

Water Supply Citizens Advisory Committee

To the MWRA and its Board of Directors



Annual Report
Fiscal Year 2019

WSCAC's Purpose

The Water Supply Citizens Advisory Committee (WSCAC) advises the Massachusetts Water Resources Authority (MWRA) and its Board of Directors in their development and implementation of water policies and programs. WSCAC keeps informed of relevant programs at the Massachusetts Department of Conservation and Recreation, the Division of Watershed Protection (DCR-DWSP), the Massachusetts Department of Environmental Protection (MassDEP), other state agencies, and citizen's groups in order to develop informed recommendations on water supply and related matters. WSCAC also addresses emerging public water policies, advances in water technology, and participates in environmental reviews of new projects in the MWRA service area.

Overview

WSCAC reviewed numerous MWRA and DCR-DWSP projects in FY19. Monthly meetings included discussions of:

- Ongoing redundancy projects to the water transmission system including updates on the Northern High and Southern Extra High pipeline projects, and the progress of the deep-rock tunnels project.
- MWRA's Greenhouse Gas Inventory and data related to the Authority's carbon footprint.
- Reservoir operations and management including spilling data, continuation and progress of the aquatic invasives program, water quality monitoring, and treatment in emergency backup reservoirs.
- Community Emergency Response Planning pursuant to the Water Infrastructure Act.
- The DCR-DWSP Annual Work Plan, Quarterly Progress Reports, staffing vacancies, and watershed protection responsibilities.
- MassDEP Annual Filtration Avoidance document and required DCR-DWSP reporting.
- Toxic Per- and Polyfluoroalkyl Substances (PFAS) in water supplies outside the MWRA service area (not an issue within the service area).
- Road salt in watershed communities and the effects on tributaries and groundwater.
- DCR-DWSP public access and the ongoing stakeholder response to recreation in the Ware River watershed.
- The identification and effects of diseases and pests in watershed forests and their impact on DCR's ability to maintain a diversity of species and age classes in the watersheds.
- Expanding the Wachusett Reservoir deer hunting program and hunting in Quabbin Park.
- Conditions at the Quabbin Park Cemetery and possible infrastructure repairs.

Summary of Continuing and Emerging Issues

WSCAC evaluates materials presented by MWRA staff regarding policies and projects and submits comments when appropriate. Our views are briefly summarized below.

- **Redundancy for the MWRA's Metropolitan Water Transmission System**
WSCAC supports MWRA's ongoing redundancy projects to the water supply system because they improve system resilience to potentially harmful internal and external events. These projects allow for infrastructure rehabilitation and maintenance to ensure reliable water service to rate-paying communities.
- **Movement of Hazardous Materials by Rail**
WSCAC supports the continuation of MWRA and DCR's collaborative efforts to work with Pan Am, state agencies, and local first-responders to protect the Wachusett Reservoir and watershed from the threat of an accident involving hazardous materials moving by rail. The ongoing UMass research on strategies for impacts of an oil spill or cyanotoxins in the Wachusett Reservoir are helpful. However, train derailments continue across the country and federal solutions have not been forthcoming. WSCAC continues to call for state solutions that would involve frequent inspections, the repair of track-related defects and other feasible means of increasing rail safety near the Wachusett Reservoir.
- **Climate Change**
WSCAC supports MWRA's research and preparation for flooding due to the frequency and severity of storms and potential impacts due to sea level rise. While much of the MWRA's water system infrastructure is located inland and is less likely to be affected by flooding, coastal communities may request emergency MWRA water if their drinking water infrastructure is compromised. In addition, the probability of drought in communities with little storage may also initiate requests for emergency water as was the case in the drought of 2016.
- **Energy Efficiency and the MWRA's Carbon Footprint**
WSCAC supports MWRA's ongoing energy-efficiency efforts at all MWRA campuses and the updating of its Greenhouse Gas Inventory. The Deer Island Combined Heat and Power study will research alternatives on the potential increases in renewable percentages at the wastewater treatment plant. This work is critical as we move toward the goals of the Global Warming Solutions Act: between 10 percent and 25 percent below statewide 1990 GHG emission levels by 2020 and 80 percent below statewide 1990 GHG emission levels by 2050.

- **Expansion of the MWRA Water System**

MWRA supports the admission of new communities to join the water system. Additional communities bring in supplementary revenue which may potentially lower the overall cost shared by all communities in the system. Although the amount of water requested per community is small relative to the overall system demand, the aggregate water demand of all new communities could be substantial when added to potential emergency water requests due to drought, contamination or infrastructure repair.

WSCAC suggests that MWRA assess the following when considering new admissions to the water system:

- The amount of additional water sold to communities during a drought, such as the drought of 2016;
- A projection of water use during future drought conditions and potential emergency requests due to flooding and contamination.

