



Water Management Advisory Committee Meeting

October 25, 2022

1 – 3 PM

Zoom

Agenda

- **Item 1:** 6/29/2022 Meeting Minutes for review and approval 5 Minutes
- **Item 2:** 7/13/2022 Meeting Minutes for review and approval 5 Minutes
- **Item 3:** Regulation Revisions 60 Minutes
 - a) Definitions
 - b) Registration Conditions
 - c) Permits Expiration Dates
 - d) Orders, Violations, and Penalties
- **Item 4: Next Steps/Future Meeting Topics** 30 Minutes

Proposed Regulation Revisions

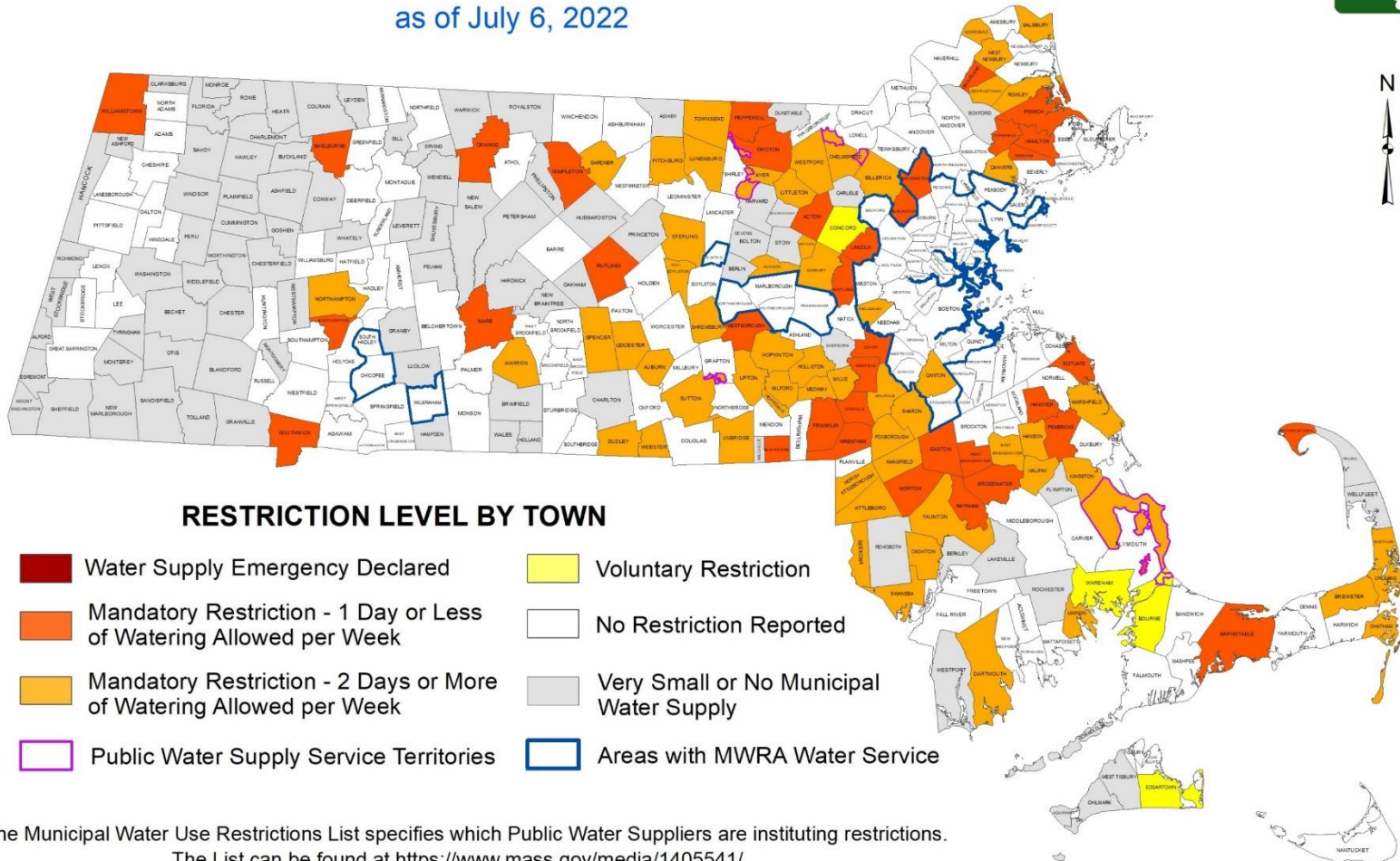
310 CMR 36.00

- Two definitions
 - Multi-Year Drought Storage
 - Nonessential Outdoor Water
- 36.07 Registration Conditions
- 36.17 Effective Dates and Expiration Dates for Permitting by Water Source
- 36.43 Orders, Violations and Penalties


