

Foxborough's 2022 Interbasin Transfer Act Amendment – Drought Management Plan & Water Conservation Plan

MA Water Resources Commission

July 13, 2023

Presentation Outline

- Background/History
- Drought Management Plan
- Water Conservation Plan

Background

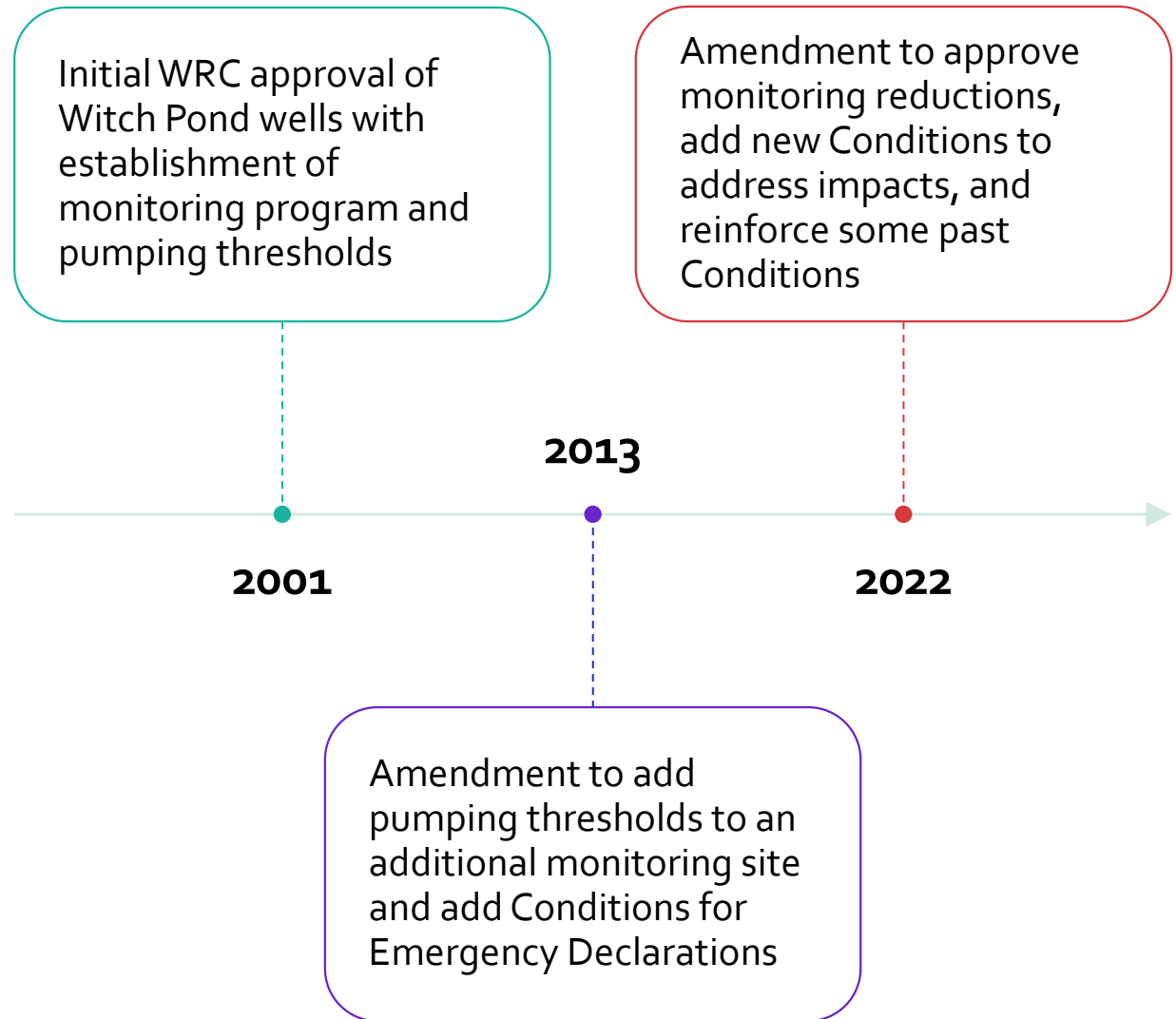
- Headwaters of the Ten Mile Basin – Bungay Brook – 0.4 sq mi
- Habitat for protected species: Hessel's hairstreak butterfly, then state-listed spotted turtle, now blue spotted salamander