- **Water Conservation**

The MWRA, through its enabling act, is authorized to promote water conservation and environmental quality in managing the water system. MWRA recommends, but does not require, restrictions on nonessential outdoor water use from its fully supplied communities, unless severe drought conditions persist. Quabbin water is transferred, treated, and used for lawn irrigation in MWRA communities throughout the summer months. This policy is divisive among communities and endorses wasteful outdoor watering practices. Demand in summer months shows consistently high outdoor water use. The importance of smart lawn irrigation and advocating for using the best available technology to reduce waste adds weight to the conservation message and the necessity of environmental stewardship. WSCAC suggests that the MWRA reinvigorate its water conservation mission as, for example, with the successful MWRA school program on water and wastewater. However, more public outreach is called for beyond web page messaging and conservation information in the annual Consumer Confidence Report.

- **Public Access in the DCR Division of Water Supply Protection Watersheds**

WSCAC supports passive recreational activities that do not jeopardize the MWRA/DCR Filtration Waiver and water quality for 2.5 million people. The Ware River Public Access Plan is currently under review by DCR. Staff has reached out to stakeholder groups for feedback on how and when they recreate on watershed land. They have also discussed moving activities away from intakes and environmentally sensitive areas. The success of this process depends on a significant level of collaboration, clarity and transparency. DCR has yet to complete the Executive Summary of its comprehensive Land Management Plan. It is a large document and not user friendly to the public. In 2012, the

Science and Technical Advisory Committee (STAC) requested that an executive summary be prepared and posted online to assist the public in understanding DCR's role in the watersheds. WSCAC continues to recommend that DCR publish and post this executive summary.

- **DCR Watershed Forestry Program**

The link between water quality and watershed protection is well-documented. The DWSP forestry program plays an important role by working toward maintaining a vigorous, species-diverse, multi-aged forest that can provide resiliency in the event of natural disasters.

New England forests are experiencing a variety of pests and pathogens that affect species such as oaks, hemlocks, beech, ash, and white pine. All of these species are found in the watershed forests. Some pests—like the southern pine beetle, which is native to the southeastern United States—have been moving northward.

The drought of 2016 exacerbated multiple years of defoliation from the Gypsy Moth. Secondary pests and pathogens added to the increased tree mortality of oaks and other species.

Climate change will continue to affect the forest in numerous ways. Temperature and precipitation changes will alter the growing season. Some indigenous species will move northward as others move up from the south. Pests and pathogens will also move. Foresters will have to be vigilant in monitoring disease, the spread of invasives, and evaluating new strategies to keep the watershed forest as healthy as possible. Third party oversight can assist in these areas.

WSCAC supports Forest Stewardship Council recertification in DWSP watershed forestry operations. WSCAC's approval for resuming logging operations after the moratorium was predicated on DWSP returning to FSC certification which lapsed in 2009. The value of recertification is increased transparency in operations, and additional forestry professionals providing oversight and planning of logging operations now and in the future.

Activities

Comment Letters

August 30, 2018 – Submitted comments on the Town of Ashland’s request for an Interbasin Transfer

December 3, 2018 – Submitted letter to WSPT re: DWSP’s FY2018 Annual Report, FY 2019 Work Plan & Quarterly Progress Report

February 25, 2019 – Submitted WSCAC comments on the proposed revisions to the Drought Mgmt. Plan

June 3, 2019-- Submitted letter to WSPT re: MassDEP’s Annual Inspection Report, FY 2020 Draft Work Plan & Third Quarter Progress Report

Ongoing distribution of the DCR Monthly Hydrologic Report to MA communities

Sign-On Letters

October 5, 2018 – Signed on to Water Infrastructure Alliance letter

April 26, 2019 – WSCAC signed on to a letter of support for WaterSense

Events Attended by Staff

August 10, 2018 – Toured three Quabbin logging sites-Chief Forester Herm Eck

August 30, 2018 – Quabbin forestry showing-DCR forester Steve Wood

October 10, 2018 – Attended NEWWA-Water Resources & Sustainability Symposium

October 12, 2018 – Oak salvage logging site tour at Quabbin-Chief Forester Herm Eck

October 26, 2018 – NEWIN Tour at UMass on water/wastewater innovation

November 28, 2018 – NCSC-David Cash, UMass Boston, presented “Adapting to Severe Climate Change: Boston and Massachusetts as a Possible Model” at UMass Amherst

December 19, 2018 – Road Salt Impacts on Watersheds - Forbes Library, Northampton

February 15, 2019 – Meeting with Dr. Boutt, hydrologist at UMass Amherst

February 26, 2019 – Gypsy Moth presentation by Dr. Elkinton, UMass Amherst at the Hitchcock Center

February 28, 2019 – Biomass presentation by Dr. Mary Booth, Partnership for Public Integrity at the Hitchcock Center

March 26, 2019 – Watershed forestry tour in Petersham-DCR forester Richard MacLean

April 16, 2019 – Quabbin forestry lot tour-DCR forester Steve Wood

June 6, 2019 – Quabbin forestry lot tour-Chief Forester Herm Eck

Presentations to WSCAC

Update on Gypsy Moth Impacts to Watershed Forests

DCR/DWSP
September 5, 2018

FY2019 Challenges*

MWRA Advisory Board
September 20, 2018

What's New for FY2019

Frederick Laskey, MWRA
September 20, 2018

System Expansion and Regulatory Updates

Beth Card, MWRA
October 9, 2018

On the Water Front: Massachusetts Water Conservation Standards, the Interbasin Transfer Act and Drought Management Plan

