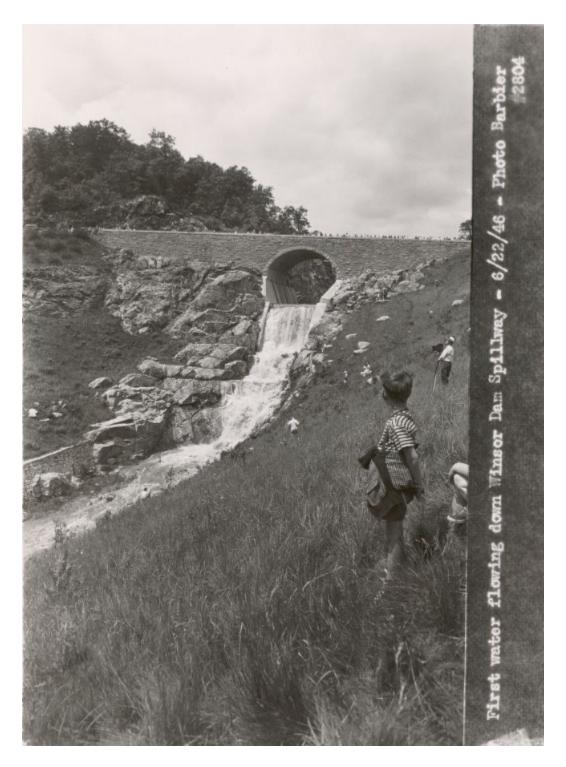
Water Supply Citizens Advisory Committee

To the MWRA and its Board of Directors



Annual Report Fiscal Year 2020

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 reviews relevant programs at the Massachusetts Department of Conservation and Recreation – Division of Water Supply Protection (DCR-DWSP), the Massachusetts Department of Environmental Protection (MassDEP), the Water Supply Protection Trust, the Water Resources Commission, other state agencies, and citizen's groups in order to develop informed recommendations on water supply. 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 and programs in FY20. Monthly meetings included discussions of:

- The ongoing redundancy projects to the water transmission system, including updates on the Northern High and Southern Extra High pipeline projects. In May 2020, the MWRA Board of Directors voted to award the Metropolitan Tunnel Redundancy Program Preliminary Design, Geotechnical Investigation and Environmental Impact Report to CDM Smith, Inc.
- An update on MWRA's ongoing efforts to reduce their carbon footprint. Both WAC (the Wastewater Advisory Committee) and WSCAC are following updates on the research for a Combined Heat & Power project at Deer Island.
- Reservoir operations and management, including the progress and locations of the aquatic invasives program, water quality monitoring including phytoplankton, cyanotoxin and algae sampling, and an update of dams and infrastructure projects.
- Community Emergency Response Planning pursuant to the Water Infrastructure Act.
- The review of the DCR-DWSP Annual Work Plan, Quarterly Progress Reports,
 MassDEP Annual Filtration Avoidance document and required DCR-DWSP reports. The
 draft Ware River Public Access Plan and the process for updating the Sudbury Access
 Plan have been delayed by the DCR Commissioner.

Due to a DCR hiring cap, DWSP has not been able to post or fill a number of watershed positions. Letters were sent to the state office of Administration & Finance from the

MWRA, the Water Supply Protection Trust, the MWRA Advisory Board, WSCAC and QWAC asking for DWSP hiring to be excluded from the DCR cap given that the MWRA pays the entire DWSP budget. There has been no response from the state.

