



**WATER SUPPLY CITIZENS
ADVISORY COMMITTEE**
to the Mass. Water Resources Authority

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WSCAC Tuesday, October 14th Virtual Meeting Meeting Minutes

WSCAC Members in Attendance in Bold:

- **Christine Bennett**, MWRA Advisory Board
- **William Copithorne**, Town of Arlington
- Steven Daunais, Tata & Howard
- **Bill Fadden**, OARS
- **Bill Kiley**, BWSC
- **Paul Lauenstein**, Neponset (Chair)
- **Paul Rybicki**, Partially Supplied Community
- **Martin Pillsbury**, MAPC
- Janet Rothrock, League of Women Voters
- **Bill Merriam**, Framingham resident, Foss reservoir abutter
- **Erin Bonney Casey**, Ipswich River Watershed Association
- **Ralph Abele**, Charles River Watershed Association
- **Warren Kimball**, Nashua River Watershed Association

Non-Members in Attendance:

- Stephen Estes-Smargiassi, MWRA
- Lisa Gustavsen, DCR-DWSP
- Jason Duff, DCR
- Purvi Patel, EEA
- Andreae Downs, WAC
- Lydia Olson, Mass Rivers Alliance
- Nina Gordon-Kirsh, CT River Conservancy
- Unknown (USPL138564)
- Moussa Siri, WSCAC

I. Introduction

Moussa opened the meeting and confirmed that a quorum was present. He walked attendees through the agenda and asked whether there was anything else WSCAC members would like to add. He apologized for forgetting to start the recording, and Paul Lauenstein offered to provide attendance information if needed.

II. WSCAC Business

a. Roll Call and Approval of September 18 Minutes

After conducting a roll call, Paul noted strong attendance and confirmed that the required quorum of six members, per the bylaws, had been met.

He asked for a motion to approve the September 18 meeting minutes. The motion was made by Martin Pillsbury and seconded by Ralph Abele. With no further discussion, the minutes were approved unanimously, with no objections or abstentions.

b. Water Conservation Subcommittee

Paul Rybicki provided a quick summary on the water conservation subcommittee. Paul stated that although he had five minutes allotted, he wished to devote most of his time to the guest speakers because of the importance of their presentation. He explained that the Water Conservation Subcommittee's overarching goal is to produce a concise, recommendation-focused presentation on strategies to improve water efficiency. The subcommittee aims to make significant progress this year, with a final presentation expected in the spring after internal review.

Paul Lauenstein added that he continues to work on the accompanying PowerPoint presentation. Although he had hoped to complete it the previous week, he expects to finalize it soon. He also shared that he recently visited the Quabbin Reservoir to photograph forestry lots and that he distributed the images to the Forestry Subcommittee. He is now shifting his attention back to the Water Conservation presentation.

III. Briefings – 18 minutes

a. WSCAC Briefing (Moussa Siri)

Moussa announced that the next meeting will occur on November 18 and expressed hope that it can be held in person. He will coordinate with Steve Estes-Smargiassi to secure a meeting room.

He reminded members that elections for the Executive Committee are held in November each year and encouraged both current members seeking re-election and new candidates to contact him. Eight members are required; currently, only four seats are filled, which could impede decision-making during emergencies.

Moussa also noted the need to review the Water Resources Commission (WRC) presentation referenced earlier by Paul Rybicki. The committee will work with Vandana Rao, Director of Water Policy, to ensure the presentation aligns with WRC expectations and scheduling.

He emphasized the importance of reviewing the structure of subcommittee meetings to ensure compliance with open meeting laws, including proper agenda posting, maintaining quorum boundaries, and posting meeting minutes when decisions are made.

