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May 7, 2021

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
 ON THE
 ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Metropolitan Water Tunnel Program
 PROJECT MUNICIPALITY : Waltham, Belmont, Watertown, Weston, Newton,
 Wellesley, Needham, Brookline, Boston, Dedham
 PROJECT WATERSHED : Charles River and Boston Harbor
 EEA NUMBER : 16355
 PROJECT PROPONENT : Massachusetts Water Resources Authority (MWRA)
 DATE NOTICED IN MONITOR : April 7, 2021

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and Section 11.03 of the MEPA Regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Draft Environmental Impact Report (DEIR).

Project Description

As described in the Environmental Notification Form (ENF), the Massachusetts Water Resources Authority (MWRA) is proposing to construct two new water supply deep rock tunnels (totaling approximately 14.5 miles) that will provide redundancy for MWRA's existing Metropolitan Tunnel System, which includes the City Tunnel (constructed in 1950), City Tunnel Extension (constructed in 1963) and Dorchester Tunnel (constructed in 1976). This tunnel system has been in continuous service since construction. While the concrete lined deep rock tunnels have a long design life, some of the associated valves and piping have exceeded their limited design life and are currently in poor condition. In order to maintain and/or replace some of these valves and piping without interruption to water supply, a redundant system is needed. The project will provide the redundancy to allow for system maintenance and repair, without disrupting service to over 2.5 million water customers. Under current conditions, if the Metropolitan Tunnel System is shut down, water must be supplied from open reservoirs

containing nonpotable water, backup aqueducts, and undersized surface mains to distribute the nonpotable water with inadequate pressure. These backup options require use of emergency chlorination and issuing a boil water order to customers. The project will support MWRA's responsibility to protect public health, provide sanitation, and provide fire protection through adequate water supply.

Water from the Quabbin Reservoir and Wachusett Reservoir is conveyed to the John J. Carroll Water Treatment Plant (WTP) in Marlborough. Treated water is conveyed from the WTP through the MetroWest Water Supply Tunnel (MWWST) and the Hultman Aqueduct (Shaft 5/5A). From there, the existing Metropolitan Tunnel System conveys approximately 60 percent of the metropolitan Boston area's daily demand. The new, redundant deep rock tunnels would originate near the convergence of MWWST and the Hultman Aqueduct (Shaft 5/5A) at a site located at the western most portion of the Metropolitan Tunnel System roughly in the vicinity of the Interstate 95 (I-95)/Interstate 90 (I-90) Interchange. From this point, one tunnel would take a northerly route toward Waltham (North Tunnel) and the other a southerly route toward Boston and Dorchester (South Tunnel). Each tunnel will connect to existing water supply infrastructure at key locations to provide water supply redundancy to the existing system.

The ENF identified a conceptual Preferred Alternative for both the North Tunnel and the South Tunnel alignments. The Preferred Alternative identified for the North Tunnel would consist of constructing approximately 4.5 miles of deep rock water supply tunnel from the Shaft 5/5A site area in Weston to a point adjacent to the Weston Aqueduct Supply Main 3 (WASM 3) in Waltham near the Belmont town line. The Preferred Alternative for the South Tunnel System involves constructing approximately 10 miles of new water supply tunnel from the Shaft 5/5A area in Weston to a point adjacent to existing water surface mains near Shaft 7C of the Dorchester Tunnel in Boston. The project will require up to 12 total shaft sites for entry of tunnel boring machine (TBM) for drilling the deep rock tunnel and receiving shaft sites to extract the TBM upon tunnel completion as well as intermediate shaft sites required for connections to the existing distribution system. The advancement of both the North and South Tunnel System conceptual designs will confirm the starting and end points of both deep rock tunnels, and the specific alignment and connection points to the existing distribution system.

After preliminary and final design are complete, construction is anticipated to begin in approximately 2026-2027 and last through 2037. Project impacts will primarily be associated with construction at the shaft sites¹ at surface connection locations, management of material removed from the tunnel, and treatment of groundwater inflow (i.e. dewatering excavated material). The proposed shafts will include up to six 25 foot (ft) by 25 ft connection shafts and up to six 50 ft by 50 ft valve chamber shaft structures with 28 foot diameter Top of Shaft Structures. Cumulatively, the shaft sites will result in the alteration of up to 11 acres of land. While the project anticipates avoiding direct wetland impacts, the full extent of environmental impacts, including the location of the proposed shaft sites will be disclosed in the DEIR.

¹ Shafts sites are where vertical concrete lined tunnels will connect the deep rock tunnel to the surface and/or water distribution infrastructure.

Project Site

The MWRA is a Massachusetts public authority established by an act of the Legislature in 1984 to provide wholesale water and sewer services to 3.1 million people and more than 5,500 businesses in 61 communities in eastern and central Massachusetts. The MWRA water transmission system consists of Quabbin and Wachusett Reservoirs, the Ware River intake, and the deep rock tunnels and surface aqueducts that deliver water by gravity. The overall transmission and distribution systems consist of approximately 100 miles of tunnels and aqueducts and 280 miles of near surface pipelines that carry water from the source reservoirs to communities. The Quabbin and Wachusett Reservoirs, which are the main water supply sources, are located 65 and 35 miles west of Boston, respectively. Water from the reservoirs is treated at the John J. Carroll Water Treatment Plant in Marlborough before being conveyed to the metropolitan Boston area through the Hultman Aqueduct and the MetroWest Water Supply Tunnel (MWWST) completed in 2003 which provides redundancy for the Hultman Aqueduct. Water from the Hultman Aqueduct and MWWST is then conveyed to the existing Metropolitan Water Tunnel System.

Each tunnel comprising the Metropolitan Tunnel System consists of concrete-lined deep rock tunnel sections linked to the surface through steel and concrete vertical shafts. At the top of each shaft, cast iron or steel pipe and valves connect to the MWRA surface pipe network. These pipes and valves are accessed through subterranean vaults and chambers. The tunnel and shaft structures, require little or no maintenance and represent a low risk of failure however, many of the valves and piping are in poor condition.

The project Study Area encompasses approximately 14 miles of deep rock tunnels (approximately 200-400 ft) below the surface of several communities. The potentially impacted areas (Study Area) includes the communities of Boston, Belmont, Brookline, Dedham, Needham, Newton, Watertown, Waltham, Wellesley, and Weston. Surface impacts associated with shaft site location will be limited to approximately 11 acres. While the specific shaft site locations have not been determined, the intent of the shaft site selection process will be to avoid resource areas and sensitive receptors to the greatest extent practicable. The study area includes wetlands, Areas of Critical Environmental Concern (ACECs), Outstanding Resource Waters (ORWs), historic resources, and mapped habitats for endangered species. The service area also includes mapped Environmental Justice (EJ) populations.

