



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 16, 2020
SUBJECT: Approval for Admission of Town of Ashland to the MWRA Water System

COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Beth Card, Director, Environmental and Regulatory Affairs
Katie Ronan, Environmental Analyst
Preparer/Title


David W. Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

To approve the Town of Ashland’s application to become a member of the MWRA waterworks system to purchase up to 32.8 million gallons annually via an interconnection with the Town of Southborough water system. Further, to authorize the Executive Director, on behalf of the Authority, to execute a water supply agreement with the Town of Ashland, in the form shown in Attachment E, stipulating the terms and conditions of service and assess a twenty-five-year payment schedule for Ashland’s Net Entrance Fee of \$388,336.34. Lastly, to authorize an allocation by the Authority of an additional \$519,400 in interest-free loans to the Town of Ashland under the Local Pipeline Assistance Program.

DISCUSSION:

On June 6, 2020, the Town of Ashland submitted an application for admission to the MWRA water system pursuant to MWRA Operating Policy 10, Admission of New Community to the Water Works System (OP.10). Ashland is seeking approval to withdraw up to 32.8 million gallons annually from MWRA via an interconnection to the Town of Southborough water system. Pursuant to OP.10, MWRA has found that the proposed connection and water withdrawal will not jeopardize the quantity or quality of service that MWRA is committed to provide to existing water service communities.

Ashland currently operates five wells, known as the Howe Street Wells, which also serve a portion of the Town of Hopkinton. Use of the wells is regulated by varying criteria, including the level of the nearby Hopkinton Reservoir. However, due to these restrictions at certain times of the year when groundwater is low, the Howe Street Wells cannot meet Ashland’s water demands. Water use and reservoir elevation data indicate that historic reservoir levels have fluctuated significantly, while demand has generally stayed constant. These supply issues have required Ashland to obtain emergency connections to MWRA under Operating Policy 5 (OP.05) in 2007, 2013, and most recently in August 2020, when water demand was average but reservoir levels were particularly low. During the approvals for the 2007 emergency connection, the Massachusetts Department of Environmental Protection (MassDEP) and MWRA required the town to develop a long-term plan to remedy supply deficiencies. Three alternatives were evaluated, including improvements to Ashland’s existing treatment plant, development of more wells and connection to the MWRA,

including both direct and indirect connections. Ultimately, an indirect connection to the MWRA water system was identified as the preferred alternative to remedy Ashland's supply issues from both a logistic and economic perspective.

Ashland has received approvals from regulatory agencies to withdraw up to 1.6 million gallons per day and up to 73 million gallons per year from MWRA via Southborough. However, Ashland intends to use the connection initially to supplement its existing water supply. Use of MWRA water will be governed locally by the town's MWRA Water Use By-law, which limits MWRA water use to periods of certain conditions within the Ashland system. Ashland expects to utilize the connection to MWRA between the months of October and January, when demand is constant but groundwater levels and the elevation of the Hopkinton Reservoir are typically low. For these reasons, Ashland is currently only applying to withdraw up to a total of 32.8 million gallons per year¹, for an annual average daily usage of up to 90,000 gallons per day (gpd). Because Ashland's usage will not occur during MWRA's peak (between May and October), the entrance fee is based on the annual average daily usage of 90,000 gpd. Ashland acknowledges that if, at a later date, it seeks additional water supply from MWRA over 32.8 million gallons per year, approval from the MWRA Advisory Board and Board of Directors will be required, as well as payment of an additional entrance fee for any increased withdrawal will be required. Ashland estimates that its maximum daily usage during a supply disruption would be 648,000 gpd.

If approved, Ashland will connect directly to the Southborough water system near Oregon Road at the municipal boundary. Southborough has agreed to the arrangement and the two communities have executed an Intermunicipal Agreement (Attachment A) governing the connection and water supply. In addition to the connection, Southborough has committed to making various improvements within its own water system to facilitate the connection with Ashland. These include upsizing Southborough's Hosmer Booster Station, installing a redundant water main leaving the station, upgrading a water main on Edgewood Road and installing an altitude valve at Southborough's Overlook water storage tank.