- WSCAC and WAC were updated on Per- and Polyfluoroalkyl Substances (PFAS) in water supplies outside the MWRA service area. Formation of a legislative task force was discussed with Rep. Kate Hogan. Speakers from MWRA and MassDEP also presented.
- DWSP is collaborating with MWRA on addressing road salt use in watershed
 communities and the effects on tributaries and groundwater. Staff have been collecting
 data on how much salt is being used, the benefits of brine application systems, and
 providing trainings for DPW staff on this system. DWSP staff are working on a potential
 grant program to provide funding for watershed towns to purchase brine equipment, and
 to obtain more data. (A presentation is available here.)
- DWSP foresters continue to identify, propose and show forestry lots for sale quarterly to interested loggers. Several lots in the watersheds are targeted for early successional habitat treatments and for prescribed burns to provide habitat for rare species.
 - DWSP personnel, with assistance from seasonal staff, are completing the Continuous Forest Inventory, done every 10 years (CFI permanently staked plots throughout the Quabbin and Ware River properties). Trees in these specialized plots have been individually numbered and measured since the early 1960s. Ware River is to be completed in 2019-2020 and Quabbin will be completed in 2020-2021.
- DWSP's 2020 Deer Management includes plans to transition towards a Watershed-Wide Permit with the goal of moving away from controlled hunts in the watershed. DWSP had planned a two-day controlled hunt in Quabbin Park which was cancelled in early fall by the EOEEA Secretary. DWSP plans to continue research on deer numbers in the park and will propose the hunt again next year.
- Conditions at the Quabbin Park Cemetery have improved with DCR-DWSP removing a number of hazardous trees. Staff continues to work on a database that will allow the public to locate individuals in the cemetery.

MWRA has provided both funds and oversight for drilling a new well and construction of an irrigation system so visitors to the QPC can water plantings and clean headstones. MWRA is also overseeing lead and asbestos abatement in the office building, the vault and the maintenance garage. The well pump house will be demolished.

The Friends of Quabbin, in their Quabbin Voices-Spring 2020 newsletter (link <u>here</u>) presented a new website that contains photos taken of all the homes and other structures

that existed in the Swift River Valley before Quabbin Reservoir was constructed as well as all the structures that were moved or destroyed. A second site contains the photographs of the graveyards that existed in the valley prior to flooding and the photos of the early days of the Quabbin Park Cemetery.

- WSCAC received an annual briefing on the proposed FY21 MWRA Budget. MWRA had proposed a 3.6% increase in February, but with reductions to its operating budget and capital financing, the rate increase, which goes into effect July 1, 2020, was lowered to 1.0%. The Board also approved a recommendation from the MWRA Advisory Board to allow communities to defer payments on any Local Water Pipeline and Infiltration/Inflow loans with repayments due to MWRA in FY2020, FY2021 and FY2022.
- Due to Covid 19, many MWRA and DWSP staff continue to work from home if possible. However, there are many plant operators, laborers and others working from an A/B list to limit contact. WSCAC recognizes and appreciates MWRA's prudent policy of crosstraining employees. Staff is facing extremely challenging conditions in order to stay safe, and ensure that the water system is operating efficiently. DCR personnel continue to protect the watersheds and to allow recreation for as many people as possible.

UPCOMING TOPICS FOR FY21

• Staff Vacancies in the DCR Division of Water Supply Protection

In May 2019, DWSP distributed a Watershed Personnel Assessment with an evaluation of all positions to determine the amount and type of employees necessary to complete responsibilities in the watersheds moving into the future. It was determined that 150 full time employees is the new accurate number of personnel. The report noted that implementing the new organizational structure will need to occur over time. Most alterations will require a waiting period for positions to vacate in order to convert titles or eliminate the position; final details are still in development.

Since that time, watershed staff positions have remained at 134-137. Given that the funds are available in the DWSP budget (paid by the MWRA ratepayers) to hire necessary positions, we are anticipating an answer from Administration & Finance regarding DWSP hiring options outside of the DCR agency hiring cap. WSCAC remains concerned about the ability of the DWSP to complete projects in the FY21 Work Plan and beyond due to inadequate staffing. WSCAC will continue to monitor these conditions and advocate for removing DWSP from the hiring cap.

• 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 and the process for updating the Sudbury Public Access Plan have been delayed by the DCR Commissioner's Office. The success of the public access process depends on a significant level of collaboration, clarity and transparency with the public. It has become very clear in the last few months that people rely heavily on the use of DCR lands and state parks to enjoy the outdoors.

WSCAC will continue to monitor the DCR's public access process, and encourages the availability of collaboration with DCR staff.

DCR has yet to complete the Executive Summary of their 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.

WSCAC supports and will continue to advocate for 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, after their previous certification 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.

We are fortunate that the Gypsy Moth infestation has not occurred this spring. However, 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.

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.

• Redundancy for the MWRA's Metropolitan Water Transmission System

WSCAC will continue to follow the Metropolitan Tunnel process and MWRA's ongoing redundancy projects to the water supply system, including the improvement of the Northern Extra High including Bedford, Lexington and Burlington.

