

Water Resources Management Advisory Committee Meeting

November 7, 2024

1- 3 pm

via

Zoom

Agenda

- | | |
|--|------------|
| 1. Review and Vote on Minutes from 6/17/2024 meeting | 10 Minutes |
| 2. WMA Program Updates | |
| - Updated Schedule for Permit Renewals through 2028 | 20 Minutes |
| - EPA Correspondence | |
| 3. Direct Mitigation for Permitting | 25 Minutes |
| - Calculating stormwater recharge for mitigation credit | |
| 4. Nonessential Use Restrictions on Registrations vs. Permits | 50 Minutes |
| - Proposals for Aligning Permit and Registration Requirements | |
| 5. Next Steps-Permit Guidance Document & Future Meeting Topics | 15 Minutes |

WMA Permit Renewal Schedule

| MassDEP Water Management Program Permitting Schedule Summary* - October 2024 | | | | | | |
|--|---|--|--|---------------------------|--|---|
| Watershed Name | Public Water Supply (PWS) & Total Permits | Orders to Complete (OTC) requires any additional information needed for review | Permit Renewals Reviews Completed Through October 2024 | Anticipated Renewal Date | New and Amended Permits Issued January 2015 - October 2024 | Expiration Date for Permits per 310 CMR 36.17 |
| Hudson | 3 PWS 6 total | Renewed: 2008 Periodic Review scheduled 2027 | 3 PWS 6 total | 2008 Review 2027-2028 | | Dec. 6, 2033 |
| Blackstone | 14 PWS 19 total | Renewed: 2009 Periodic Review scheduled 2027 | 14 PWS 19 total | 2009 Review 2027-2028 | 3 amendments | June 5, 2034 |
| Charles | 14 PWS 20 total | Renewed: 2009 Periodic review underway: 2024 | 14 PWS 20 total 5 PWS 10 reviews total | 2009 Reviews 2024-2027 | 1 new / 1 amendment | June 5, 2034 |
| Ipswich | 4 PWS 5 total | 1 OTC remains to be issued | | 2026-2027 | | Aug. 31, 2029 |
| North Coastal | 4 PWS 9 total | Renewed: 2009 Periodic review scheduled 2027 | 4 PWS 8 total | 2009 Reviews 2026-2027 | 1 new | Dec. 6, 2034 |
| Boston Harbor | 9 PWS 17 total | 2 OTCs remain to be issued | 2 PWS 9 total | 2024-2027 | 2 new / 2 amendments | June 5, 2031 |
| Taunton | 23 PWS 47 total | 2 OTCs remain to be issued | 12 PWS 29 total | 2024-2027 | 2 new / 1 amendment | June 5, 2031 |
| South Coastal | 12 PWS 20 total | 1 OTC remains to be issued | 11 PWS 19 total | 2024 | 3 new / 2 amendment | Dec. 6, 2031 |
| Cape Cod | 17 PWS 27 total | 5 OTCs remain to be issued | 8 PWS 17 total | 2024-2027 | 3 new / 1 amendment | Mar. 6, 2032 |
| Islands | 4 PWS 7 total | OTCs completed | 1 PWS 3 total | 2024-2025 | 1 new | June 4, 2032 |
| Buzzards Bay | 11 PWS 39 total | 7 OTCs remain to be issued | 2 PWS 9 total | 2024-2027 | 3 new / 7 amendments | Sep. 4, 2032 |
| Concord | 12 PWS 17 total | OTCs completed | 5 PWS 10 total | 2024-2027 | 2 amendments | Dec. 6, 2032 |
| Ten Mile | 4 PWS 7 total | OTCs anticipated: 2026 | | 2026-2027 | 1 amendment | Nov. 31, 2031 |
| Deerfield | 1 PWS 2 total | OTCs completed | 1 PWS 2 total | 2019 | | June 4, 2033 |
| Housatonic | 2 PWS 9 total | 1 OTC remains to be issued | 0 PWS 1 Total | 2024-2025 | | May 31, 2032 |
| Farmington | No permits | | | | | |
| Westfield | 2 PWS 4 total | 1 OTC remains to be issued | 1 PWS 1 total | 2024-2025 | | Nov. 31, 2032 |
| Millers | 5 PWS 6 total | OTCs anticipated: 2027 | | 2027-2029 | | Feb. 28, 2033 |
| Chicopee | 8 PWS 11 total | 1 OTC remains to be issued | | 2024-2025 | | May 31, 2033 |
| Quinebaug | 1 PWS 2 total | 1 OTC remains to be issued | | 2024-2025 | | Aug. 31, 2033 |
| Connecticut | 10 PWS 24 total | 21 OTC remain to be issued | | 2024-2025 | | Nov. 31, 2033 |
| Nashua | 14 PWS 17 total | OTCs anticipated: 2026 | | 2026-2027 | 1 amendment | Feb. 28, 2034 |
| French | 2 PWS 2 total | OTCs anticipated: 2027 | | 2027-2029 | | May 31, 2034 |
| Shawsheen | 1 PWS 1 total | OTCs anticipated: 2027 | | 2027-2029 | | Aug. 31, 2034 |
| Merrimack | 17 PWS 22 total | OTCs anticipated: 2025-2026 | | 2025-2026 | 6 amendments | Nov. 31, 2034 |
| Parker | 4 PWS 5 total | OTCs anticipated: 2026 | | 2026-2027 | 1 amendment | Feb. 28, 2035 |
| Narragansett | 1 PWS 2 total | OTCs anticipated: 2027 | | 2027-2028 | | May 31, 2035 |