Community Support

On May 3, 2017, members of the Ashland Town Meeting voted to approve Ashland's admission to MWRA via an interconnection to the Southborough water system. This vote appropriated "funds sufficient to cover the cost of the entrance fee for and the cost of the construction related to" connecting to MWRA. On November 11, 2016, the Ashland Water and Sewer Commissioners adopted an MWRA Supplemental Connection Use By-Law, which limits use of MWRA water to periods when certain conditions related to low groundwater are met in the local water system. These conditions involve elevation of the Hopkinton Reservoir, local distribution system pressure, local tank elevation and required maintenance. Additionally, as noted above, an Intermunicipal Agreement has been executed between the Town of Ashland and the Town of Southborough (Attachment A) governing the connection and water supply arrangement.

Regulatory Approvals

All regulatory approvals pursuant to MWRA OP.10 have been obtained prior to seeking Board approval.

¹ Ashland's application incorrectly stated total withdrawal volume up to 32.4 million gallons per year. Based on average daily use usage of up to 90,000 gpd, the correct total withdrawal volume is up to 32.8 million gallons per year. The Entrance Fee approved by the Advisory Board was calculated based on 32.8 million gallons per year.

- On June 29, 2018, the Secretary of Energy and Environmental Affairs issued a certificate finding that the connection complies with the Massachusetts Environmental Policy Act (MEPA) and its implementing regulations. This approval authorizes Ashland to withdraw up to 1.6 mgd and up to 73 million gallons annually from MWRA (Attachment B).
- On January 11, 2019, the Massachusetts Department of Environmental Protection (MassDEP) Central Region approved the connection and on April 18, 2019, the MassDEP Northeast region approved modifications necessary to make the connection.
- On November 13, 2019, legislation was authorized in Chapter 112 of the Acts of 2019 adding Ashland to the MWRA Enabling Act (Attachment C).
- On October 11, 2019, the Water Resource Commission (WRC) approved Ashland's request for an Interbasin Transfer for admission to the MWRA Water Works System under the Interbasin Transfer Act (IBTA), M.G.L. Chapter 21 §§ 8B-8D. This approval authorizes Ashland to withdraw up to 1.6 mgd and up to 73 million gallons annually from MWRA (Attachment D).
- On November 19, 2020, the MWRA Advisory Board voted to approve Ashland for admission to the MWRA water system via a connection with the Town of Southborough. This approval limits withdrawals to up to 32.8 million gallons annually.

Water Supply Agreement

Subject to approval, the relationship between MWRA and Ashland will be governed by a Water Supply Agreement (Attachment E). The proposed Water Supply Agreement incorporates the provisions of 360 CMR 11.00 Continuation of Contract Water Supply. The contract limits and entrance fee are based on up to 32.8 million gallons annually and annual average daily use of up to 0.090 mgd.

OP.10 specifies that initial agreements with a new community be for a period of five years in order to monitor the process and status of demand management efforts. Therefore, the term of the Ashland/MWRA Agreement will be five years.

Entrance Fee Calculation

In accordance with OP.10 and the Advisory Board's approval, Ashland is assessed an entrance fee to cover the town's share of the value of the MWRA water system currently in place. The basic formula for calculation of the entrance fee for Ashland is as follows:

$$\frac{\text{New user's projected MWRA needs}}{\text{System Water Consumption}} \times \text{Net Asset Value of Total Waterworks System}$$

The FY2020 entrance fee for average water use of 90,000 gpd, is \$391,787.57. Through emergency use period four, Ashland has made \$3,451.23 in net asset value payments that will be applied to the entrance fee, resulting in a net entrance fee of \$388,336.34. Ashland will pay the entrance fee pursuant to a 25-year, interest-free payment plan with a payment grace period for the first three years. The first payment of \$17,651.66 will be due in December 2023. The Attachment F payment schedule details the annual payment amounts.