• MWRA's Carbon Footprint

WSCAC will continue to follow MWRA's ongoing energy efficiency efforts at all MWRA campuses and the updating of its Greenhouse Gas Inventory. We will join with WAC in the opportunity for an update on the Deer Island Combined Heat & Power study. 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 greenhouse gas emission levels by 2020 and 80 percent below statewide 1990 greenhouse gas emission levels by 2050.

• Expansion of the MWRA Water System

As communities around the MWRA service area are potentially faced with the discovery of various contaminants such as 4 Dioxane, PFAS and others, WSCAC will be focusing on ongoing research that addresses contaminants affecting public drinking water. MWRA is likely to be the "go to" for these communities as well as those that are affected by drought. In addition, there are many communities that are facing aging infrastructure issues and may turn to MWRA as partial or full users of the water system. Although the amount of water requested per community can be small relative to the overall system demand, the aggregate water demand of all new communities could be substantial. WSCAC will be looking at communities surrounding the service area who may be facing these types of issues in the near future.

WSCAC continues to monitor and submit comments on the MEPA, IBTA and MWRA admission process with the Town of Burlington.

• Water Conservation

Water conservation continues to be the least expensive method of saving energy and treatment costs as well as keeping supplies available for future use.

MWRA recommends, but does not require, restrictions on nonessential outdoor water use from its fully supplied communities, unless severe drought conditions persist. Demand in

summer months shows consistently high outdoor water use. Quabbin water continues to be 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.

WSCAC will continue to promote the use of smart outdoor water use technology and the importance of communities to support the MA Water Conservation Standards.

• 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 research at UMass Amherst on strategies to address the impacts of a spill in the Wachusett Reservoir is 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 timely notifications of hazardous cargo, frequent inspections, the repair of track-related defects and other feasible means of increasing rail safety near the Wachusett Reservoir.

Activities

Comment Letters

- September 9, 2019 WSCAC submitted comments to the WSPT on DWSP projects and programs and the DWSP FY20 Work Plan
- January 10, 2020 WSCAC submitted comments to MEPA on Burlington's DEIR
- January 30, 2020 WSCAC submitted a letter of support to senate members on the Ways and Means Committee regarding H4256 An Act on establishing an interagency PFAS task force
- February 7, 2020 Submitted WSCAC letter to Somerville City Council on water conservation
- February 14, 2020 Submitted WSCAC comments to A & F Secretary Heffernan on DWSP hiring cap
- Ongoing distribution of the DCR Monthly Hydrologic Report to MA communities

Sign-On Letters

- September 27, 2019 WSCAC signed on to the Water Infrastructure Alliance letter regarding Gov. Baker's supplemental budget request (HB 4067)
- October 7, 2019 WSCAC signed on to the WIA letter regarding additional funding for the Clean Water Trust, the emerging presence of PFAS and remediating lead in schools
- October 18, 2019 WSCAC signed on to Mass Rivers Alliance letter regarding EPA Clean Water Act Section 401 rollback
- April 10. 2020 Signed on to joint letter with Mass Rivers Alliance and others on Water Infrastructure Stimulus Package
- June 11, 2020 Signed on to letter with Alliance for Water Efficiency to the Environmental Protection Agency (EPA) in support of WaterSense program
- June 24, 2020 Signed on to Mass Rivers Alliance letter in support of the sewage notification bill H.3976

Events Attended by Staff

- July 11, 2019 Quabbin forestry lots tour with Steve Wood, South Quabbin forester
- September 9, 2019 MA Rivers Alliance meeting with Senator Eldridge and Rep. Dykema
- September 11, 2019 Tour of the Quabbin Park Cemetery with the Water Supply Protection Trust
- October 4, 2019 Harvard Forest lecture by David Wong, MassDEP Road Salt Pollution and Forests in Massachusetts: A Tale of Two Streams
- October 19, 2019 Attended the DCR-DWSP public forestry tour in New Salem
- October 30, 2019 Water Resources and Sustainability Symposium Devens
- November 8, 2019 Quabbin watershed forestry lot tour
- January 10, 2020 Water Supply Protection Trust meeting
- January 14, 2020 Symposium on Groundwater Research for Drinking Water Professionals at UMass Amherst