Environmental Impacts and Mitigation

Given the early stage of project design, the impact calculations presented in the ENF are intended to be conservative and conceptual in nature. Potential impacts associated with shaft sites include the alteration of up to 11 acres of land and creation of up to 4 acres of new impervious surface. The project corridor was depicted in relation to open space/conservation land, estimated wetlands, Estimated and/or Priority Habitat for State-Listed Species, water supply protection zones, historical resources, hazardous waste sites which were provided graphically in figures included in Attachment B of the ENF. Greenhouse Gas (GHG) emissions and other air pollutants will be generated during construction period activities, including the use of heavy equipment, trucks and other emitting sources employed during construction.. The ENF notes that impact calculations will be refined as the alternatives are further advanced through

shifts in roadway alignment, further utilization of retaining walls, reduction/removal of pavement, and other similar measures.

The project will minimize and mitigate environmental impacts by avoiding direct impacts to resource areas through the selection of shaft sites. The DEIR should provide further analysis to demonstrate that the project includes measures to minimize mobile-source GHG emissions generated by the project to the maximum extent practicable.

Jurisdiction and Permitting

The project is subject to the preparation of a Mandatory EIR pursuant to 301 CMR 11.03(4)(a)(3) because it requires State Agency Actions and involves the construction of one or more new water mains ten or more miles in length. The project may exceed additional MEPA thresholds depending on the location of the proposed shaft sites and other design refinements. The DEIR should identify any additional MEPA thresholds that will be exceeded. The project will likely require multiple State Permits, including licenses and/or approvals. Such Permits include a Highway Access Permits from the Massachusetts Department of Transportation (MassDOT); Construction and Access Permits and/or easements from the Department of Conservation and Recreation (DCR); Section 401 Water Quality Certificate, Chapter 91 license (inland waterways only), Bureau of Resource Protection Water Supply (BRP WS) Permit 32 – Distribution System, Modification under the Massachusetts Drinking Water Regulations, Surface Water Discharge Permitting, and Ground Water Discharge Permitting from MassDEP; Natural Heritage and Endangered Species Program (NHESP) review; and review by the Water Resources Commission pursuant to the Water Management Act. The project may require Article 97 Land Disposition legislation.

The project may require Order of Conditions from multiple Conservation Commissions (or in the case of an appeal, a Superseding Order of Conditions (SOC) from MassDEP). The project requires National Pollutant Discharge Elimination System (NPDES) from the Environmental Protection Agency (EPA).

Because the project is being undertaken by the MWRA, an Agency as defined in MEPA regulations, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause Damage to the Environment.

Review of the ENF

The ENF provides a description of existing conditions and the proposed conceptual route alternatives, and preliminary analysis of environmental impacts. The ENF submittal is conceptual in nature and intended to provide sufficient information to guide the scoping of the DEIR. Comments received on the ENF express support for beginning MEPA review early in the design process but note that, due to the project preliminary design phase, specific locations of temporary and permanent impacts are not known and the full scope of the project's environmental impacts cannot be understood and assessed until the DEIR is submitted.

Public Outreach / Environmental Justice

The ENF provides a description of MWRA's public outreach that has occurred to date. As described in the ENF, the MWRA has begun to implement a robust community outreach strategy with stakeholders. Stakeholders include, but are not limited to, communities where shaft sites may be located or where the proposed tunnel alignments may traverse (i.e., Study Area) including local elected officials and municipal departments, property owners (public and private) of potential shaft and construction sites, state agencies, and legislators. It is expected that project stakeholders will evolve as the project advances to later stages of design and construction. The outreach strategy includes introductory meetings within each community in the Study Area, formation of a working group (one working group to start which may evolve into two or more as the project design progresses) consisting of representatives from communities and stakeholders in the Study Area, coordination with MWRA's Advisory Board and Commonwealth agencies, as well as outreach to environmental advocacy groups. Further, MWRA is participating as a member of an EJ task force led by the Executive Office of Energy and Environmental Affairs (EEA) and will follow EEA guidelines pertaining to outreach to and inclusion of EJ populations in the Study Area. I expect that the MWRA will continue to actively seek public input and work closely with the Stakeholder Working Group(s) and other stakeholders in developing the DEIR for this project. MWRA staff will make presentations to the working group(s) as the evaluation of alternative tunnel alignments progresses with the goal of arriving at a consensus for one preferred and up to two back up alternatives, which will be formally proposed in the DEIR.

Alternatives Analysis

The MWRA evaluated 28 alternatives to provide redundancy that would allow future emergencies to be mitigated without an interruption in the water supply that would incur a boil water order. These alternatives are detailed in Attachment D to the ENF. The alternatives included deep rock tunnels, near-surface mains, and improvements to the existing infrastructure to expand capacity. All of these alternatives begin in the vicinity of Shaft 5 and 5A in Weston. Of these alternatives, there were 13 north alternatives that extended to the northeast from Weston, providing improvements or redundancy for Weston Aqueduct Supply Main 3 (WASM 3) and 15 south tunnel alternatives that extended to the southeast from Weston to the Dorchester Tunnel. MWRA's evaluation sought a combination of a north and south alternatives that would work together.

Two tiers of screening criteria were developed and applied for 28 alternatives from a site location in the vicinity of Shaft 5 and 5A in Weston. The first tier of screening criteria was used to eliminate alternatives that did not meet primary project goals of meeting water demand needs and system reliability and resiliency. Tier 2 screened alternatives for preliminary feasibility; potential environmental and social impacts (including dust, vibration and traffic impacts); operational impacts; and cost. For the North Alternatives, nine alternatives met the project's primary goals. Of these, only one met all of the Tier 2 criteria (Alternative 8N). For the South Alternatives, four alternatives met the project's primary goals; however, only one alternative met the Tier 2 criteria.

As described in the ENF, the MWRA and its predecessor agencies have been planning for system redundancy since the 1930s. Several versions of tunnel loops and redundant tunnels have been proposed over the years. A surface pipe alternative had previously been contemplated

in 2011 and iterations were included in the alternatives analysis presented in the ENF. However, as the planning progressed, it became apparent that the construction of large diameter pipelines through dense urban areas would cause unacceptable community disruption and have significant implementation challenges. Given the difficulties associated with the construction and significant community impacts associated with large diameter surface pipes together with operational reliability concerns, only the deep tunnel rock advanced through the two-tiered screening.