- Foxborough's water supply wells - Wells 14R & 15 adjacent to Witch Pond in an Atlantic white cedar swamp



History



Drought Management Plan (DMP) Condition

Per the 2022 Amendment:

Foxborough must meet Water Conservation Standard #6, a drought/emergency contingency plan, by updating its drought plan. Foxborough should review the 2019 (or most recent) Massachusetts Drought Management Plan and incorporate applicable recommended elements from the state plan into its drought plan. It must tie its drought plan to the Secretary of EEA's drought declaration as a secondary trigger for nonessential outdoor water use restrictions and incorporate recommended actions by the Secretary of EEA for the Southeast Drought Region or any of the basins that Foxborough is in, whichever applies.

Foxborough shall submit a revised drought plan for WRC review and approval. After approval, Foxborough shall seek WRC approval prior to making any changes to its drought plan regarding nonessential outdoor water use that would make it less environmentally protective than the approved, revised plan.

Foxborough Response: Drought Management Plan updated, submitted, and included as an attachment to the Water Conservation Questionnaire

Foxborough's Drought Management Plan (DMP)

- Drought levels and associated actions follow the state's DMP and declaration of drought levels
 - Five levels: Normal, Mild, Significant, Critical, Emergency
 - Outdoor watering restrictions

State Drought Condition (by Region)	Nonessential Outdoor Water-Use Restrictions
Level 1 (Mild Drought)	1 day per week watering, after 5 p.m. or before 9 a.m. (to minimize evaporative losses)
Level 2 (Significant Drought)	Limit outdoor watering to hand-held hoses or watering cans, to be used only after 5 p.m. or before 9 a.m.
Level 3 (Critical Drought)	Ban on all nonessential outdoor water use
Level 4 (Emergency Drought)	Ban on all nonessential outdoor water use

- Additional actions per level for the water system
 - Review procedures to declare a water supply emergency (@ Level 2)
 - Postpone nonessential flushing (@ Level 3)
 - Review procedures for alternative water supplies (@ Level 3)
 - Review procedures emergency interconnections (@ Level 4)
- Includes Foxborough's Emergency Response Plan by reference
- Existing bylaw that provides the authority to implement watering restrictions

Water Conservation Plan

Foxborough must work with MassDEP and WRC staff to meet water conservation Conditions including:

- reducing unaccounted-for water (UAW)
- working with Industrial, Commercial and Institutional users to reduce water use
- continuing existing residential water conservation measures to keep RGPCD below 65
- during Emergency Declarations, follow water conservation Conditions outlined in the 2013 Amendment

Unaccounted for Water (UAW)