He expressed interest in reviewing WSCAC priorities at the November meeting and hopes the discussion can take place in person. If available, Colleen Rizzi will update the committee on system expansion and the Quabbin feasibility study. Moussa indicated that he had already shared the study with members, but they can still request it from him if they would like to review it.

b. WAC Briefing (Andreae Downs)

Andreae welcomed attendees and noted that the Wastewater Advisory Committee (WAC) focuses primarily on wastewater issues and flooding rather than drought. Current work centers on legislation regarding biosolid residuals. Several proposals aim to ban land application of biosolids, but these do not address PFAS contamination or long-term residuals management.

Their main focus through December is the long-term control plan for combined sewer overflows (CSOs). Some watershed associations advocate for full sewer separation or the most extensive possible remediation to reduce CSOs. While WAC shares the goal of improved water quality, Andreae emphasized that most phosphorus and fecal indicator bacteria originate upstream of combined sewer systems. She argued that resources should also support upstream stormwater management, as communities already face financial pressure from stormwater-related mandates.

She cited Newton as an example: the city has avoided raising water and sewer rates for four years due to major increases in stormwater rates needed to address phosphorus reduction. If sewer rates increase due to CSO projects, Newton may fail to meet its phosphorus goals, affecting both affluent and economically vulnerable residents.

Andreae invited attendees to join future WAC meetings, including a joint session in November focused on CSOs. She also mentioned an upcoming May tour of a facility, inviting all interested participants.

During the discussion, she noted that leaf litter is the primary source of phosphorus in Newton, followed by vehicle exhaust. Fertilizer contributions are generally lower, and although high-phosphorus fertilizers are largely banned in Massachusetts, they can still be purchased online or out of state.

c. Advisory Board Briefing (Christine Bennett)

Christine reported that the Advisory Board is finalizing its annual rate survey. This year's supplemental questionnaire seeks deeper qualitative insights, including:

- Community funding approaches for sewer operations
- General fund contributions
- Stormwater funding practices
- Billing methods
- Ratepayer engagement strategies
- Challenges related to emerging issues, regulations, staffing, and innovation

The survey design allows different sections to be completed by different staff members within a community, which is expected to improve participation and data quality.

The Advisory Board has also launched a working group to examine long-term rate management. With major capital projects on the horizon—such as the updated CSO long-term control plan, the Metro Tunnel Redundancy Program, aging infrastructure at Deer Island, and the uncertainty surrounding MIPTI and PFAS regulations—the group will assess long-range pressures on MWRA rates and evaluate the agency’s capacity to manage these challenges.

Christine noted that although the Advisory Board typically does not meet in October, a special meeting will be held on October 30 to discuss the preferred CSO alternatives following MWRA’s special meeting. A deeper discussion will take place during a joint meeting in November.

d. MWRA Briefing (Steve Estes-Smargiassi)

Moussa introduced Steve and reminded members that Steve previously presented on MWRA’s membership application process at the September 18 meeting. Meeting minutes contain additional details for applicants seeking updates.

i. Lead and Copper Rule Sampling

Steve reported that MWRA’s annual lead and copper sampling is underway. Approximately 91% of residential samples (out of ~600) and the majority of school and childcare samples (out of ~120) have been collected.

- Of 518 samples analyzed to date, 15 exceeded the action level.
- All elevated samples occurred in homes with known lead service lines, reinforcing that service line removal is critical.
- Three communities are expected to exceed the action level individually and will need to issue public notices and educational materials.

Mandatory letters to households with lead, galvanized-requiring-replacement, or unknown service line materials will be issued by mid-November to maintain compliance with federal requirements.

ii. **Reservoir and Drought Status**

Steve explained that despite regional drought concerns, Quabbin Reservoir remains within its normal operating range. As of 9 a.m. that morning:

- Quabbin Reservoir was at 83.2% capacity (approximately 343 billion gallons).
- Wachusett Reservoir remains stable due to managed transfers.

Recent rainfall yielded significantly more precipitation in the eastern part of the state than at Quabbin or Wachusett. Although rainfall slowed the seasonal decline in reservoir levels, it did not result in substantial increases.