Transition from Emergency Use Customer to MWRA Water Community

If approved for admission, any water provided to Ashland for the remainder of FY2021 and through FY2022 will be billed at MWRA's prevailing rate, currently \$4,320.63 per million gallons. Ashland will transition to a "rates based" community beginning in FY2023. Its FY2023 water assessment will be based on its share of MWRA system water use in CY2021.

Level of Funding to Ashland under the Local Water System Assistance Program

Ashland is eligible to receive funds (ten-year interest-free loan) under MWRA's Local Water System Assistance Program (LWSAP). The level of funding available to Ashland through this program upon admission is \$519,400, based upon: 1) funding of \$500,000 for partially served communities; 2) funding of Ashland's percent share of unlined water main prorated to the percentage of MWRA water supplied to Ashland (43.6 miles of unlined water mains and 8.6% MWRA water supplied to Ashland); 3) funding based on Ashland's percent share of estimated MWRA water assessment (8.6% MWRA water supplied to Ashland); and 4) prorating available funds to the number of years remaining in the Phase 3 LWSAP program (seven years remaining as of FY21 of ten-year funding allocations FY18-FY27).

BUDGET/FISCAL IMPACTS:

Ashland's Net Entrance Fee is \$388,336.34 for its share of the value of the waterworks system in place at the time of entrance. The net entrance fee reflects an entrance fee of \$391,787.57 minus the total net asset value contributions of \$3,451.23 previously paid pursuant to OP.05. Ashland will pay the entrance fee pursuant to a 25-year, interest-free payment plan with a payment grace period for the first three years. The first payment of \$17,651.65 will be due in December 2023. The attached payment schedule details the annual payment amounts.

ATTACHMENTS:

Town of Ashland and Town of Southborough Intermunicipal Agreement (Attachment A)
MEPA Certificate (Attachment B)
Chapter 112 of the Acts of 2019 (Attachment C)
WRC Approval (Attachment D)
Draft MWRA Water Supply Agreement (Attachment E)
Entrance Fee Payment Schedule (Attachment F)

INTERMUNICIPAL WATER SUPPLY AGREEMENT

THIS AGREEMENT ("the AGREEMENT") is entered into as of this by and between the Town of Southborough through its Board of Selectmen ("Southborough" or "the Southborough Board"), and the Town of Ashland through its Board of Selectmen ("Ashland" or "the Ashland Board") and referred to collectively as "the Parties".

RECITALS

I. General

- A. The Parties deem it to be most economical and in furtherance of a public purpose to enter into an agreement whereby Ashland will supplement its water supply through an MWRA indirect connection via Southborough water lines, in order to secure, treat and supply drinking water for Ashland;
- B. The Parties intend to have this Agreement remain in full force and effect for twenty-five(25) years, unless sooner terminated or extended as herein provided;
- C. Southborough intends to supply quantities of water to Ashland for the price and under the terms set forth herein.
- D. The Parties intend that the municipal corporations entering into this agreement are the sole and exclusive beneficiaries of the Agreement.

II. Proposed Expansion of Public Water Supply System

- A. Both Parties propose to construct additional pumps, and add equipment to current facilities in order to provide supplemental water supply to the Town of Ashland. The proposed "Project" will primarily affect existing infrastructure. Existing water lines between Southborough and Ashland are approximately 60 feet apart along Oregon Road in Ashland. The 'Connection' will be a ten foot wide by fifteen foot long buried meter vault along the side of Oregon Road. Other improvements include a new transformer and pad, new gate valve and pipe fittings, and pump improvements at Southborough's Hosmer pump station ('Primary Project Site'); an altitude valve and pipe fittings at Southborough's Overlook water storage tank; and approximately 1,550 linear feet of 12" water main installation from the Hosmer pump station. The details of this work is shown on the conceptual design plans.
- B. Southborough proposes to deliver to Ashland a minimum of 0 and a maximum of 1.6 million gallons per day (gpd) from the new connection;

III. Cost for the MWRA water connection

- A. The estimated construction cost of the Project is \$1.8 million dollars, per Exhibit 1, Opinion of Probable Construction Cost (75% Design Stage).
- B. The Town of Ashland will be responsible for all costs related to the Project.