MWRA's preferred alternatives included two deep rock water supply tunnels including the North Alternative 8N and South Alternative 20S. Alternative 8N would involve construction of a 10 to 12-foot diameter rock tunnel 4.5 miles long, from the Shaft 5/5A area in an alignment roughly parallel to WASM 3, and ending in Waltham near the Belmont town line. Alternative 20S would involve construction of a 10-foot diameter rock tunnel extending from the Hultman Aqueduct near Shaft 5/5A, to first the end of the Section 80 main in Needham, then to the Newton Street Pumping Station in Brookline, and ending near Shaft 7C of the Dorchester Tunnel. For improved redundancy, MWRA will evaluate the feasibility of connecting the tunnels to additional existing pump stations that are near the planned routes for the tunnels. I note that environmental impacts included in the Tier 2 screening were limited to construction period impacts including dust, vibration and traffic impacts. Additional evaluation of impacts to land alteration (including protected open space), wetlands, rare species habitat, historical and cultural resources should be evaluated in the DEIR.

SCOPE

General

The DEIR should follow Section 11.07 of the MEPA regulations for outline and content and provide the information and analyses required in this Scope. It should clearly demonstrate that the Proponent has sought to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible. The DEIR should contain a copy of this Certificate and a copy of each comment received. Given the conceptual nature of impacts identified in the ENF, the MWRA should circulate the DEIR to the same distribution list the ENF was sent to, including all community contacts for the identified the Study Area; additional stakeholders identified; and to any State Agencies from which MWRA will seek permits or approvals; and to any parties specified in Section 11.16 of the MEPA regulations.

Project Description and Permitting

The DEIR should describe the project and identify any changes since the filing of the ENF. The DEIR should identify all MEPA thresholds that will be met or exceeded by the project, including any not identified in the ENF. The DEIR should include a description and analysis of applicable statutory and regulatory standards and requirements, and a discussion of the project's consistency with those standards. Given the conceptual nature of the project identified in the ENF, the DEIR should include a description of the project's temporary and permanent impacts to environmental resources, including but not limited to the following: land alteration (including protected open space), wetlands, rare species habitat, cultural and historical resources and open space. The DEIR should identify methods that will be undertaken to avoid, minimize and mitigate Damage to the Environment. I encourage the MWRA to consult with the MEPA Office

prior to filing the DEIR for guidance on the analyses of impacts and mitigation measures appropriate for the level of project information to be provided in the DEIR.

The DEIR should include updated site plans for existing and post-development conditions for each project alternative. Given the numerous shaft site locations proposed, MWRA may include overall plans for regional and local context supplemented by plans that focus on specific project areas (e.g., each shaft site location) to allow for the presentation of details at a legible scale. Site plans for existing and proposed conditions should clearly identify environmental resources including: wetland resource areas, protected open space, c.91 jurisdictional limits, stormwater, wastewater and water supply infrastructure (including private wells), rare species habitat, and historic resources. The DEIR should include plans that clearly delineate and describe either existing land ownership or acquisitions, easements and associated rights (e.g., rail operations, sewer lines, drainage culverts, etc.) required for project construction, and roadway and intersection jurisdictions.

The DEIR should identify and describe State, federal and local permitting and review requirements associated with the project and provide an update on the status of each of these pending actions. The DEIR should include a description and analysis of applicable statutory and regulatory standards and requirements, and a discussion of the project's consistency with those standards. The DEIR should clearly describe the permits and/or regulatory approvals required for each component of the project. The DEIR should describe how the project is consistent with any applicable EEA policies, including but not limited to the Article 97 Land Disposition Policy.

The information and analyses identified in this Scope should be addressed within the main body of the DEIR and not in appendices. In general, appendices should be used only to provide raw data, such as drainage calculations, traffic counts, capacity analyses and energy modelling, that is otherwise adequately summarized with text, tables and figures within the main body of the DEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in electronic format, include links to individual sections. Any references in the DEIR to materials provided in an appendix should include specific page numbers to facilitate review.

Public Outreach/Environmental Justice

As noted above, the MWRA has indicated that a robust community outreach strategy with stakeholders will be undertaken in connection with the development of the project design. Stakeholders include, but are not limited to, communities where shaft sites may be located or where the proposed tunnel alignments may traverse including local elected officials and municipal departments, property owners (public and private) of potential shaft and construction sites, state agencies, and legislators. It is expected that project stakeholders will evolve as the project advances to later stages of design and construction. The DEIR should provide an overview of public outreach activities that have taken place since the ENF was submitted. The DEIR should identify EJ populations that may be impacted by the project and provide a narrative describing outreach activities undertaken relative to those communities. The effects, positive and negative, of the project on EJ populations should be evaluated in the DEIR, specifically, to determine whether project impacts will result in disproportionate or adverse effects on EJ populations. Available data on baseline environmental and health conditions for the EJ population should be consulted to determine whether project impacts may exacerbate any such

existing conditions so as to potentially create a disproportionate or adverse impact, and if so, what measures could be taken to avoid, minimize and mitigate such impacts. As noted below, specific analysis of construction impacts, including air quality impacts, should be provided.

Alternatives Analysis

The objective of the MEPA review process is to support analysis of the environmental impacts of a project and measures to avoid, minimize and/or mitigate Damage to the Environment to the maximum extent practicable within the context of the project purpose and goals. Alternatives analyses are required to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment. The DEIR should include a discussion that describes and estimates the environmental impacts associated with the various alternatives presented in the ENF including between operational changes to the existing system to increase capacity and use of surface pipelines.

The DEIR should include an expanded alternative analysis that builds off the preliminary data presented in the ENF and provides additional description and data outlining the potential environmental impacts of the conceptual alternatives. As indicated above, the DEIR will present a Preferred Alternative and up to two back up alternatives. The DEIR should identify the Preferred Alternative deep rock tunnel alignment alternatives and the location of construction and connection shafts including any backup alternatives. The alternatives analysis should provide a detailed assessment of the relative ability of the respective alternatives to achieve the project goals while minimizing environmental impacts. The DEIR should describe proposed conditions, quantify environmental impacts and provide a conceptual plan for each alternative. It should compare the alternatives with respect to their impacts on environmental resource areas including, wetlands, rare species habitat, cultural and historical resources, open space, land alteration and protected open space, impervious area and stormwater management and construction period impacts in both a narrative and tabular format. The DEIR should provide a comparison of GHG impacts and review climate change resiliency features of each alternative as applicable. The DEIR should clearly describe the criteria used to evaluate these alternatives and explain the reasons that the Preferred Alternative was chosen and other alternatives were dismissed. As stated above, the project should consider potential adverse effects on EJ populations, and should compare the alternatives relative to EJ impacts.