CURRENT MUNICIPAL WATER USE RESTRICTIONS

Non-Essential Outdoor Water Use Restrictions

as of July 6, 2022



RESTRICTION LEVEL BY TOWN

- | | |
|---|---|
|  Water Supply Emergency Declared |  Voluntary Restriction |
|  Mandatory Restriction - 1 Day or Less of Watering Allowed per Week |  No Restriction Reported |
|  Mandatory Restriction - 2 Days or More of Watering Allowed per Week |  Very Small or No Municipal Water Supply |
|  Public Water Supply Service Territories |  Areas with MWRA Water Service |

The Municipal Water Use Restrictions List specifies which Public Water Suppliers are instituting restrictions.
The List can be found at <https://www.mass.gov/media/1405541/>.

SOURCES:

MassDEP Bureau of Water Resources, Water Management Program; MassDEP GIS Program; MassGIS.
Restriction Level data provided by municipal Public Water Suppliers or by MassDEP internet search.

For more information contact MassDEP Water Management Program at 617-292-5706.

NOTE: Sub-town water supply service areas are approximate.



Registration Renewal Proposal

- During drought- condition nonessential water use
 - Align registrations with Drought Management Plan using drought status

State Drought Plan	Nonessential Outdoor Water-Use Restrictions
Level 1-Mild	1 day per week watering, before 9 a.m. or after 5 p.m.
Level 2-Significant	Hand-held hoses or watering cans only, before 9 a.m. or after 5 p.m.
Level 3-Critical	Ban on all nonessential outdoor water use
Level 4- Emergency	Ban on all nonessential outdoor water use

Nonessential Water Use Updates

2021 vs. 2022

Nonessential Outdoor Water Use means a use that is not required:

- (a) for health or safety reasons;
- (b) by permit, license, statute or regulation;
- (c) for the production of food, including vegetable gardens, and fiber;
- (d) for the maintenance of livestock;
- (e) to meet the core functions (those functions essential to the commercial operations) of a business, including but not limited to:
 - 1. plant nurseries as necessary to maintain stock;
 - 2. golf courses as necessary to maintain greens and tees, and limited fairway watering per 310 CMR 36.07(2)(c)2.a. through d.;
 - 3. ~~golf courses with an event~~ venues used for weddings or similar special events as part of the core business, when that limited to watering by to hand-held hose or drip irrigation as necessary to maintain gardens, flowers and ornamental plants;
 - 4. professional washing of exterior building surfaces, parking lots, driveways and/or sidewalks as necessary to apply surface treatments such as paint, preservatives, stucco, pavement, or cement in the course of construction, reconstruction or renovation work;
- (f) for irrigation of public parks and public recreation fields; or
- (g) to establish a new lawn as necessary to stabilize soil in response to new construction or following the repair or replacement of a Title 5 system.



Golf Conditions

87 Registered
vs.
62 permitted

Registered Golf Courses would be required to implement Seasonal Demand Management Plan with graduated reductions in nonessential irrigation based on drought levels.

Irrigation can be reduced either by reducing irrigation times, or by irrigating fewer acres
Watering allowed up to designated percent

MA Drought Level	Tees & Greens	Fairways	Roughs	Landscape & Ornamentals
Normal	100% Essential Use	100%	100%	100%
Level 1 (Mild)		80%†	50%†	Courses whose core business includes a special event venue may continue to irrigate gardens, flowers and ornamental plants by means of hand-held hose or drip irrigation
Level 2 (Significant)		60%†	0%	
Level 3 (Critical)		40%†		
Level 4 (Emergency) **	TBD	40%†		0%

† Irrigation use shall not occur between the hours of 9 a.m. and 5 p.m., except that hand-watering of hot spots may occur at any time