He noted that MWRA is evaluating operational and treatment changes in anticipation of updates to federal rules on disinfection byproducts (DBPs) and microbial safety. EPA has delayed the rule, giving MWRA more time to assess potential impacts.

iii. **Additional Notes**

- Transfer decisions for the Quabbin system and releases to the Swift River will be made in the coming weeks.
- Infrastructure testing is underway following upgrades to the Wachusett Lower Gatehouse.
- Steve offered to provide a more complete water quality update at MWRA's November Board meeting and at a future WSCAC meeting.

IV. Presentation: Water Resources Commission Presentation on Drought & Water Conservation (Purvi Patel & Jason Duff) (see link to the presentation at the end to learn more)

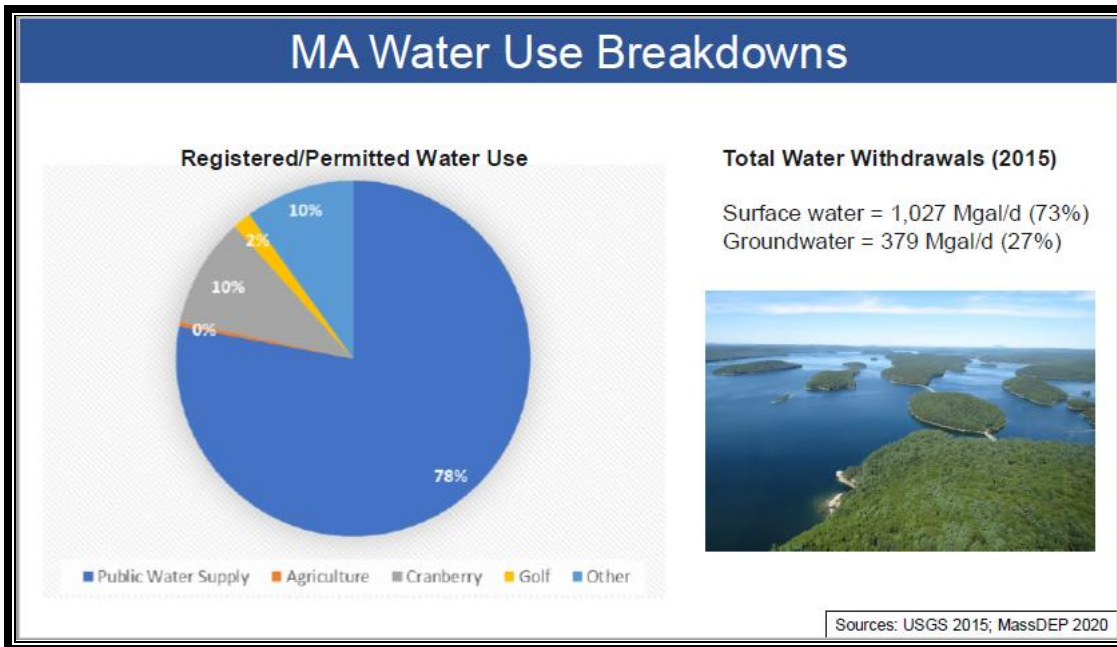
Moussa opened the session and welcomed **Purvi Patel**, Assistant Director of Water Policy at the Executive Office of Energy and Environmental Affairs (EEA), and **Jason Duff**, Water Resources Planner at the Department of Conservation and Recreation (DCR).

Patel and Duff jointly presented on **drought management**, **statewide water-use trends**, and **water conservation efforts** in Massachusetts, integrating context from recent climate impacts and state policy initiatives.