*** NOTES on Water Management Permit Expiration and Renewal Dates**

Pursuant to M.G.L. c. 30A, section 13, and 310 CMR 36.18(7), if a **permit renewal application** is filed by the filing deadline, the existing permit will be administratively continued in force and effect until MassDEP issues a final decision on the renewal application.

Since 2010, for permits that were not in administrative continuance, expiration dates have been extended:

Nonessential Use Restrictions

Registrations

vs.

Permits

Nonessential Outdoor Water Use Restrictions

Permit vs. Registration

Existing Condition

Permits – May 1 to Sept. 30

| | Calendar | | STREAMFLOW | | |
|--------------------------|------------------|------------------------|----------------|----------------|------------------------|
| RGPCD for prior year → | 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 | 7 days* | 1 day* |
| >65 or Minim. subbasin → | 2 days* | 1 day* | 7 days | 2 days* | 1 day* |

* No watering 9 am to 5 pm on any day

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

Registration Conditions- Year Round

| 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 Outdoor Water Use Restrictions

Option-1- Replace 7 Day-Low Flow with Drought Plan

Permits – May 1 to Sept. 30

| RGPCD for prior year → | Calendar | | STREAMFLOW | | |
|------------------------|--------------------------|--------------|----------------|----------------|--------------|
| | May 1 to Sept 30 | Drought Plan | Flow above ABF | Flow below ABF | Drought Plan |
| | < 65 → | 7 days* | 7 days | 7 days* | See below* |
| | >65 or Minim. Subbasin → | 2 days* | 7 days | 2 days* | See below* |

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Nonessential Outdoor Water Use Restrictions

Option-2- Replace 7 Day with Drought Plan & Calendar-only trigger

Permits – Year Round

| RGPCD for prior year | Calendar | | STREAMFLOW | | |
|--------------------------|------------|--------------|----------------|----------------|--------------|
| | Year Round | Drought | Flow above ABF | Flow below ABF | Drought Plan |
| < 65 → | 7 Days* | Drought Plan | 7 days | 7 days* | See below |
| >65 or Minim. Subbasin → | 2 Days* | Drought Plan | 7 days | 2 days* | See below |

* No watering 9 am to 5 pm on any day

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

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Nonessential Outdoor Water Use Restrictions

Permit vs. Registration

Questions

– Aligning Permits/Registrations

- Replace the 7-day low flow restrictions in permits with the Drought requirements?
- Permits include timeline (May 1-Sept. 30) for all restrictions

Registration requirements are in place year-round

- Drought requirements apply year-round? or
- Develop SOP that outreach to regulated community is from May 1 – Sept. 30 or April 1 – October 30?

– Do we wish to simplify requirements for permittees?

Permits include 2 options (Calendar & Streamflow)

- Remove Streamflow triggers and require only Calendar and Drought Triggered restrictions?