** Additional actions to be determined by the Governor's Emergency Proclamation.

Alternative Restrictions Criteria

- PWS registered-only systems supplied entirely by surface water reservoirs
- Multiple years of Reservoir Storage
 - Useable Reservoir Storage greater than 3 times the sum of registered volume plus any required releases
 - Useable Reservoir Storage applies only to active water supply reservoirs that do not need further MassDEP approval for use



Multi-Year Drought Storage Definition 2021 vs. 2022

|
Multi-Year Drought Storage means a registrant's reservoir capacity, as determined by the Department, of not less than three times the sum of a registrant's authorized withdrawal and any required reservoir release established by statute, regulation, permit or other approval issued by a state or federal agency, as determined by the Department. Multi-Year Drought Storage does not include the volume of water below intake elevations and does not require an emergency declaration or order for use.

Drought Management Plan Elements

Must present an approved plan that demonstrates systems can meet the following criteria:

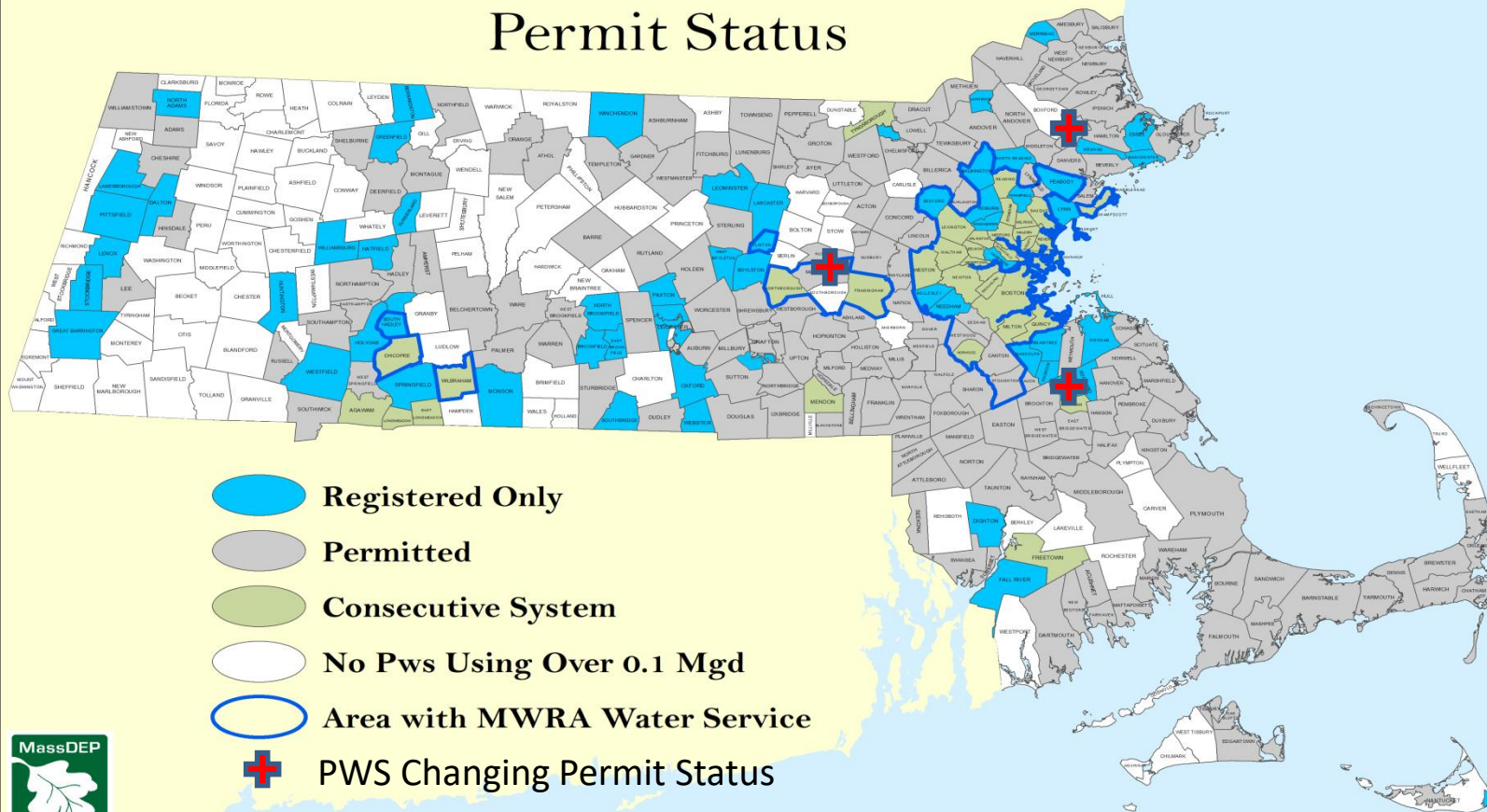
- Drought stages determined by:
 - actual or modeled historical levels to set triggers shall include the drought of record;
 - days of supply remaining and seasonal levels of demand;
 - predicted drawdown and refill probabilities; or a functionally equivalent method.
- Actions triggered at each drought stage;
- Protocols for communicating drought stages & actions to public & officials;
- Plan for local enforcement authority & penalties for violations;
- A system to monitor and document water use reductions