IV. Operation Costs

- A. The Town of Southborough will charge for the water based on usage and based on the attached fee schedule per gallon at the time of usage. The fee schedule may be revised on an annual basis based on actual costs as further defined, and shall be provided to the Town of Ashland no less than 90 days prior to any feechanges.

V. Legislative Authority

- A. The Parties are authorized pursuant to M,GL c. 40, §4A, M.GL. c, 40, §38 to enter into the Agreement.

NOW, THEREFORE, in consideration of the mutual agreements and provisions set forth herein, and the payments and obligations hereunder, and for other good and valuable consideration, the receipt and adequacy of which consideration is hereby acknowledged, the Parties hereby agree as follows:

1 Definitions

- 1.1 Southborough is the Town of Southborough, a municipal corporation of the Commonwealth of Massachusetts,. The Town of Southborough acts through its Board of Selectmen , in their capacity as the chief executive officer of the Town. The signatories to this Agreement shall have no personal liability and are acting solely in their capacity as members of the Board of Selectmen .
- 1.2 Ashland is the Town of Ashland, a municipal corporation of the Commonwealth of Massachusetts,. The Town of Ashland acts through its Board of Selectmen , in their capacity as the chief executive officer of the Town . The signatories to this Agreement shall have no personal liability and are acting solely in their capacity as members of the Board of Selectmen.
- 1.3 Net Project Cost shall mean the total cost for all of the construction and capital obligations for the upgraded Plant and associated system upgrades, together with necessary related accessories, including but not limited to, planning, design, engineering, construction, cost estimating, permitting, demolition or the removal of any building or structures on the site, the furnishings and equipment, insurance during construction, legal and administrative costs, and site and easement acquisitions, together with costs and such other expenses as may be necessary or incidental to any construction, extension, acquisition or improvement of such facilities and the placing of such facilities in operation, minus Grants received from United States Environmental Protection Agency (USEPA) or the Massachusetts Department of Environmental Protection (MADEP) and/or any other funding agency. It is understood that if and when Ashland receives a Federal or State grant it may not be entirely for water distribution, and that only the funds that are properly attributable to water distribution shall be deducted from the Net Project Cost. Net Project Costs shall also include the costs for construction design and necessary related accessories.
- 1.4 Project shall mean the proposed infrastructure improvements related to the interconnection of the Southborough and Ashland water systems. It includes upgrades to the Hosmer pump station, Overlook water tank, as well as the construction of a meter vault and associated piping at the Southborough/ Ashland town line.
- 1.5 Total Operations, Maintenance and Repair ("Total OM&R")
- 1.5.1 Total OM&R shall mean activities required to assure the dependable and economical functioning of the Project and the fair allocation of costs to the Parties including without

limitation the following:

- 1.5.1.1 Maintenance: Preservation of functional integrity and efficiency of pumps, facilities, pipes, conduits and equipment which make up the Project. This includes preventive maintenance and corrective maintenance.
- 1.5.1.2 Replacement Equipment Costs: Machinery required to supply treated water, Hosmer Pump water usage, Bandon Hosmer Meter, and Meter Vault meter Costs are pro-rata shared between 2 parties (Ashland and Southborough). Ashland Pit Maintenance – wherein MWRA bills are sent for the 12 months Prior is 100% paid for by Ashland.
- 1.5.1.3 Operation: Control and operation of the Project. This includes supervision, financial and personnel management, record keeping, safety and emergency planning, monitoring and sampling, measuring water flow, obtaining permits, performing inspections and audits, and administering this Agreement.
- 1.5.2 Repair: Fixing or replacing of deteriorated sections of the Project site. Repair does not include replacement or expansion of the water system for the purpose of expanding capacity referred to as Plant Expansion under Section 16. Repair does not cover increase in the pump station capacities referred to as Future Capital Upgrade under Section 14.