a. Massachusetts Water Use & Hydrologic Trends

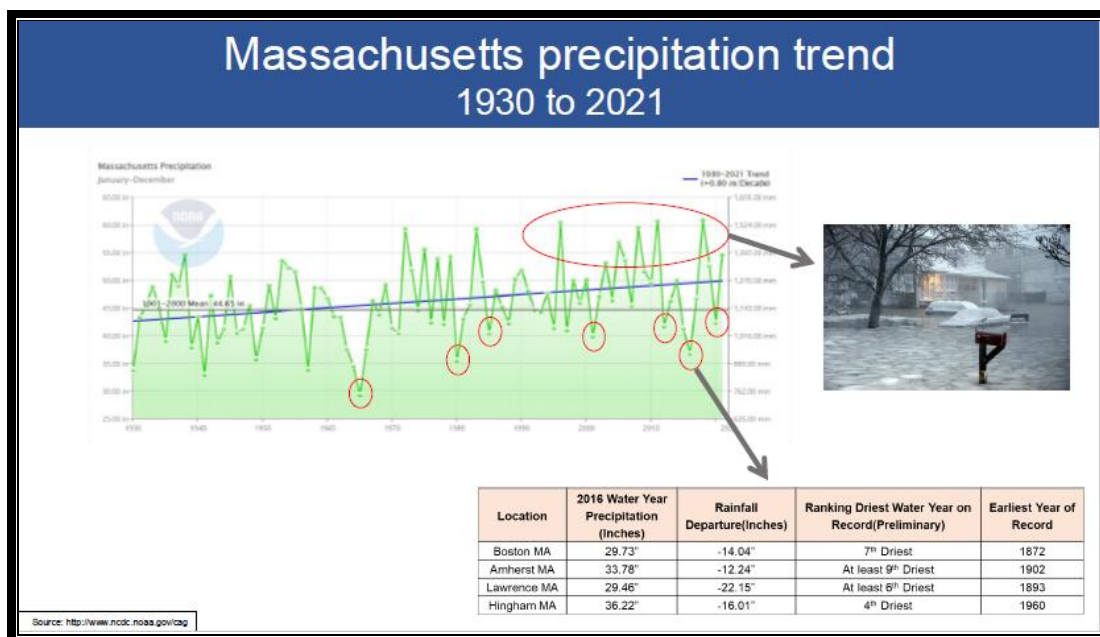
1. Water Use Breakdown in Massachusetts

- **Total water withdrawals (2015):**
 - **73% surface water**
 - **27% groundwater**
- Unlike many Western states, **agriculture is only a small percentage**, but cranberries constitute a significant share, raising questions during Q&A.



2. Climate Trends Affecting Water Supply

- **Precipitation has increased** since the early 1900s—but falls in **more intense events**, contributing to both flooding and drought.
- **Temperatures are rising**, increasing evapotranspiration.
- **Increasing impervious surfaces** reduces aquifer recharge and baseflow.
- USGS records show **more frequent record-low streamflows**, indicating chronic hydrologic stress.





3. Visual Examples of Drought Impacts

Purvi Patel highlighted:

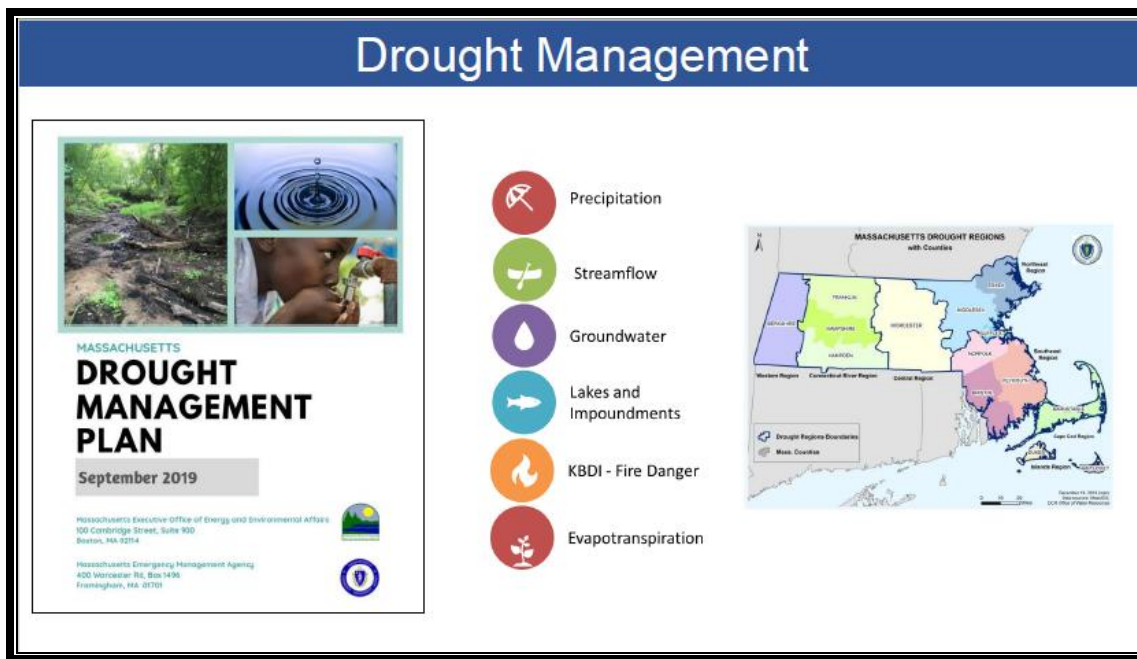
- Dry streambeds and impaired fish passage.
- Heightened wildfire risks—2023 saw a significantly higher number of wildfires than typical years.
- Landscape impacts: side-by-side examples of irrigated vs. non-irrigated grounds.



b. Massachusetts Drought Management Framework

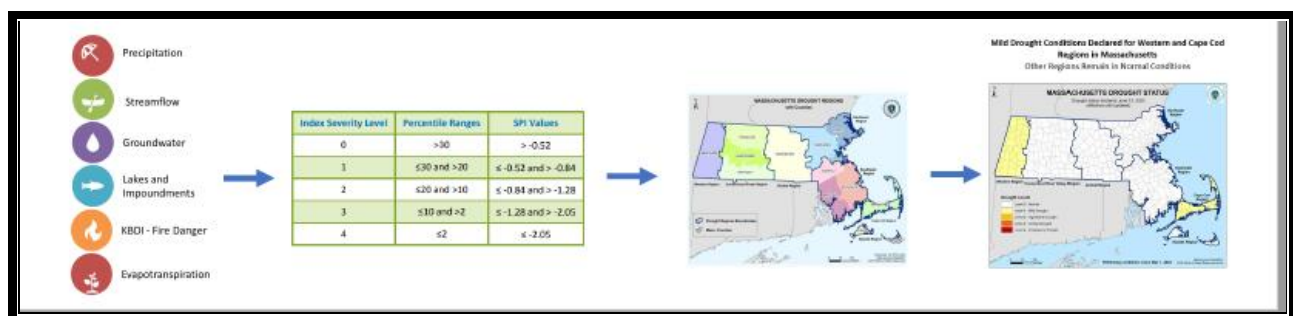
1. Drought Management Plan (updated 2023)