Mass.gov

WMA Registration and Permit Status



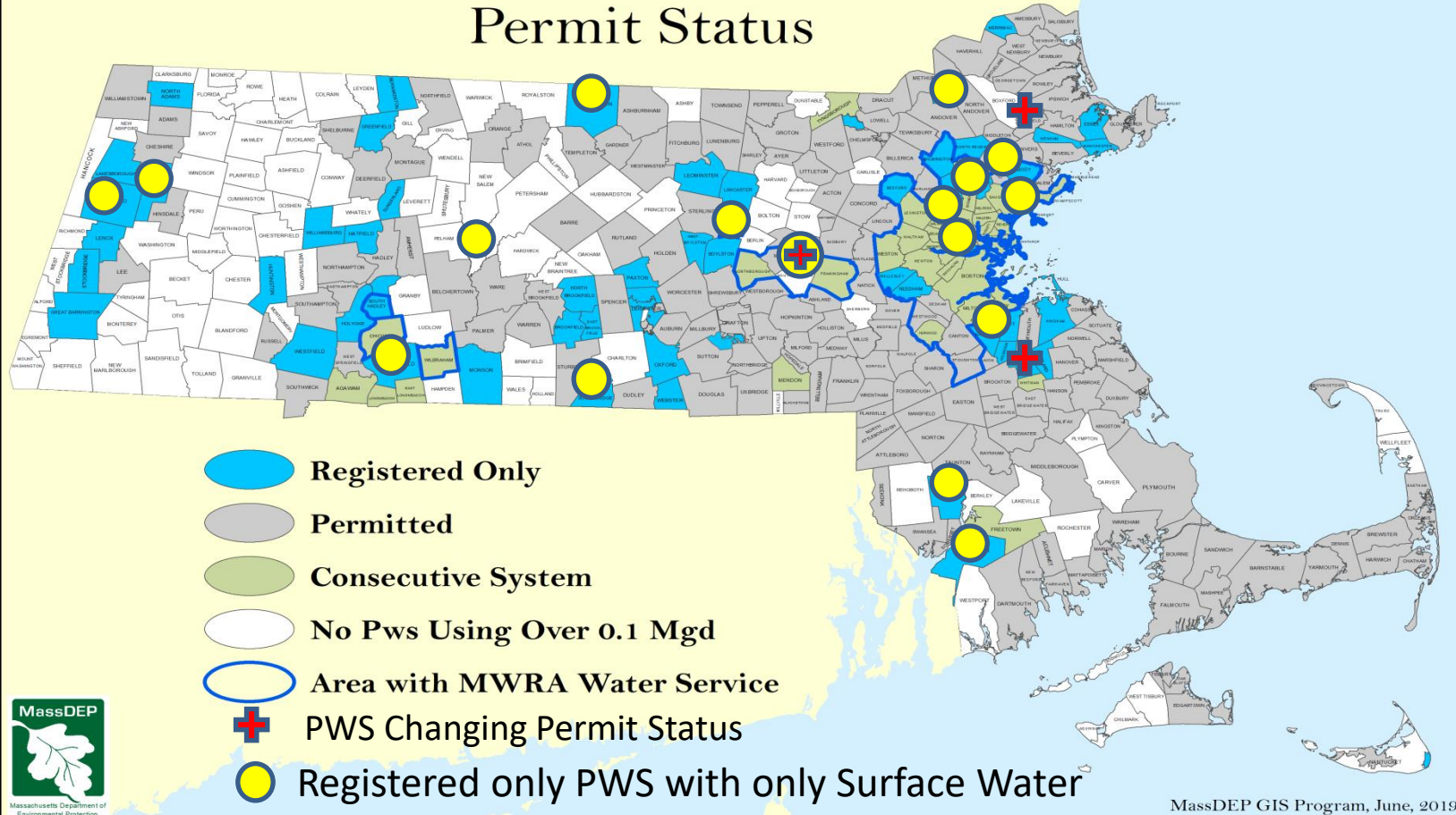
Massachusetts Department of Environmental Protection