Prior to undertaking replacement under the foregoing the Parties shall consult with each other to ascertain the need for such replacement.

- 1.6 Grants -It is the policy and intention of the Parties to apply for, receive and utilize all appropriate financial and other aid which can be effectively used for the Project. To that end, the Parties will make joint or separate applications (as appropriate and after discussion between the Parties) as the circumstances and requirements of the grantor or grantors may require, and will provide and pledge to each faithful cooperation. Any aid received that is attributable to the Project will be administered and employed in accordance with the terms thereof. To the extent that it becomes available, aid shall be utilized to defray, reduce or reimburse costs of the joint undertaking pursuant to the Agreement.
 - ~~1.6.1 Both Parties agree to inform and consult with each other sufficiently in advance of the filing date of all grant applications in order for the Parties to review and discuss such applications. The Parties further agree to inform and consult with each other concerning all grant approvals received. The determination of the attribution of a portion of a grant to New Plant shall be by agreement of the Parties. It is understood that the New Plant is eligible for funding under the Massachusetts State Revolving Fund (SRF) loan program. The Net Costs of the New Plant shall reflect that such loan program provides no or low interest loans. However, non-eligible costs may require conventional borrowing for which the cost of borrowing will be apportioned according to section III.B herein.~~

2 Basic Obligations of the Parties

2.1 Construction

- 2.1.1 Southborough shall construct the Connection Project site in accordance with the plans and specifications entitled "75% Design for the Ashland and Southborough Interconnection" prepared by PARE Corporation and dated February 2017. The Project shall be designed and equipped to meet all requirements of Federal and State law and to qualify for financial assistance from USEPA and MADEP.
- 2.1.2 Southborough shall provide Ashland and MWRA with monthly reports concerning the progress of the construction and any changes the cost estimate for the completion thereof. If at any time the cost estimate for the completion of the construction as provided by more than five (5) percent, Ashland shall meet with Southborough to review the construction progress to insure that both parties agree with the methods of construction and decisions made in order that the final cost be maintained to a minimum.

2.2 Permits

- 2.2.1 Ashland shall notify MassDEP of the proposed construction of the Project, satisfy requirements under the Massachusetts Environmental Policy Act ("MEPA") as well as any other statutes, acts, rules and regulations relative thereto, and obtain all required MassADEP, and local permits and/or approvals for such construction.

2.3 Supply

- 2.3.1 Southborough agrees to furnish and Ashland agrees to purchase MWRA's supply of water in accordance with the terms of the Agreement.

2.4 Method of Supply

- 2.4.1 The means and methods of supplying water shall be as determined and approved by the Southborough Board and the Ashland Board.

2.5 Assignment of Capacity

- 2.5.1 Southborough shall allocate 1.6 Million gpd maximum capacity for use by Ashland after the completion of the Project.

2.6 Transport

- 2.6.1 Southborough shall provide water to Ashland at a point at the Ashland/Southborough town line adjacent to the Connection (referred to hereafter as the "Turnover Point"). Ashland shall be solely responsible for water from the Turnover Point and throughout its own distribution system including all measurement, testing, pumping, and the addition of chemicals, including the cost of such chemicals. Ashland shall also be solely responsible for the OM&R costs of the equipment necessary to measure and pump the water into its distribution system and for the addition of chemicals, including the cost of said chemicals, it may uniquely add to its water based on tests.

2.7 Compliance with Regulations by Southborough

2.7.1 Southborough shall comply with all applicable laws and regulations, permits, and orders or decrees of USEPA and MassMADEP or other government authorities having jurisdiction over the production, treatment and transmission of water.