January 23. 2020 – MassDEP hearing on proposed PFAS regulations in Springfield

February 26, 2020 – NECASC – UMass-Systematic Examination of Sensitivity and Thresholds in Growth of Tree Species to Potential Changes in Climate Patterns, by T. Bonnot, University of Missouri

March 11, 2020 - Tour of Wachusett Lower Gatehouse project

March 12, 2020 – Showing of DWSP New Salem early successional forestry lot

April 7, 2020 – EPA webinar: "COVID-19 Planning and Response: Overview of EPA's Pandemic Incident Action Checklist for Water Utilities"

April 29, 2020 – Webinar: NACWA Water Week 2020

May 6, 2020 – Webinar: Early Lessons from Operational Forest Adaptation Studies in the Northern Forest – NECASC

May 14, 2020 – DCR Stewardship meeting

May 29, 2020 – Webinar: Xylem – Tools for Treating Emerging Contaminants

June 8, 2020 – Water Supply Protection Trust meeting

Presentations to WSCAC

Challenges for the Year Ahead*

Frederick A. Laskey, MWRA Executive Director September 19, 2019

FY20 MWRA Advisory Board Preview*

Joseph Favaloro, MWRA Advisory Board Executive Director September 19, 2019

What Do We Know about PFAS in MWRA Water, Wastewater and Biosolids?*

Steve Rhode, MWRA Lab Director October 15, 2019

Per and Poly Fluoroalkyl Substances (PFAS): Why all the Fuss?*

C. Mark Smith Ph.D., M.S., MassDEP Office of Research and Standards October 15, 2019

A Drop in the Bucket: Water Affordability Policies in Twelve Massachusetts Communities

Martha F. Davis, JD, Northeastern law professor November 21, 2019

DCR-DWSP Watershed Protection Plan and Ware Public Access Plan

Lisa Gustavsen, Assistant Regional Director, Quabbin Reservoir & Ware River Region December 10, 2019

Activities for Children and Adults*

Adriana Cillo, Educational Coordinator, Boston Water and Sewer Commission February 11, 2020

What Can We Do To Protect The Environment?*

Adriana Cillo, Educational Coordinator, Boston Water and Sewer Commission February 11, 2020

Partnering to Bring Stormwater Education In and Out of the Classroom*

Meg Tabacsko, MWRA Project Manager for School Education February 11, 2020

Report on the 2019 Water Use Trends and Reservoir Status

Stephen Estes-Smargiassi, Director of Planning and Sustainability March 10, 2020

Quabbin Reservoir Levels (10/31/1948 - 1/31/2020) and System Status

Matthew Walsh, MWRA Project Engineer March 10, 2020

MWRA FY21 Proposed CEB and CIP Presentation*

Tom Durkin, MWRA Finance Director and staff April 21, 2020

AWWA-AMWA Covid Report and MWRA response

Stephen Estes-Smargiassi, MWRA Director of Planning May 8, 2020

*Meeting held jointly with the Wastewater Advisory Committee (WAC) *If available, presentations can be viewed on WSCAC's website.*

Meetings

MWRA Board of Directors – Monthly

MWRA Advisory Board – Monthly

Reservoir Operations Group – Quarterly

Water Supply Protection Trust – Quarterly

Water Resources Commission – Monthly

 $Drought\ Management\ Task\ Force-As$

Needed

Quabbin Watershed Advisory Committee –

Quarterly

Members

Michael Baram, Chair, Town of Belmont

Whitney Beals, Southborough

William Copithorne, P.E. Town of Arlington

Steve Daunais, Tata & Howard

Andrea Donlon, Connecticut River Conservancy

Gerald Eves, Trout Unlimited

Bill Fadden, OARs and SuAsCo Wild & Scenic Rivers

William Kiley, Boston Water and Sewer

Paul Lauenstein, Neponset River Watershed Association

Martha Morgan, Nashua River Watershed Association

Martin Pillsbury, Metropolitan Area Planning Council

Janet Rothrock, League of Women Voters

Bruce Spencer, retired DCR Chief Forester

Kurt Tramposch, Wayland Wells

Roger Wrubel, Member at Large

James Guiod, MWRA Advisory Board

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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 21 and beyond.