Vandana Rao, Ph.D.,
Executive Office of Energy and Environmental Affairs
November 13, 2018

Updating Public Access at Ware River

Lisa Gustavson, Quabbin/Ware Watershed
December 11, 2018

Renewable Energy at the MWRA

Michael McDonald, MWRA
January 15, 2019

Update on the 2018 Water and Wastewater Master Plan*

Lise Marx, MWRA
February 12, 2019

Update on Dams and Invasive Aquatic Plant Management at MWRA Reservoirs

John Gregoire, MWRA
March 12, 2019

MWRA Fiscal Year 2020 Proposed Budget*

Thomas Durkin and James Halloran, MWRA
April 23, 2019

Metropolitan Tunnel Redundancy Update

Fred Brandon, MWRA
May 15, 2019

Forest Insects and Diseases

Nicole Keleher, and Ken Gooch, DCR
June 11, 2019

Protecting the Quabbin Reservoir and Watershed

Paula Packard, Aquatic Biologist, DCR
June 11, 2019

Overview of the Water Quality Monitoring Program for Quabbin Reservoir Watershed and Ware River Watershed

Yuehlin Lee, Environmental Quality Section Supervisor
Kristina Gutches, Environmental Analyst III
June 11, 2019

*Meeting held jointly with the Wastewater Advisory Committee (WAC)

Meetings

MWRA Board of Directors - Monthly

Water Resources Commission – Monthly

MWRA Advisory Board - Monthly

Drought Management Task Force – As Needed

Reservoir Operations Group - Quarterly

Quabbin Watershed Advisory Committee -
Quarterly

Water Supply Protection Trust – Quarterly

Members

Michael Baram, Chair, Town of Belmont

Paul Lauenstein, Neponset River Watershed
Association

Whitney Beals, New England Forestry
Foundation

Martha Morgan, Nashua River Watershed
Association

William Copithorne, P.E. Town of Arlington

Martin Pillsbury, Metropolitan Area
Planning Council

Steve Daunais, Tata & Howard

Andrea Donlon, Connecticut River
Conservancy

Janet Rothrock, League of Women Voters

Gerald Eves, Trout Unlimited

Bruce Spencer, retired DCR Chief Forester

Bill Fadden, OARs and SuAsCo Wild &
Scenic Rivers

Kurt Tramposch, Wayland Wells

William Kiley, Boston Water and Sewer

Roger Wrubel, Member at Large

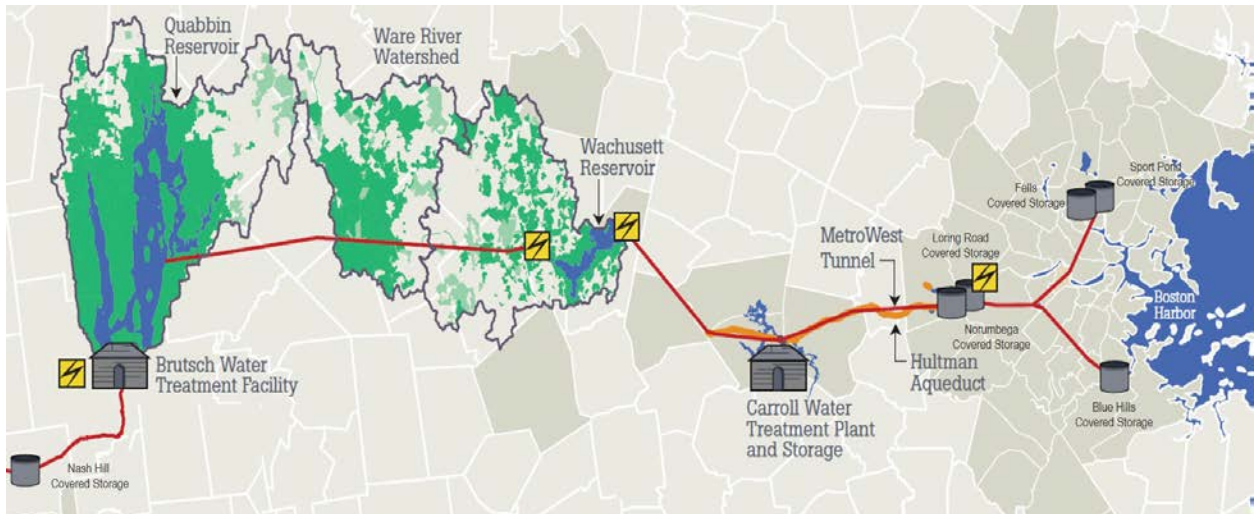
Staff

Alexandra Dewey
Executive Director

485 Ware Road
Belchertown, MA 01007

Alexandra Peckham
Administrative Assistant

Phone: 413-213-0454
Email: info@wscac.org
[Visit Our Website](#)



MWRA Water System and DCR Watersheds

WSCAC looks forward to supporting the MWRA and its Board of Directors with water supply and water protection issues in FY 20 and beyond.