2.8 OM&R

2.8.1 Southborough shall perform all of the work necessary and appropriate for Total OM&R of the Project in the town of Southborough.

2.9 Minimum Purchase

2.9.1 There is no minimum purchase requirement for Ashland.

2.10 Compliance with Regulations by Ashland

Ashland shall operate its respective local system in accordance with all applicable laws, regulations, permits, and orders and decrees of USEPA and MassDEPMADEP or other governmental authorities having jurisdiction over the treatment and transport of water.

2.11 Monitoring and Sampling

Pursuant to 310 CMR 22.05 through 310 CMR 22.09, Southborough shall perform all required water testing, monitoring and sampling from the water supply facilities to the "Turnover Point" for all potential contaminants including, without limitation, total coliform, inorganic chemicals, sodium, trihalomethane, synthetic organic chemicals, volatile organic compounds, organic and inorganic chemicals, and maximum turbidity.

2.12 Construction of Upgrades and Expansion

Southborough shall construct all upgrades and expansions of the Project sites located in Southborough following those terms pertaining to the construction of the Project as may be reasonably applicable to such future construction.

2.13 Amendments. Laws and Regulations Adopted Subsequent to Date of Agreement

All provisions within this Agreement that reference any laws or regulations shall include any amendments thereto and any other applicable laws or regulations that may be passed or adopted from time to time.

3 Construction

3.1 Construction Schedule

Subject to approval by Ashland Town Meeting, Environmental Impact report (EIR) submission and approvals and various state agency regulatory permit approvals, construction is estimated to be completed by Fall of 2018.

4 OM&R Capital Contribution, and Connection Fees or Rates

4.1 Connection Fees

4.1.1 Ashland shall pay for all fees related to the use of additional MWRA water.

4.2 Construction Costs

4.2.1. Ashland shall pay for all costs related to system upgrades for the Project as called out in the Project's design plans.

4.3 Annual OM&R Charges Paid by Ashland

4.3.1. Ashland shall pay part of the Total OM&R in the proportion that Ashland's actual water flow, as determined from records at the respective metering stations described in Section 8.0, bears to the total of all flows delivered through and from the Project (referred to as "Ashland's OM&R Cost"). The remainder of the Total OM&R Cost shall be referred to as "Southborough's OM&R Cost."

4.3.2. If increased flows from the Project require (a) greater monitoring or sampling pursuant to 310 CMR 22.05 through 310 CMR 22.09 or (b) additional or more highly trained operators for the Project pursuant to 310 CMR 22.11B, the costs thereof shall be included in the Total OM&R Cost.

4.3.3. If increases in the population served by the Project trigger new requirements under 310 CMR 22.00 or any applicable federal regulation, the additional costs of compliance with these requirements shall be included in the Total OM&R Cost.

4.4 Ashland's Rate for OM&R

4.4.1 Ashland shall include in its rates billed to local residents and businesses amounts sufficient to cover Ashland's OM&R cost.

4.5 Southborough's Rate for OM&R

4.5.1 Southborough shall include in its rates billed to local residents and businesses amounts sufficient to cover Southborough's OM&R cost.

5 Leak Correction

5.1 Leak Identification

5.1.1 Southborough and Ashland shall each maintain and fund a continuous leak identification program for the portion of the system within the respective towns on an annual basis in accordance with applicable MassDEP regulations and guidelines and approved by MassDEP prior to the initiation of work.

6 Water Use Regulations

6.1.1 Town of Ashland shall meet or exceed MWRA water conservation measures during the

times of water withdrawals from Southborough.

7 Permitting and Other Regulations

7.1 Permitting

7.1.1 Ashland shall provide Southborough with all information required for all federal, state, and other required permitting.