MassDEP GIS Program, June, 2019

Number of Registered only PWS (based on July 2022 Permit Status)

Western Region	Central Region	Northeast Region	Southeast Region
22 + MWRA	16 17+ MWRA	18 19	6 5

WMA Registration and Permit Status



Registered Only PWS with only Surface Water (based on July 2022 Permit Status)

Western Region	Central Region	Northeast Region	Southeast Region
3 + MWRA	4 + MWRA	6	2

Nonessential Outdoor Water Use Restrictions

Permit vs. Registration

Non-Essential: Uses not required for health or safety reasons, by regulation, for production of food or fiber, for maintenance of livestock, or to meet the core function of a business

Permits

RGPCD for prior year	Calendar		STREAMFLOW		
	May 1 to Sept 30	7 day Low-Flow Trigger	Flow above ABF	Flow below ABF	7 day Low-Flow Trigger
	< 65	7 days*	1 day*	7 days*	1 day*
	>65 or Minim. subbasin	2 days*	1 day*	7 days	2 days*

* No watering 9 am to 5 pm on any day

Note: Cape and Island requirements are based on GW and Drought Triggers

Proposed Registration Conditions

State Drought Plan	Nonessential Outdoor Water-Use Restrictions
Level 1-Mild	1 day per week watering, before 9 a.m. or after 5 p.m.
Level 2-Significant	Hand-held hoses or watering cans only, before 9 a.m. or after 5 p.m.
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Restriction Triggers 2020 & 2022

Year	Basin	Triggers, Dates and Watering allowed				
		Permit-ABF	Permit 7-Day LF	Drought Level 1	Drought Level 2	Drought Level 3
Watering allowed		2-Days wk	1-day	1-day	Hand only	none
2020	Charles R.	5/29-7/5 off 7/15-8/9 → 8/10-8/30 8/31-9/10 ← 9/11-9/30		NE 7/9 ← NE 6/24 → 8/12 →		10/9
2020	Taunton R.	6/5-6/14 off 6/18-7/5 off 7/24-8/9 → 8/10-9/30			8/12 →	10/9
2022	Charles R.	5/18-7/18 → 7/19-9/12 off 9/21-9/29		NE 5/11 → 6/15 → NE 7/21 NE 10/7 ← 8/9		
2022	Taunton R.	5/21-7/12 → 7/28-8/30 off 8/31-9/29		5/11 → 6/15 → 8/9 10/7 ← 9/2 ←		

USGS Gage	May-June (ABF- cfs)	July – Sept. (ABF)	7-Day Low Flow (cfs)
Charles River @ Dover	170	62	30
Taunton River @ Bridgewater	265	119	47

36.17 Permit Term Expiration Dates

Water Source	Effective Date	First Expiration	Second Expiration
XXXXX Basin	August 31, 1988	August 31, 2008	August 31, 2028

A. Basins Renewed for a second term prior to PEA	B. Basins Renewed for a second term after PEA	C. Basins with permits both renewed and not before Covid Order	D. Basins with no permits renewed from first term
	PEA Extended first expiration date		
PEA & Covid Order both extend 2 nd expiration date	Covid Order applied to 2 nd expiration	2 nd expiration date adjusted to original schedule + Covid Order added	Covid Order not applicable because administrative continuance
Hudson Blackstone Charles North Coastal	Deerfield	Boston Harbor, South Coastal, Taunton; Cape; Islands; Concord, Buzzards Bay	15 Remaining basins

Comments Received in 2021

- 373 Total Comments Received
 - 21 Public Water Suppliers*
 - 13 Environmental Organizations*
 - 6 Business or Industry Representatives
 - 1 Legislator
 - 11 Individual Residents
 - 317 Emails