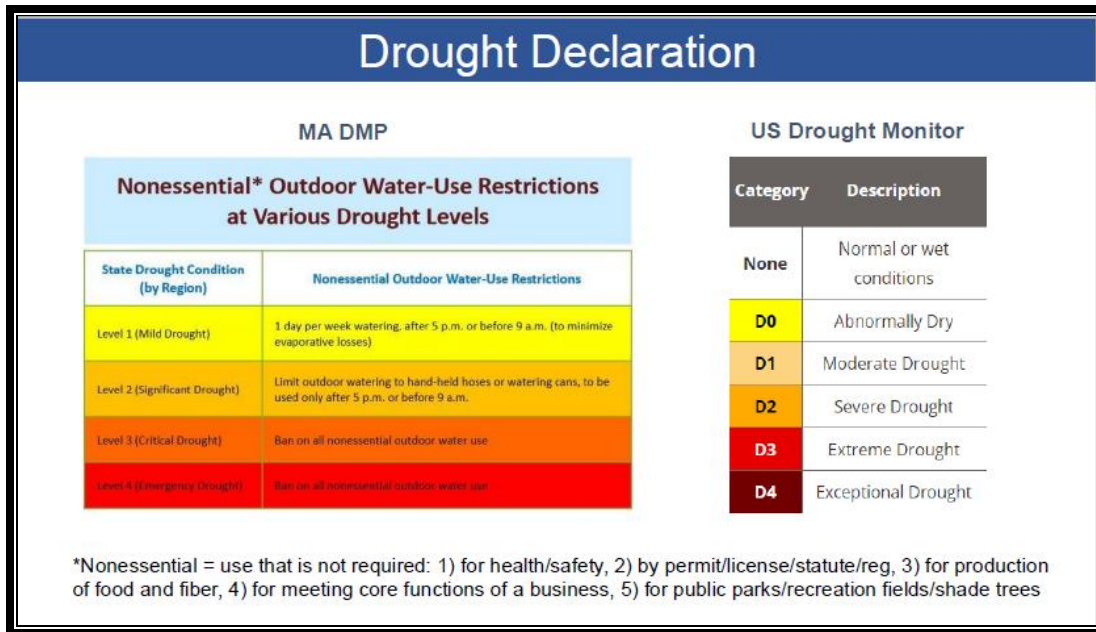
- Uses **six drought indices** (streamflow, groundwater, precipitation, reservoir levels, etc.) across **seven drought regions**.
- Each month (or more frequently), agencies review data and determine regional drought levels.



2. Drought Declaration Process

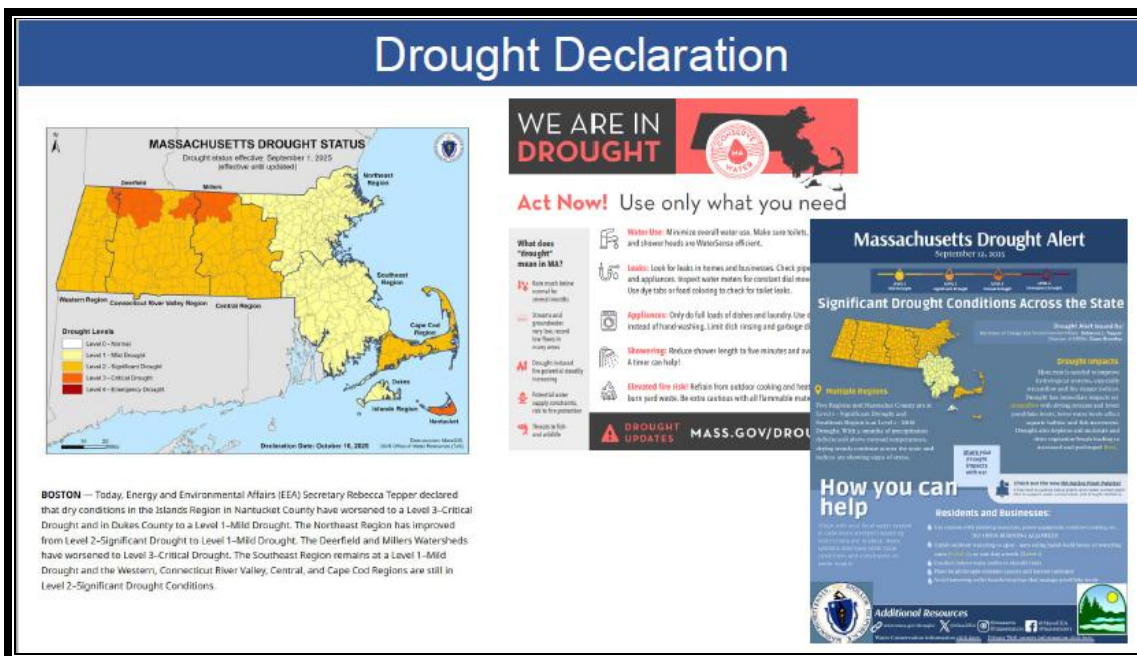
- Continuous monitoring of six indices
- Drought Management Task Force convenes
- Recommendations issued by the region
- **Secretary of the Environment issues official declaration**
- Ongoing monitoring and updates biweekly if needed





3. 2025 Conditions

- Several western regions, plus Nantucket, were under **significant to critical drought**.
- The Northeast region showed **improvement** from Level 2 to Level 1.