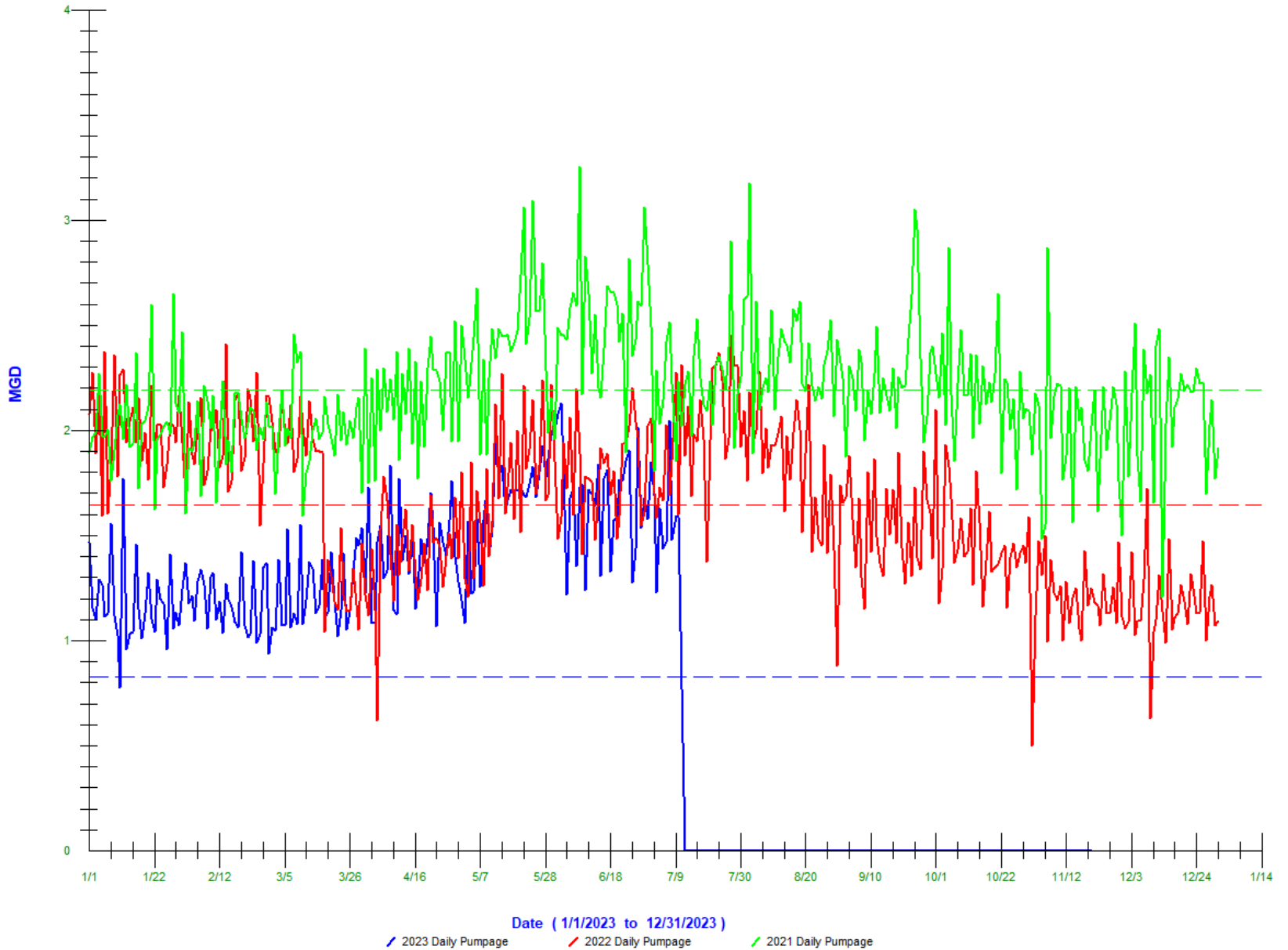
Condition: With UAW greater than 10%,
Foxborough must:

- Complete annual M36 water audits
- Submit to the WRC documentation that an annual M36 water audit has been completed
- Develop and implement a Water Loss Control Program in accordance with standard industry best management practices

Foxborough Response:

- *M36 audits in 2021 and 2022*
- *2022 UAW: 14.8%*
- *Provided documentation*
- *Annual audits and leak detection; using audit results to guide next steps*

2021 - 2023 Town of Foxborough Daily Pumpage in MGD



Residential Water Conservation

Condition: Foxborough must continue with its successful residential water conservation program. These activities must be documented in the Annual Monitoring Report (AMR).

Foxborough Response:

- *2022 rgpcd: 52*
- *Ongoing rebate program and collaborating with NepRWA*
- *Submitted in the Water Conservation Questionnaire; in future years will submit as part of their AMR*

Emergency Declarations

Condition: As stated in the 2013 Amendment, during Emergency Declarations, Foxborough must:

- Exhaust options to purchase water from other surrounding communities via the existing emergency connections
- Maximize pumpage from Foxborough's other sources which are currently in operation
- Impose tighter restrictions on outdoor water use, up to a total ban on any outdoor water use. A total outdoor water ban will be implemented when Witch Pond wells are used and the thresholds are exceeded.

Foxborough Response:

- ***Foxborough has not had an Emergency Declaration since 2020***
- ***Work completed to improve system resiliency***

Industrial, Commercial and Institutional (ICI) Use

Condition: To complete meeting Massachusetts Water Conservation Standard #10 - Industrial, Commercial and Institutional (ICI) Use, Foxborough must:

- monitor water use on its metering system for high usage and suspected leaks, and notify the users as needed
- reach out annually to the top users to direct them to EPA's WaterSense website
- these activities must be documented in the Annual Monitoring Report

Foxborough Response:

- ***Targeting the high users in collaboration with NepRWA***
- ***Submitted in the Water Conservation Questionnaire; in future years will submit as part of their AMR***