* a few submitted multiple comments

Summary of Comments Received Opposed

- **Process concerns**
 - Did not follow procedures outlined in MGL c. 21G requiring regs be developed after consultation & advice from WMA Advisory Committee
 - Were not developed with representatives of PWS
 - A more detailed definition of Nonessential Outdoor Water Use was proposed
 - Amend to ensure that every PWS has a system-specific drought plan within 5 yrs
 - “Multi-Year Drought Storage” criteria for developing a system-specific analysis is not based on science or water resources practice
 - What planning, recording, and reporting requirements are expected
- **Impact to registered water rights**
 - would infringe upon Registrants’ entitlement by limiting their ability to sell water
- **Change not needed, use not only not going up but in some cases decreasing**
- **Potential Health Impacts**
 - Could increase water age in the system, cited are Disinfection Bio-Products and Total Trihalomethanes (TTHM)

Summary of Comments Received

Opposed – 2

- **Costs**
 - PWS have unmet needs to fund repair and replacement of aging infrastructure. Restrictions will further lower funds
 - Exacerbate socioeconomic inequities - raising rates will disproportionately impact lower income customers
 - If adopted, the state must develop new funding to make up for shortfall
- **Implementation Timeline is too Quick (24 Months)**
 - Changes to bylaws/ordinances often require approvals beyond the purview of the PWS and 24 months to implement may not be possible
- **Linkage to the MA Drought Management Plan (DMP) & Climate Change**
 - Tying restrictions to the DMP is not appropriate. DMP is based on many indices that are not water supply related
 - Permitting new sources & eliminating downstream releases will do more to protect water systems from climate change

Summary of Comments Received

Supporting

- **Expand to include < threshold withdrawals & private wells**
- **Good first step.**
- **Impact to registered water rights**
 - would not deny their entitled withdrawal - could withdraw full volume over the year.
 - there should be consistency between registrants and permittees
- **Should apply to permittees to**
 - promote equity among PWS and
 - address Climate change and water resource needs
- **Implementation should be immediate, not 24 Months**
 - Regulations should take effect sooner than 24 months, should be asap
- **Linkage to the MA Drought Management Plan (DMP) & climate change**
 - The 2019 DMP was updated to address climate issues. Linking drought restrictions is appropriate and important



Next Steps for Registration Renewals

- **October 6, 2022 - Registration Renewal Expiration Date**
- **10/13 WRC Review**
- **10/25 WMA Advisory Committee Meeting**
- **10/27 Public Hearing- 5:30 pm via Zoom**
- **10/28 Public Hearing- 10 am via Zoom**
- **11/7 Public Comment Period Closes**
- **December 2022**
 - WRC Vote on WMA Regulations
 - Regulation Promulgation
- **February – April 6, 2023 – Prepare & issue Registration Renewals**

Comments and Questions

- The proposed regulations are available for review at:
www.mass.gov/eea/agencies/massdep/news/comment/.
- All comments previously filed in July 2021 are available at [**310 CMR 36.00: Massachusetts Water Resources Management Program | Mass.gov**](#).
- Comments on the proposed regulations may be filed at:
[**dep.talks@mass.gov**](mailto:dep.talks@mass.gov)
 - Email comments should include “WMA Regulations” in the subject line.
 - Written comments shall be submitted to:
MA Department of Environmental Protection, BWR – WMA Program
One Winter Street, 5th floor
Boston, MA 02108
Attention: WMA Regulations.
 - All comments must include the name and contact information for the person providing the comments
- For more information contact Duane LeVangie at 617-780-1962 or
[**duane.levangie@mass.gov**](mailto:duane.levangie@mass.gov)

Topics for Future Meetings?

○ **Permitting**

- Direct Mitigation Review Criteria
 - Stormwater recharge
 - Infiltration/Inflow Removal
 - Water releases
 - Retire registered and permitted users
- Indirect Mitigation Review Criteria
 - Land Protection
 - Culvert Replacement
 - Dam Removal
 - Bylaws (Wetlands; Stormwater, Fertilizer, Private Wells)
 - Infiltration and Inflow Program
 - MS4 Implementation
 - Install and Maintain Fishway
 - Audubon Certification

○ **Grants**