- A new **Instagram page** (“**Mass Waters**”) for drought, flooding, and water educational content.

c. **Water Conservation Strategy in Massachusetts (Jason Duff)**

Duff framed conservation in **three main buckets**:

1. Regulatory Tools

- **Water Management Act (WMA)**: sets conditions on withdrawals; includes standards such as
 - 65 gallons/day per capita (RGPCD)
 - 10% unaccounted-for water (UAW)
- **Interbasin Transfer Act**: recently updated performance standards emphasize water efficiency for communities moving water across watersheds.

2. Policy Guidance

- **Water Conservation Standards** (last update 2018) include:
 - Water loss control
 - Metering & pricing strategies
 - Residential appliance standards
 - Outdoor water use
 - Education & outreach
- The state is now exploring **updates** to the standards.

3. Education & Outreach

Duff highlighted the **Water Conservation Toolkit**, including (see presentation link for more Toolkit and Outreach Materials):

- Water-use calculator
- Leak detection guidance
- Native plant & drought-resilient landscaping guidance
- Social media graphics and infographics
- Videos: Short-format videos explaining drought dynamics, why rain does not immediately end drought, and how groundwater lags.

A few examples of toolkit resources

Interactive Tools



Technical Resources



Outreach Materials

Social media products



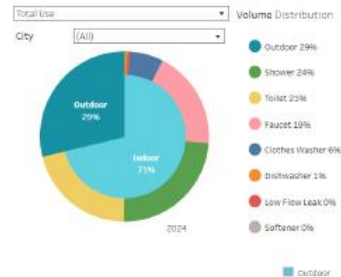
d. Recent State Achievements

1. Drought Resiliency & Water Efficiency Grant Program

- \$500,000 awarded to 13 projects in FY25
- FY26 RFP newly released

Recent Water Conservation Achievements

- Drought Resiliency and Water Efficiency Grant Program
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 - RFP for FY26 just posted
- Water data projects
 - Collaborative water database project with USGS
 - Flume data and dashboard



2. Water Data Initiatives

- Multi-agency effort with USGS to **consolidate statewide water withdrawal & use data**.
- New contract with **Flume** to obtain anonymized residential water-use data from ~1,500 MA homes:
 - Real-time monitoring
 - Machine-learning disaggregation (e.g., toilet vs. shower vs. irrigation use)
 - Helps quantify indoor/outdoor water use patterns

3. Drought-Resilient Landscaping & Native Plants

- Development of the **Native Plant Palette tool** (mass.gov/plantpalette).
- Demonstration gardens at Appleton Farms, Endicott Park, and collaboration with nurseries and park systems.

4. National Collaboration

- Active participation with the **Alliance for Water Efficiency (AWE)** on national research and conservation best practices.

5. What's Next (Jason Duff)

Jason Duff reviewed the state's forward-looking priorities for drought and water conservation:

1. Community Needs & Messaging

- The Commonwealth will continue strengthening drought and conservation communication.
- State agencies invite feedback from municipal staff and partners.

2. Expansion of the DRWE Grant Program

- FY25 funded 13 projects totaling \$500,000.
- The FY26 RFP is now posted.
- Future program expansion is being considered.

3. Evaluation of Water Efficiency Standards

- The state will reassess the current benchmarks:
 - 65 RGPCD (residential gallons per capita per day)
 - 10% unaccounted-for water (UAW)
- Duff noted national trends toward more granular water loss control metrics.
- Additional analysis will focus on peak demand management and winter/summer usage ratios.