Land Alteration, Open Space, Wetlands, Rare Species Habitat, Cultural and Historical Resources

As indicated in the ENF, the intent of the shaft site selection process will be to avoid resource areas and sensitive receptors to the greatest extent practicable. The ENF indicated that shaft sites and temporary project locations including staging, equipment storage, and vehicle access areas will be located at previously impacted locations paved surfaces, to the extent feasible. The DEIR should include a comprehensive analysis of the project's potential environmental impacts (including but not limited to: wetlands/waterways; rare species habitat; cultural and historical resources; land alteration, impervious area, and stormwater management; and protected open space) and identify measures to avoid, minimize and mitigate said impacts. The DEIR should include a separate section or chapter that addresses each of these resources. The DEIR should demonstrate that land alteration and tree clearing has been limited to the maximum extent practicable and/or propose supplemental landscaping or tree planting to mitigate impacts associated with land alteration. The Proponent should continue to reduce

impervious area through the incorporation of pervious surfaces and landscaped areas. The DEIR should describe both temporary and permanent wetlands/waterways impacts associated with the project. The DEIR should identify temporary and permanent impacts to rare species habitat and cultural and historical resources.

Water Management Act/Water Supply

As described in MassDEP's comment letter, it is anticipated that up to 12 shaft sites will be constructed for deep rock tunnel across the Charles River Basin and the Boston Harbor Basin. The DEIR should provide the water withdrawal rates that will be needed to dewater the tunnel during construction for this project to determine the applicability of the WMA and/or Interbasin Transfer Act (IBTA) to the project.

Based on the study area and the preferred South and North Alternative provided in the ENF, the project may require Water Management Act Permits in more than one river basin (the tunnel may pass through the Charles and Boston Harbor Basins). The DEIR should clarify the need for this Permit and address the permit criteria at 310 CMR 36.00 that incorporate: streamflow criteria (Biological Category, Groundwater Withdrawal Category and Seasonal Groundwater Withdrawal Categories) and potential impacts to coldwater fish resources. MWRA should consult with MassDEP regarding this analysis prior to preparing the DEIR.

The DEIR should examine the project impacts on the public and private wells. A water contingency plan is encouraged for areas within the maximum anticipated impact zone to identify the course of action to be taken to provide water service to any affected homeowners. The DEIR should include a conceptual water contingency plan.

Climate Change

Governor Baker's Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth (EO 569; the Order) was issued on September 16, 2016. The Order recognizes the serious threat presented by climate change and directs Executive Branch agencies to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The Order seeks to ensure that Massachusetts will meet GHG emissions reduction limits established under the Global Warming Solution Act of 2008 (GWSA) and will work to prepare state government and cities and towns for the impacts of climate change. I note that the MEPA statute directs all State Agencies to consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise, when issuing permits, licenses and other administrative approvals and decisions.

The GHG Policy and requirements to analyze the effects of climate change through EIR review play an important role in this statewide strategy. These analyses advance proponents' understanding of a project's contribution and vulnerability to climate change.

Adaptation and Resiliency

The DEIR should include a discussion of the project's design life and how, if at all, the project will be vulnerable to the effects of climate change. The DEIR should include a

discussion of how the project will be designed to increase the resiliency of the infrastructure and services that will be provided by the project. It should specify whether climate data and projections (including extreme heat and precipitation, flooding, groundwater elevations etc.) will be incorporated into the design of any project components, and if so, identify the data sources used for such design. The DEIR should identify any infrastructure that will be located within the floodplain and how the infrastructure was designed to mitigate flood impacts.

Greenhouse Gas (GHG) Emissions

Because the project requires the preparation of an EIR, it is subject to the MEPA Greenhouse Gas Policy and Protocol (GHG Policy). I note that the GHG Policy includes a de minimus exemption for projects that will produce minimal amounts of GHG emissions. The DEIR should include a narrative that addresses the applicability of this exemption as related to project components other than construction period impacts. Alternatively, it should include a GHG analysis in accordance with the GHG Policy. As indicated by the Proponent, the majority of GHG emissions are associated with construction period activities. The Proponent should provide an accounting of the estimated total number of trucks and other mobile sources, as well as all fossil fuel burning equipment, to be utilized during the construction period, including a breakdown by location and time period (e.g., phases or years within the construction period). The Proponent should quantify the amount of GHG emissions associated with these emitting sources, as well as the amount of volatile organic compounds (VOC) and nitrogen oxides (NO_x) projected to be emitted in the project area. Guidance provided in the MassDEP Guidelines for Performing Mesoscale Analysis of Indirect Sources should be consulted. To the extent EJ populations may be impacted, this analysis should be considered in the context of any baseline environmental or health conditions that may be associated with poor air quality. The DEIR should assess whether construction period impacts from the project may exacerbate such existing conditions so as to potentially create a disproportionate or adverse impact on the EJ population, and if so, what measures could be taken to avoid, minimize and mitigate such impacts.

Construction Period

The DEIR should provide a comprehensive review of the project's construction-period impacts and mitigation relative to noise, air quality, water quality, and transportation, including pedestrians, bicyclists and transit riders. The DEIR should include measures that will minimize damage to the site and adjacent areas that could result storm events including flooding from extreme precipitation. It should identify the schedule for construction of various project elements.

The DEIR should include an inventory of construction equipment that will be in use during the construction to provide information on the potential air quality impacts associated with construction period mobile emissions. The DEIR should describe construction period materials management plans (including management of contaminated materials) and estimates of the number of haul trips at each construction site. The DEIR should outline mitigation measures that will be undertaken to avoid, minimize and mitigate these impacts. The DEIR should analyze the potential operational and construction period noise impacts associated with the construction activities at the shaft sites. The DEIR should propose measures to limit vehicle idling time in compliance with the Massachusetts Idling regulation (310 CMR 7.11) and measures to offset identified air quality impacts. It should confirm that the project will require its construction

contractors to use Ultra Low Sulfur Diesel fuel, and discuss the use of after-engine emissions controls, such as oxidation catalysts or diesel particulate filters.

The DEIR should provide more information regarding the project's generation, handling, recycling of excavated material. I encourage the Proponent to commit to C&D recycling activities as a sustainable measure for the project as applicable. The DEIR should review procedures to be used for the removal and disposal of any asbestos at any of the shaft sites. It should describe how contaminated soil or groundwater encountered during construction will be managed in accordance with M.G.L. c. 21E and the Massachusetts Contingency Plan (MCP). The DEIR should include dewatering plans (including management of contaminated groundwater).

Mitigation and Draft Section 61 Findings

The DEIR should include a separate chapter summarizing all proposed mitigation measures, including construction-period measures. This chapter should also include draft Section 61 Findings for each permit to be issued by State Agencies. The DEIR should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and a schedule for implementation.

Responses to Comments

The DEIR should contain a copy of this Certificate and a copy of each comment letter received. It should include a comprehensive response to comments on the ENF that specifically address each issue raised in the comment letter; references to a chapter or sections of the DEIR alone are not adequate and should only be used, with reference to specific page numbers, to support a direct response. This directive is not intended to, and shall not be construed to, enlarge the Scope of the DEIR beyond what has been expressly identified in this certificate.

