Water Resources Commission Meeting
August 11, 2016

Proposed Updates to the Massachusetts Surface Water Quality Standards
(314 CMR 4.00)

Division of Watershed Management, Bureau of Water Resources, MassDEP
314 CMR 4.00: Background

- **314 CMR 4.00 Massachusetts Surface Water Quality Standards (SWQS)**
  - Purpose: restore, enhance and protect the chemical, physical, and biological integrity of surface waters
  - Covers all waters in the Commonwealth except groundwaters
  - Massachusetts SWQS were first promulgated in 1967 and have been periodically revised
  - The Clean Water Act requires the EPA to approve all revisions following promulgation for the changes to become enforceable
Proposed Changes to 314 CMR 4.0

- Updating Bacteria Standards
  - 2012 EPA guidance for recreational waters

- Clarifying Aluminum Criteria
  - Acid-Soluble instead of Total Recoverable aluminum criteria

- Reformatting & Housekeeping Updates
  - Tables and Figures: 1-27
  - Table 28
    - Site-specific copper criteria
EPA released new recommended recreational bacteria criteria for the protection of human health in 2012.

Continued federal grant funding for state Beaches Environmental Assessment and Coastal Health (BEACH) programs requires adoption of EPA’s new criteria.

The Department of Public Health implements the BEACH program while MassDEP implements the SWQS program.
The proposed changes to 314CMR 4 clarify the following:

- Bacteria indicators remain unchanged
- Enterococci threshold of 33 cfu/100mL → 35, not significant
- Statistical Threshold Value (STV) of 130 Enterococci/410 E. Coli replaces single sample maximum (SSM) of Enterococci 61/E. Coli 235

- *Note the proposed changes are not expected to cause significant impact to permit holders or beach operators*
Clarifying Aluminum Criteria

- **Revised SWQS**
  - Chronic (87 µg/L) and acute (750 µg/L) aluminum criteria thresholds will not change.
  - Consistent with EPA guidance, aluminum criteria will be expressed as the acid-soluble aluminum (ASA) present in surface waters.
  - ASA criteria will remain ecologically-protective of aquatic life and will better reflect natural conditions in Massachusetts.
Translating Aluminum Criteria into NPDES Limits

- **Technical Assistance Toolkit**
  - Permittees interested in assessing permit compliance based on the ASA criteria will need to collect additional aluminum data to support the development of revised aluminum permit limits.
  - MassDEP has created fact sheets and data collection guidelines to inform NPDES facilities on the steps required to develop alternative criteria.
Reformatting & Housekeeping Updates: Tables and Figures (1-27)

No substantive changes

Tables

- Reformatted and alphabetized tables
- Clarified boundaries of waters/segments
- Added missing Classes (A, B, SA, SB) to many waterbodies
- Clarified “Qualifiers” for many waters/segments
- Surface waters previously listed as a group are now each listed separately

Figures

- Changed figures that had errors in basin boundaries or surface water locations
- Added or updated Class SB waterbody markers for certain figures
Reformatting & Housekeeping Updates

Site-specific copper criteria added in 2013 (not approved by EPA) will be removed

<table>
<thead>
<tr>
<th>BASIN/DRAINAGE AREA</th>
<th>SURFACE WATER</th>
<th>BOUNDARY, TOWN OR RIVER MILE*</th>
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<tbody>
<tr>
<td>BLACKSTONE</td>
<td>Unnamed Tributary to West River</td>
<td>Upton, 0.2 - 0.0</td>
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<tr>
<td>CHARLES RIVER</td>
<td>Unnamed Tributary to Stop River</td>
<td>1.5 - 0.0</td>
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<td>Unnamed Tributary to Charles River</td>
<td>Weston, 0.3-0.0</td>
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<td>CHICOPEE</td>
<td>Dum Brook</td>
<td>3.7 - 0</td>
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<td>MILLERS RIVER</td>
<td>Millers River</td>
<td>38.5 - 0.0</td>
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<td>Otter River</td>
<td>9.5-0.0</td>
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<tr>
<td>PARKER RIVER</td>
<td>Mill River</td>
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<td>Unnamed Tributary to Mill River</td>
<td>Byfield</td>
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<td>SHAWSHEEN</td>
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<td>Lincoln, 0.5-0.0</td>
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<td>SUASCO</td>
<td>Unnamed Tributary to Hop Brook</td>
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<td>Hop Brook</td>
<td>13.1 - 0.0</td>
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<td>Spencer Brook</td>
<td>1.8 - 0.0</td>
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<td>Sudbury River</td>
<td>10.6 - 0.0</td>
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<tr>
<td>TAUNTON</td>
<td>Sawmill Brook</td>
<td>Bridgewater, 1.6 - 0.0</td>
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</table>
MassDEP has worked with stakeholders:

- EPA
- Department of Public Health
- Water Works Association
- Coalition for Water Resources Stewardship
- Watershed groups
  - Mass Rivers Alliance
  - Charles River Watershed Association
  - Connecticut River Watershed Council
Public Process

- **Estimated Timeline:**
  - Public hearing: early/mid October 2016
  - Public comment period: October 2016
  - Promulgation target: Early 2017

- **Subscribe to MassDEP’s Regulations List-Serve:**
Kimberly A. Groff, Ph.D.

Director, Watershed Planning Program
Division of Watershed Management
Bureau of Water Resources
Massachusetts Department of Environmental Protection
8 New Bond Street
Worcester, MA 01606

Tel. 508-767-2876
kimberly.groff@state.ma.us