4. Regional Water Planning & Housing Coordination

- The state seeks stronger integration between water resource capacity and **housing development planning**.
- Improved alignment is intended to support sustainable growth.

Duff invited members to provide further feedback after the meeting or via email.

2. Transition to Questions (Moussa & Purvi Patel)

Moussa thanked the presenters and opened the floor for questions.

Purvi Patel reiterated the state's interest in input regarding updates to the 2018 Water Conservation Standards, noting that technical corrections could be implemented quickly, while broader changes would require long-term stakeholder engagement.

3. Member Questions and Comments

3.1 Paul Rybicki

- **Cranberry Water Use:** Asked about the significant proportion of statewide water used for cranberries and whether conservation or alternative strategies should be considered.

- **Toilet Efficiency:** Asked whether Massachusetts officially enforces the **1.28 GPF** standard.
 - Duff confirmed yes; plumbing code updates are forthcoming.
- **Higher-Efficiency Toilets:** Suggested moving toward **0.8 GPF** standards.
 - Duff noted limited momentum for this change at present.

3.2 Paul Lauenstein

- **Groundwater–Surface Water Connectivity:** Emphasized that hydrologic boundaries between groundwater and surface water are not distinct.
- **Posting of Materials:** Requested public access to the presentation.
 - Moussa confirmed it will be posted on the WSCAC website.
- **Ecosystem Services Messaging:** Encouraged integrating ecosystem valuation into conservation outreach.
- **Advanced Metering:** Highlighted the value of **fixed-network metering systems** for data, leak detection, and rate-setting.
- **WaterSense vs. AWE:** Asked for clarification.
 - Duff explained WaterSense is an EPA program; AWE is a national nonprofit.

3.3 Nina Gordon-Kirsch (CT River Conservancy)

- Introduced herself as the Massachusetts River Steward at the Connecticut River Conservancy.
- Advocated for expanded **greywater reuse** in Massachusetts and described ongoing citizen legislative efforts.
- Invited collaboration from interested members.

3.4 Steve Estes-Smargiassi (MWRA)

- **Unaccounted-for Water (UAW):** Supported the state's intention to revisit the 10% UAW standard and offered to participate in future discussions.
- **Drought Preparedness Materials:** Commended EEA and DCR for improved statewide resources.
- **MWRA Drought Triggers:** Noted that MWRA operates under a separate drought plan due to its multi-year storage capacity.

- Requested clearer indication of MWRA's distinct drought triggers on state maps to reduce customer confusion.
- Patel acknowledged this feedback and noted it is under consideration.

3.5 Andrea Downs (WAC) – Chat Comment

- Requested conservation messaging suitable for **MWRA customers**, especially those with irrigation meters who need clarity on why conservation still matters.
- Patel and Duff indicated willingness to assist.

3.6 Final Comment – Paul Lauenstein

- Recommended the book *Water Follies* (Robert Glennon) as an accessible resource on groundwater impacts.
- Offered extra copies to interested members.

4. Closing Remarks (Moussa)

- **Moussa** thanked presenters Purvi Patel and Jason Duff for the comprehensive session.
- Reminded members of the **November 18 in-person meeting**; room reserved by Steve.
- Encouraged members to send any additional questions directly to the presenters or to him.

Link to the presentation: <https://www.mwra.com/about-mwra/advisory-groups/water-supply-citizens-advisory-committee-wscac/wscac-presentations-archive>

V. Other Businesses

Moussa asked whether any members had additional business to bring before the group. No further items were raised.

VI. Adjournment

Paul initiated the adjournment process and called for a motion to adjourn.

- **Motion to Adjourn:** Made by Martin Pillsbury
- **Second:** by Erin Casey Boney
- **Vote:** All in favor; motion passed unanimously.

Moussa thanked all attendees for their participation and noted that members are welcome to share information (not discussions or opinions) with the group by email. He wished everyone a good day.

Meeting adjourned at approximately 11:38 AM.