Circulation

The Proponent should circulate the DEIR to those parties who the ENF was distributed to, any additional stakeholders identified during MWRA's public outreach program, to any State Agencies from which the Proponent will seek permits or approvals, to any parties specified in section 11.16 of the MEPA regulations and make a copy available for review at public libraries of the Study Area communities.² Per 301 CMR 11.16(5), the Proponent may circulate copies of the EIR to commenters in CD-ROM format or by directing commenters to a website address. However, the Proponent must make a reasonable number of hard copies available to accommodate those without convenient access to a computer and distribute these upon request

² Requirements for hard copy distribution or mailings will be suspended during the Commonwealth's COVID-19 response. Please consult the MEPA website for further details on interim procedures during this emergency period: <https://www.mass.gov/orgs/massachusetts-environmental-policy-act-office>.

on a first-come, first-served basis. The Proponent should send correspondence accompanying the CD-ROM or website address indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. The DEIR submitted to the MEPA office should include a digital copy of the complete document.



May 7, 2021

Date

Kathleen A. Theoharides

Comments received:

04/27/2021 Charles River Watershed Association
 04/27/2021 Department of Conservation and Recreation (DCR)
 04/27/2021 Massachusetts Department of Environmental Protection (MassDEP) Northeast
 Regional Office (NERO)
 04/27/2021 Water Supply Citizens Advisory Committee (WSCAC)
 04/27/2021 City of Newton
 05/04/2021 Massachusetts Historical Commission (MHC)

KAT/EFF/eff

April 27, 2021

Via Email

Erin Flaherty
Environmental Analyst, MEPA Office
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114
erin.flaherty@mass.gov

**Re: Comments on Metropolitan Water Tunnel Program (EEA No. 16355)
Environmental Notification Form**

Dear Ms. Flaherty:

Charles River Watershed Association (“CRWA”) submits the following comments on the Environmental Notification Form (“ENF”) for the Massachusetts Water Resources Authority’s (“MRWA” or “Authority” or “Project Proponent”) Metropolitan Water Tunnel Program, filed with the MEPA Office on March 31, 2021. As described in the ENF, this project consists of construction of approximately 14 miles of new water supply deep rock tunnels that will provide redundancy for MWRA's existing Metropolitan Tunnel System and allow the Authority’s aging existing water tunnel system to be rehabilitated without interrupting service. The Program is in the preliminary design and environmental review stage. It is anticipated that up to 12 shaft sites will be required as part of the deep rock tunnel construction and provide permanent connections to the existing surface water distribution system. Final design will begin after preliminary design is complete, with tunnel construction planned to occur from approximately 2026-2027 through 2037. Due to the scale of this work, this project currently meets/exceeds more than one mandatory Environmental Impact Report (“EIR”) threshold per 301 CMR 11.03, and therefore will be preparing and submitting an EIR.

We are pleased to see MWRA undertake a project that is so critically important to the public health, safety, and economy of the greater Boston area and appreciate that the Project Proponent has initiated the MEPA review process early in the preliminary design phase of work. We are also pleased that the alternatives analysis identified that deep rock tunnels would lead to the least environmental and social impacts during construction while serving the primary program goals of meeting water demand and system reliability and resilience.

However, because the program is in the preliminary design phase, specific locations for temporary and permanent areas of work and associated impact were not included in the ENF. Without this information, the full scope of the project's environmental impacts cannot be understood and assessed. Given this, CRWA requests that MRWA provide additional documentation in the EIR on the following:


- Location-specific construction period and post-construction impacts and mitigation measures;
- Specific siting considerations regarding land available for construction and long-term structures, including avoidance of: wetlands resources and Riverfront Area; public water supplies and surface water or groundwater protection areas; public lands (Article 97); current and likely future flood zones; etc;
- Construction period staging and dewatering plans (including management of contaminated groundwater);
- Materials management plans (including management of contaminated materials);
- Construction period and post-construction stormwater management, including how the project will specifically address pollutants of concern and Total Maximum Daily Loads ("TMDL") for impaired waterbodies listed on the Final Massachusetts 2016 Integrated List of Waterbodies, including, but not limited to, how the project will comply with the Charles River nutrient TMDLs and the Charles River pathogen TMDL;
- Tree and vegetation protection and restoration;
- How the project has considered climate change, including consistency with the recently-released Resilient MA Action Team's ("RMAT") Climate Resilience Design Standards Tool;
- Operation and maintenance of the proposed system, including any impacts to the environment or to water resources;
- Plans for and documentation of public outreach, education, and engagement prior to and during construction; and
- Further consideration of environmental justice communities, including engagement, multi-lingual outreach, and construction-period and long-term impacts on these communities.

CRWA was also pleased to see that "the Program Team anticipates outreach to environmental advocacy groups such as the Massachusetts River Alliance, Conservation Law Foundation, and the Charles River Watershed Association, among others." We would like to meet with MRWA and its engineers in the next couple of months to discuss the project and further explore our questions and concerns bulleted above.

Finally, as MRWA proceeds with the project design, CRWA would like to be included in discussions about site-specific concerns associated with the shaft locations prior to finalization of the design plans and submittal of the DEIR.

Thank you for considering these comments.

Sincerely,

A handwritten signature in blue ink that reads "Janet S. A. Moonan". The signature is written in a cursive style with a long horizontal flourish at the end.

Janet Moonan, PE
Stormwater Program Director



April 27, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
Attn: Erin Flaherty, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EOEEA #16355 Metropolitan Water Tunnel Program ENF

Dear Secretary Theoharides:

The Department of Conservation and Recreation (“DCR” or “Department”) is pleased to submit the following comments in response to the Environmental Notification Form (“ENF”) submitted by the Massachusetts Water Resources Authority (the “Proponent”) for the Metropolitan Water Tunnel Program (the “Project”).

As described in the ENF, the Proponent will construct approximately 14 miles of new water supply deep rock tunnels that will provide redundancy for the MWRA’s Metropolitan Tunnel System. According to the ENF, specific shaft locations are unknown at this time, but preliminary consideration of possible shaft sites indicates that the Project may invoke Article 97 of the Amendments to the Massachusetts Constitution, both for portions of the tunnel beneath DCR property and for aboveground permanent impacts to DCR property.

DCR appreciates the pre-filing meeting provided by the Proponent. DCR understands that once the tunnel route is selected, DCR sites up to 5 acres in size may be needed to stage tunnel construction over several years, requiring a DCR Construction and Access Permit. The Proponent may need to acquire permanent easements over much smaller portions of the construction staging areas, triggering Article 97.

Article 97 Land Disposition

Transfers of interests in state conservation property must meet the requirements set forth in the Executive Office of Energy and Environmental Affairs (“EEA”) Article 97 Land Disposition Policy (the “Policy”). The Policy has the stated goal of ensuring no net loss of Article 97 lands under the ownership and control of the Commonwealth, and states as a general premise that EEA and its agencies shall not sell, transfer or otherwise dispose of any right or interest in Article 97 lands. Transfer of ownership or interests therein only may occur under exceptional circumstances, as defined in the Policy, including the determination that no feasible alternative is available, and a minimum amount of land or an interest therein is being disposed for the proposed use. Transfer also requires authorization by the General Court through a two-thirds supermajority roll call vote.

