



Town of Needham Memorial Field Irrigation Upgrades for Watering Efficiency – FY25

Executive Office of
Energy and
Environmental Affairs
Drought Resiliency and
Water Efficiency Grant



Project Purpose

- Implement water efficiency improvements to the irrigation system at Needham's Memorial Field (2.5-acre public playing field)
- Many rotors leaking or set below grade
- Additional watering occurring during the playing season to make up for the inefficiencies of the irrigation system
- Replaced existing equipment with new rotors that included low-flow nozzles to reduce the amount of water used at the Field
 - Rotors reset to grade to ensure watering efficiency was optimized



Project Outcomes

Water Billing Month	Billing Period (days)	Monthly Precipitation in Needham (inches)	Average Consumption for Irrigation Per Day (hundred cubic feet)
June 2022 (6/13/22-6/29/22)*	17*	2.23	8.7
June 2023 (5/31/23-6/29/23)	30	4.65	6.9
June 2024 (5/31/24-6/28/24)	30	4.79	4.3
June 2025 (5/29/25-6/30/25)	33	2.11	3.9

**Please note that the month of June 2022 had an abbreviated billing period due to technical issues at the site.*

Lessons Learned



Clear expectations for the timeline need to be set with the contractor from the beginning of the project given grant timeframe



Need to begin coordination with Town procurement staff early in the project to speed up contracting process



Irrigation upgrades well timed for spring before watering and sports season reaches its peak for playing fields

Recommendations for Future Efforts

- Successful project and looking forward to replicating similar irrigation efficiency upgrades at other playing fields
- Evaluate whether these upgrades could be completed across multiple playing fields in a single season to maximize efficiency
- Additional efficiencies should be considered for the Town's irrigation systems, such as weather-smart controls systems
- Need to think holistically about irrigation systems and conduct upgrades on regular intervals