– Golf permits remove the 7-Day Low Flow?



Golf Conditions

87 Registered
vs.
62 permitted

Registered Golf Courses are required to implement Seasonal Demand Management Plan with graduated reductions in nonessential irrigation based on drought levels. Permits are also triggered by the 7 Day Low Flow Value.

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) or 7 Day Low Flow value | | 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.

Questions and Comments



- Following slides are only incase I need to refer back to them should questions arise about frequency of triggers.

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 74 8/31-9/10 → | 39 8/10-8/30 ← 9/11-9/30 | 34 7/9 | NE 6/24 8/12 63 9/4 | 10/10 |
| 2020 | Taunton R. | 6/5-6/14 off 6/18-7/5 off 7/24-8/9 42 → | 51 8/10-9/30 | | 49 SE 8/12 9/4 | 10/10 |
| 2022 | Charles R. | 5/19-7/17 → 58 | 7/18-9/12 56 | | NE 6/15, 55 7/12; 10/7 | 8/9 9/8 30 |
| 2022 | Taunton R. | 5/21-7/27 → 67 | 7/28 – 8/30 33 | SE 5/11 10/7 35 | 6/15; 7/12; 9/8 76 | 8/9 30 |

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

Drought Status vs 7-Day Low-Flow

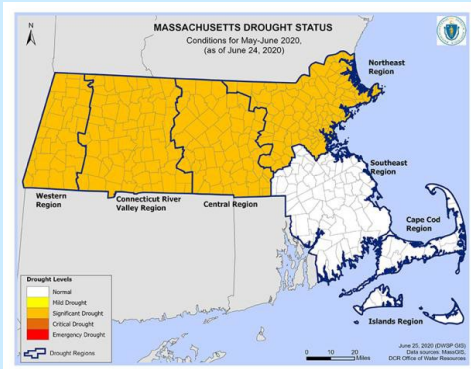
Level 1-Mild Drought

1 day per week watering

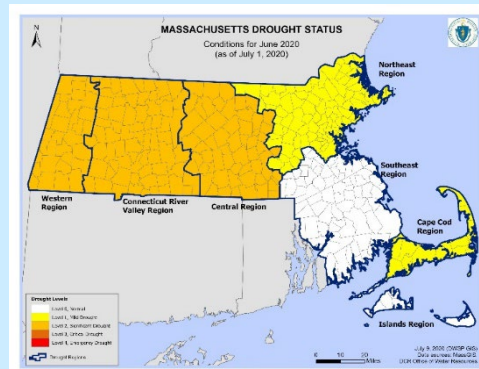
Level 2-Significant Drought

Hand-held hoses or watering cans only

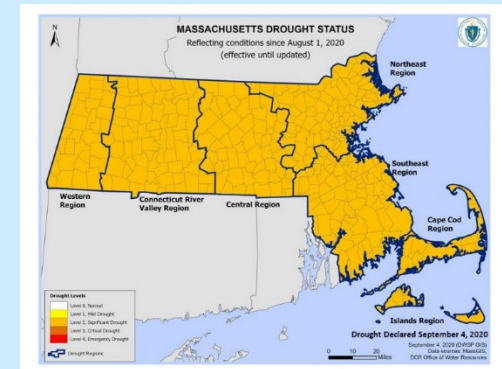
June 24, 2020



July 9, 2020



Aug. 12 & Sept. 4. 2020



7 DAY LOW FLOW VS DROUGHT TRIGGER 2018-2023 (May-Sept)

1st time 7 Day LF trigger hit for 3 cons. days each year = 1 day per week watering & (Date each State Drought **Region** Trigger was hit first time that year)

| River and Drought Region | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------------------------------|------|------|-------------------|-----------|-------------------|------|
| Concord River @Lowell- NE | | | 8/13 (L2-6/24) | | 7/25 (L2-6/15) | |
| Indian Head River@Hanover - SE | 8/4 | | 7/29 (L2-8/12) | (L1-6/10) | 7/24 (L2-6/15) | |
| Mill River@Northampton- CT | | 8/29 | 8/14 (L2-6/24) | | 7/26 (L1-6/15) | |