DCR requests continuing communication and coordination with the Proponent as construction sites are identified. DCR supports the granting of a Construction and Access Permit for tunnel staging sites and permanent easements on DCR land, and DCR will continue to work with the Proponent to ensure that the process is compliant with EEA’s Article 97 Policy. Construction and Access Permits for this Project,

COMMONWEALTH OF MASSACHUSETTS · EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

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Charles D. Baker
Governor

Karyn E. Polito
Lt. Governor

Kathleen A. Theoharides, Secretary,
Executive Office of Energy & Environmental Affairs

Jim Montgomery, Commissioner
Department of Conservation & Recreation

required for work activities on DCR property, will not be issued until MEPA review is complete and Article 97 legislation has been enacted.

Thank you for the opportunity to comment on the ENF. Please contact the Director of Construction & Access Permitting, Sean Casey at sean.casey@mass.gov regarding DCR Construction and Access Permits. Questions related to Article 97 can be directed to Jennifer Howard at jennifer.howard@mass.gov.

Sincerely,



Jim Montgomery
Commissioner

Cc: Jennifer Howard, Sean Casey, Priscilla Geigis, Patrice Kish, Tom LaRosa (DCR)



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

April 27, 2021

Kathleen A. Theoharides, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

Attn: MEPA Unit

RE: Boston, Belmont, Brookline, Dedham,
Needham, Newton, Waltham, Watertown,
Wellesley, Weston
Metropolitan Water Tunnel Program
EEA # 16355

Dear Secretary Theoharides:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Environmental Notification Form (ENF) submitted by the Massachusetts Water Resources Authority (MWRA) for the proposed 14-mile Metropolitan Water Tunnel Program in Boston, Belmont, Brookline, Dedham, Needham, Newton, Waltham, Watertown, Wellesley, and Weston. MassDEP provides the following comments.

Drinking Water

The MWRA provided redundancy for the Hultman Aqueduct when it constructed the MetroWest Tunnel, which went on-line in 2003; however, it presently does not have any redundancy for the older "Metropolitan Tunnel System" to the east of Route I-95. The ENF states that some tunnels, valves, associated surface piping, and equipment that have been in use for more than 60 years are now in need of regular inspections, and possibly repairs, but cannot be shut down for inspection or repair because there is no way to provide the necessary water throughout the system while these are shut down. Some valves are not exercised because there would be an interruption in the water supply if one got stuck in the closed position. The need for redundancy

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

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MassDEP Website: www.mass.gov/dep

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was highlighted when a break in a pipe connection in May 2010 resulted in an interruption in service and subsequent Boil Water Order for much of the Boston metropolitan area.

MWRA evaluated 28 alternatives to provide redundancy that would allow future emergencies to be mitigated without an interruption in the water supply that would incur a Boil Water Order. These alternatives are detailed in Attachment D to the ENF. The alternatives included deep rock tunnels, near-surface mains, and improvements to the existing infrastructure. All of these alternatives begin in the vicinity of Shaft 5 and 5A in Weston, near the Route I-90 and I-95 intersection. Of these alternatives, there were 13 “north” alternatives that extended to the northeast from Weston, providing improvements or redundancy for Weston Aqueduct Supply Main 3 (WASM 3). There were 15 “south” alternatives that extended to the east-southeast from Weston to the Dorchester Tunnel. MWRA’s evaluation sought a combination of a north and south alternative that would work together.

MWRA’s preferred alternatives are north Alternative 8N and south Alternative 20S. Alternative 8N would involve construction of a 10 to 12-foot diameter rock tunnel 4.5 miles long, from the Shaft 5/5A area in an alignment roughly parallel to WASM 3, and ending in Waltham near the Belmont town line. Alternative 20S would involve construction of a 10-foot diameter rock tunnel extending from the Hultman Aqueduct near Shaft 5/5A, to first the end of the Section 80 main in Needham, then to the Newton Street Pumping Station in Brookline, and ending near Shaft 7C of the Dorchester Tunnel. For improved redundancy, MWRA will evaluate whether to connect the tunnels to additional existing pump stations that are near the planned routes for the tunnels.

The ENF states that the exact alignment for the proposed rock tunnels, and the number and exact locations of the vertical shafts that will be drilled for the construction of the tunnels, are not yet finalized. Most of the environmental impact will be associated with those shafts, and because the locations of those shafts are not yet known, little can presently be said about the environmental impacts.

The general layout for the proposed rock tunnels will not pass through the Zone II wellhead protection areas for any active public supply wells or the surface water protection areas for any active public surface water supplies.

The ENF states that a Distribution System Modification permit (MassDEP Permit Category BRPWS32) will be required from the MassDEP Drinking Water Program. The Drinking Water Program is in regular communication with MWRA. As MWRA more fully scopes out the design of the project, MassDEP will evaluate the appropriate permitting for the project.

Water Management Act

According to the ENF, it is anticipated that up to 12 shaft sites will be constructed for deep rock tunnel across the Charles River Basin and the Boston Harbor Basin. The ENF did not provide the water withdrawal rates that will be needed to dewater the tunnel during construction for this project. The Water Management Program understands that the Preliminary Design Report, which will be submitted as part of the DEIR and EIR, will provide a detail examination of the shaft site

locations and associated alignments for the proposed two-tunnel concept. The Preliminary Design Report should include detailed estimates of the gallons of water per day that will be pumped from the tunnel and discharged, and the location(s) at which the pumping and discharge will take place. The water withdrawal rates and discharge locations will determine the permit conditions to be included in the new Water Management Act (WMA) permit.

Based on the study area and the preferred South and North Alternative provided in the ENF Narrative, the project proponent may be required to obtain Water Management Act Permits in more than one river basin (the tunnel may pass through the Charles and Boston Harbor Basins) and address the following permit conditions as appropriate.

The project proponent should examine the project impacts on the public and private wells. A water contingency plan is encouraged for areas within the maximum anticipated impact zone to identify the course of action to be taken to provide water service to any affected homeowners.

The project proponent should be aware that in 2014, MassDEP adopted revised WMA Program Regulations at 310 CMR 36.00 that incorporate:

- “streamflow criteria” and “coldwater fish resources” that will be used to identify environmental conditions within subbasins of the major river basins where the project dewatering withdrawals and discharge will take place;
- “baseline” which is defined as the volume withdrawn in compliance with WMA during the calendar year 2005, the average volume withdrawn in compliance with WMA from 2003 to 2005, or the registered volume, whichever is the highest;
- “mitigation” to offset the environmental impacts of increasing withdrawals above baseline by improving streamflow or aquatic habitat; and
- “minimization” of water withdrawals to protect streamflows in subbasins that are net groundwater depleted during August.

