs assessment (with CEI)
- Agricultural needs assessment completed by project partner CISA
- Public outreach materials
- Leak detection & line locating class by Mass Rural Water Association geared for Franklin County





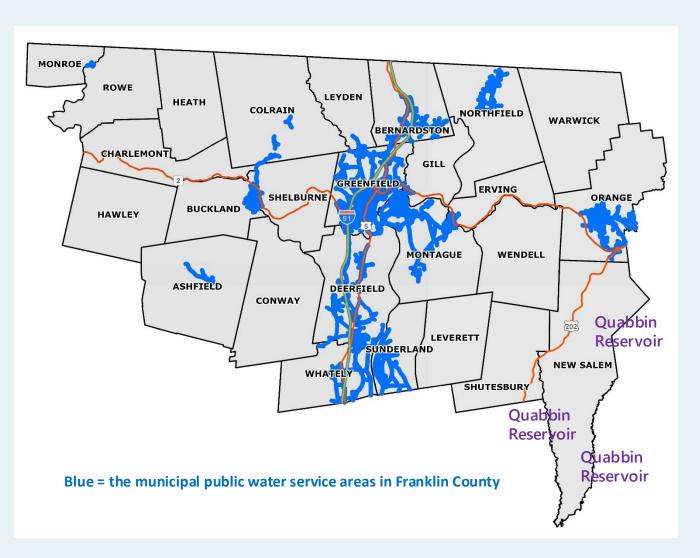


Municipal public water supply needs assessment

Background

- Franklin County is most rural part of MA
- 18 of 26 municipalities have populations ≤ 2,000
- 17 water supplies distribute water in 15 municipalities
- 10 of these fall under Water Management Act
- Mix of water districts, fire & water districts, and municipal systems
- Typically supply water to part of town, not entire town/city
- No municipal water supply in 11 towns

Stagnant population growth in the county. Multiple droughts in recent decades.



Municipal public water supply needs assessment

Analysis

- Reviewed Annual Statistical Reports (ASRs) for following info:
 - Water sources
 - Registered or approved withdrawals & approved yields
 - Water use trends
 - Average and max. day demands
 - Infrastructure details, size, stress points
- Reviewed and evaluated Sanitary Surveys
 - Common system-wide issues and areas for improvements were ID'ed
- Estimated potential water savings and implementation costs

Recommendations

- Listed common best practices & offered recommendations specific to each water supply
- Provided "order of magnitude" cost estimates
- Identified one priority recommendation with potentially the greatest "return on investment"



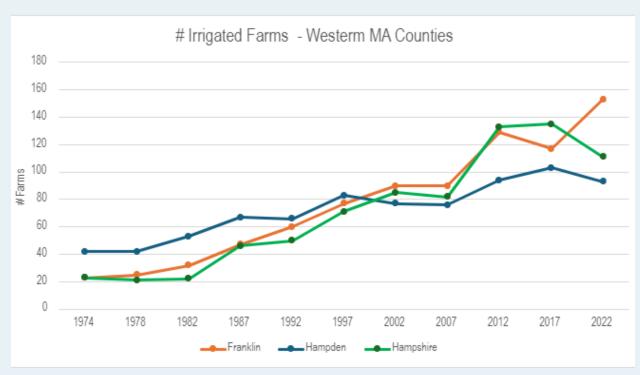


Our report is online at: https://frcog.org/wp-content/uploads/2025/07/FRCOG-Drought-Resiliency-Needs-Assessment-for-Franklin-County-06-30-25-FINAL.pdf

Agricultural Needs Assessment

Information gathering

- Farm products from Franklin County valued at \$76.4M in 2022 (13% total sales in MA)- highest sales from greenhouse/sod, vegetables, and livestock products (includes milk). Hay dominates farming acreage.
- 2016-2017 drought showed biggest losses in hay, potatoes, silage corn.
- # of irrigated farms is on the rise, and irrigated acreage has tripled since 1970's and 80's
- In MA, 75% of acres irrigated from surface water sources, 15% from groundwater sources, and 8% from off-farm water.
- Only 17% of farmers in MA are using soil moisture sensing devices. Instead, 82% use "condition of the crop" and 61% use "feel of soil" to determine when to irrigate.



Source: USDA Census of Agriculture, 2022

Farms are being directly and negatively affected by extreme weather events, including drought.



Agricultural Needs Assessment

Key recommendations

- Technical assistance on crop watering needs and irrigation systems (drip vs. overhead) & O&M is needed
- Soil moisture sensors, flow meters, and irrigation plan would help farms optimize crop quality and water use efficiency
- Grant funding needed big investments can be out of reach for farms with little net income
- Understanding sources of irrigation water can help balance ag use with other local water needs
- Extreme weather labor management training needed