The streamflow criteria (Biological Category, Groundwater Withdrawal Category and Seasonal Groundwater Withdrawal Categories) and potential impacts to coldwater fish resources for the proposed project areas will vary, depending on the final shaft locations.

All Water Management permittees may be required to implement measures to minimize the proposed withdrawals and mitigate the impacts of their withdrawals above baseline whenever feasible. Baseline is a reference point against which a withdrawal request will be compared in order to determine a new or increasing withdrawal volume. Because the proposed project is a new withdrawal(s), there is no baseline volume. As part of the Water Management permitting process, the project proponent may be required to develop a plan to provide feasible mitigation of environmental impacts for the entire withdrawal volume, and feasible protection for any affected coldwater fisheries.”

Solid Waste

MassDEP's current *Massachusetts 2010-2020 Solid Waste Master Plan*¹ –*Pathway to Zero Waste*, issued in April 2013 identifies a key goal to reduce solid waste disposal by 30% by 2020, from 6,550,000 tons of disposal in 2008 to 4,550,000 tons of disposal by 2020. MassDEP encourages the Proponent to review the plan to identify project management and operations practices that will assist the Commonwealth in meeting its material management goals. More information on the *Solid Waste Master Plan* and yearly update reports can be found at: <https://www.mass.gov/guides/solid-waste-master-plan>.

Waste Ban

Section 310 CMR 19.017 *Waste Bans* of the Massachusetts Solid Waste regulations prohibit the disposal of certain construction-related wastes in Massachusetts, including, but not limited to, metal, wood, asphalt pavement, brick, concrete, clean gypsum wallboard. Further guidance can be found at: <https://www.mass.gov/guides/massdep-waste-disposal-bans>.

MassDEP regulations also ban disposal of food and other organic wastes from businesses and institutions that dispose of more than one ton of these materials per week. The ban is one of MassDEP's initiatives for diverting at least 35% of all food waste from disposal statewide by 2020. Diverted food waste may be composted, converted to energy (through anaerobic digestion), recycled, or reused. Additional information on the Commercial Food Material Disposal Ban can be found at: <https://www.mass.gov/guides/commercial-food-material-disposal-ban>.

C&D Recycling

Many construction and demolition materials are currently banned from disposal or transfer for disposal in Massachusetts (<https://www.mass.gov/guides/massdep-waste-disposal-bans>). Therefore, MassDEP encourages the Proponent to make a significant commitment to construction and demolition (C&D) waste recycling activities as a sustainable measure for the project and to assist in complying with waste ban requirements. MassDEP considers an asphalt, brick, and concrete (ABC) rubble processing or recycling facility (pursuant to the provisions of Section (2)(b) under 310 CMR 16.03), the Site Assignment regulations for solid waste management facilities), to be exempt from the site assignment requirements, if the ABC rubble at such facilities is separated from other solid waste materials at the point of generation. In accordance with 310 CMR 16.03(2)(b), ABC can be crushed on-site with a 30-day notification to MassDEP. However, the asphalt is limited to weathered bituminous concrete (no roofing asphalt), and the brick and concrete must be uncoated or not impregnated with materials such as roofing epoxy. If the brick and concrete are not clean, the material is defined as C&D waste and requires either a Beneficial Use Determination (BUD) or a Site Assignment and permit before it can be crushed.

Pursuant to the requirements of 310 CMR 7.02 of the Air Pollution Control regulations, if the ABC crushing activities are projected to result in the emission of one ton or more of particulate matter or other pollutant to the ambient air per year, and/or if the crushing equipment employs a

¹ Note the Draft 2020-2030 Solid Waste Master Plan is in review and may be finalized in late 2020.

diesel oil fired engine with an energy input capacity of three million or more British thermal units per hour for either mechanical or electrical power which will remain on-site for twelve or more months, then a plan application must be submitted to MassDEP for written approval prior to installation and operation of the crushing equipment.

Asbestos

Pursuant to 310 CMR 7.15 the removal of asbestos from the buildings must adhere to the special safeguards defined in the Air Pollution Control regulations. An asbestos survey to identify all asbestos containing materials (ACM) shall be conducted by a Massachusetts Department of Labor Standards certified Asbestos Inspector. All identified ACM shall be abated prior to demolition activities. The Proponent is required to submit to MassDEP an Asbestos Removal Notification (Form AQ04 (ANF-001)) at least 10 working days prior to initiating work for any project involving asbestos abatement, removal, or disposal. If any ACM will need to be abated through non-traditional abatement methods, the Proponent must apply for and obtain approval from MassDEP, through Application BWP AQ36 - Application for Non-Traditional Asbestos Abatement Work Practice Approval.

Pursuant to 310 CMR 7.09, for any Construction and Demolition, except in a residential building with fewer than 20 units, the Proponent is required to submit to MassDEP a Construction/Demolition Notification (Form BWP AQ06) at least 10 working days prior to initiating work. MassDEP Asbestos, Construction and Demolition Notifications can be found at: <https://www.mass.gov/guides/massdep-asbestos-construction-demolition-notifications>.

Pursuant to 310 CMR 19.061, disposal of ACWM within the Commonwealth must be at a facility specifically approved by MassDEP. The Proponent is advised that asbestos containing waste materials (ACWM) are a special waste as defined in the Solid Waste Management regulations. There are specific ACWM disposal exceptions for intact vinyl asbestos tile (VAT) and asphaltic-asbestos felt and shingles. The disposal of the ACWM outside the jurisdictional boundaries of the Commonwealth must comply with all the applicable laws and regulations of the state receiving the material. Pursuant to 310 CMR 16.05, ACM including VAT, and/or asphaltic-asbestos felts or shingles may not be disposed of at a facility operating as a recycling facility.

Recycling Infrastructure

MassDEP supports voluntary initiatives to institutionalize source reduction and recycling into operations. Adapting the design, infrastructure, and contractual requirements necessary to incorporate reduction, recycling and recycled products into existing large-scale developments has presented significant challenges to recycling proponents. Integrating those components into developments during the planning and design stage enables the project's management and occupants to establish and maintain effective waste diversion programs.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Rachel.Freed@mass.gov at (978) 694-3258 for further information on wetlands issues. Please contact Duane.LeVangie@mass.gov at (617) 292-5706 for further information on Water Management Act issues. Please contact John.MacAuley@mass.gov at (978) 694-3262 for further information on solid waste, construction and demolition, or asbestos issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@mass.gov or at (978) 694-3304.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Eric Worrall, Rachel Freed, John MacAuley, MassDEP-NERO
Duane LeVangie, MassDEP - Boston



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

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April 27, 2021

Secretary Kathleen Theoharides
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Attention: Erin Flaherty, MEPA Unit

Re: EOEEA # 16355
ENF-MWRA Metropolitan Water Tunnel Program

Dear Secretary Theoharides:

Thank you for the opportunity to comment on the Massachusetts Water Resources Authority Metropolitan Water Tunnel Program ENF, March 2021.

The Water Supply Citizens Advisory Committee (WSCAC) is formally contracted as the public water advisory committee to the MWRA Board of Directors and staff. We review and develop positions on MWRA and the Department of Conservation and Recreation-Division of Water Supply Protection water programs and projects.

WSCAC has supported the MWRA's ongoing redundancy projects to the water distribution system including the MetroWest Tunnel, the completed rehabilitation of the Hultman Aqueduct which now provides redundancy to the John J. Carroll Water Treatment Plant, and the new emergency pumping station in Marlborough. Ongoing redundancy projects include MWRA's Weston Aqueduct Supply Main 3 and the Southern Extra High pipeline project.

The proposed construction of two new water supply tunnels will allow the existing tunnel system to be rehabilitated after 50 years of constant use. The new tunnels will provide redundancy for 60% of the water that moves east from the Quabbin Reservoir to the Metropolitan Boston service area. Without redundancy and the rehabilitation of the existing tunnels, a failure in the system could trigger widespread difficulty with water delivery to communities.

As with previous and ongoing water redundancy projects, we appreciate the extensive public outreach MWRA provides to affected communities. All ten communities in the Tunnel Alignment Study Area have been contacted by MWRA staff and each has a seat on the working group.

WSCAC has a seat on the working group in order to keep members up to date on the Tunnel Program. As the program moves into the design phase, members will have the opportunity to provide informed feedback on the project.

We appreciate the opportunity to comment on this significant and necessary project.

Sincerely,

Gerald W. Eves, WSCAC Chair



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

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Barney S. Heath
Director

April 27, 2021

MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

SUBJECT: Massachusetts Water Resources Authority (MWRA)

Metropolitan Water Tunnel Program

Preliminary Design, Geotechnical Investigation and Environmental Impact Report
Environmental Notification Form (ENF) March 2021

MWRA Contract: 7159

EEA No.: 16355

Newton's Comments, submitted via email MEPA@mass.gov

To whom it may concern,

The City of Newton thanks you for the opportunity for to comment on the Massachusetts Water Resources Authority Metropolitan Water Tunnel Program Environmental Notification Form (ENF), dated March 2021. Given the preliminary/cursory nature of the materials provided to date, our perspective/comments are similarly preliminary/cursory.

- Newton will need a great deal more information on shaft locations and tunnel depths to be able to intelligently comment on or question proposed project logistics.
 - It appears that the proposed shaft locations are at the termini and junctions. If that is correct, there would not be a shaft site in Newton, as all proposed junctions are in neighboring towns. If, however, the alignment is different than that shown or if shafts are located within the proposed segments, there might be shaft locations within Newton (each with an estimated 67,000 sf of disturbance).
- As an urbanized area, Newton's natural resource areas are already stressed, especially valuable, and especially vulnerable.
 - It will be important that the disturbance associated with shaft development not impact Newton's brooks, streams, rivers, vegetated wetland areas, certified and potential vernal pools, or wetland wildlife. Whenever it is appropriate, the MWRA should address how they will monitor for adverse effects on surface wetland resource areas.
 - It will be important that the disturbance associated with shaft development not impact sensitive upland natural areas and wildlife habitat.

- Tree protection during exploratory activities, shaft development, and tunnel construction will need to be addressed.
- Detailed planning for access, excavated material, dewatering, concrete washout, etc. will be critical, and Newton will want to review those details when they become available.
 - Disposal of the excavated rock, at the shaft sites, and along the entire tunnel routes, should be addressed. MWRA mentions it briefly, stating the excavated rock could be used for concrete aggregate and road base, but they mention no specifics.
- Even very deep horizontal rock drilling can cause fractures that affect wetlands above (as happened to Dudley Pond, in Wayland), so Newton will want details on the deep tunnel alignment, construction proposals, and prevention/mitigation plans, when they become available.

If you have any questions, please don't hesitate to contact me at 617-796-1134 or jsteel@newtonma.gov.

Sincerely,

Jennifer Steel

Jennifer Steel
Chief Environmental Planner



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 27, 2021

Kathleen Murtagh
Director, Tunnel Redundancy Program
Massachusetts Water Resources Authority
Chelsea Facility
2 Griffin Way
Chelsea, MA 02150

RE: Metropolitan Water Tunnel Program; MHC# RC.69562; EEA #16355

Dear Ms. Murtagh:

Staff of the Massachusetts Historical Commission (MHC), office of the State Historic Preservation Officer, have reviewed the Environmental Notification Form (ENF) prepared for the project referenced above.

The ENF indicates that the project will require both federal and state agency permitting, and is proposed for funding from the Massachusetts Water Resources Authority. The MHC proposes to coordinate its review in compliance with both federal and state historic preservation law and regulations (see 950 CMR 71.04 (2) and (3)).

The ENF (Attachment C-19) indicates that as part of the project planning study, geotechnical investigations are proposed that include the drilling of 10 deep rock borings and installation of monitoring instrumentation. The deep rock boring and instrumentation installations, because they involve surface and subsurface disturbance, have the potential to affect historic and archaeological resources.

The MHC has requested and anticipates receiving information about the locations and boundaries of the geotechnical investigation areas, so that the MHC can provide comments to assist to avoid, minimize, or mitigate any adverse effects to historic and archaeological resources.

The information requested include USGS topographic quadrangle locus maps showing the locations of the geotechnical investigation areas, which are keyed to larger-scale plans showing the locations and boundaries of the impact areas in relation to parcel boundaries. Oversize materials such as plans should be sized no larger than 11" x 17".

The MHC request that potential shaft sites and surface connection sites are provided to MHC for review and comment on their impacts to historic and archaeological resources before the final shaft and surface connection sites are chosen. Please provide this information to MHC with maps and plans. The MHC advises that planners should consider locating project impacts including staging, equipment storage, and vehicle access areas at previously impacted locations or on paved surfaces, to the extent feasible, which would assist to avoid impacting historic and archaeological resources.

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

If you have any questions or need any additional information, please contact me or Elizabeth Sherva, Director of Architectural Review at the MHC. These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), M.G.L. c. 9, ss. 26-27C (950 CMR 71), and MEPA (301 CMR 11).

Sincerely,



Edward L. Bell
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Katherine Ronin, MWRA
Wendy Pearl, DCR
Secretary Kathleen Theoharides, Attn. Erin Flaherty, MEPA office
Tammy R. Turley, Regulatory Branch, US Army Corps of Engineers