7.2 Distribution

7.1.2 Southborough and Ashland shall each maintain all service connections in their respective towns so that the service connections have a minimum residual water pressure at street level of at least 20 pounds per square inch under all design conditions of flow as required under 310 CMR 22.19.

8 Flow Measurement

8.1 Responsibilities

8.1.1 Southborough shall operate and maintain at the Southborough treatment plant devices for measuring in water flowing to Ashland.

8.1.2 Southborough shall ensure that all measuring devices are calibrated annually

8.1.3 Southborough and Ashland will regularly inspect the meters measuring the supply of water furnished and Southborough will repair or replace any meter or part of a meter which has registered a larger total volume than prescribed by standard American Water Works Association (AWWA) practice or which has been in service than established AWWA practice or which is known or suspected to be registering incorrectly, The cost of maintaining and repairing all water meters shall be deemed part of the Total OM&R Cost to be shared by Parties under the terms of the Agreement.

8.1.4 Ashland shall have the right to test any of such meters or measuring devices at any and all reasonable times upon reasonable notice to Southborough. If such meters or measuring devices are found to be providing inaccurate data, they shall be immediately repaired or replaced.

8.1.5 If either party believes that a water meter has registered incorrectly, the Southborough Board of Selectmen in the case of Southborough distribution system or the Ashland Board of Selectmen in the case of Ashland's water distribution system shall prepare an estimate of the amount of water furnished through the faulty meter. The estimate shall be based upon the average of three (3) preceding readings of the meter, exclusive of incorrect readings. If less than three (3) correct readings are available, fewer readings, including some obtained after the period of incorrect registration, may be used. The Parties shall forthwith adjust the charges which have been made to Ashland for OM&R cost to accurately reflect the appropriate charge.

8.1.6 Southborough shall provide quarterly and annual water flow summaries to Ashland. Such summaries shall contain the amount of all water delivered from the Hosmer Pump Station to

Ashland and Southborough in such manner as the parties agree and deem appropriate.

9 Payments, Record Keeping, Billings and Payments of OM&R, Connection, and Membership Fees

9.1 Reports/Records/Rate Schedules

9.1.1 Southborough shall be responsible for delivering water to Ashland and for implementation of the terms of this Agreement unless Southborough notifies Ashland of appointment of a successor. In such case, Southborough shall continue to be responsible to fulfill all of the terms and conditions of this Agreement. Each party shall, at the request of the other, promptly provide any records, reports, documents or information reasonably related to the rights and obligations of the Parties under the Agreement and to the performance of the terms of the Agreement. Southborough shall notify Ashland in writing, and keep Ashland informed, of the name and title of its official or officials responsible for water supply in Ashland and for implementation of the terms of the Agreement. Southborough shall also provide Ashland with the telephone numbers which can be used at any time to reach personnel of the Hosmer pump station in the event of a condition requiring immediate attention.

9.2 Record Keeping

- 9.2.1 Southborough shall maintain records for documenting the Total OM&R Cost in a manner consistent with that shown in Exhibit 2; and Southborough shall make available for viewing and copying such records to Ashland upon reasonable notice.
- 9.2.2 Southborough shall maintain all records regarding the operation and structural aspects of the water supply system as required pursuant to 310 CMR 22.17.
- 9.2.3 Upon reasonable notice, Southborough shall make available to Ashland for viewing and copying all records kept pursuant to 310 CMR 22.17. To the extent Ashland has information regarding water supply from Southborough that is required to be kept by Southborough and upon written request from Southborough to Ashland, Ashland shall provide to Southborough all such records or information.
- 9.2.4 All records maintained by Southborough hereunder shall be prepared and maintained in accordance with sound and appropriate business practices which shall be subject to reasonable review by Ashland.

9.3 Financial Statements

9.3.1 All financial statements, records, bills, statements, and reports of any type relating to this Agreement shall be prepared and maintained in accordance with generally accepted accounting practices (GAAP) and procedures consistently applied for the operation of municipal water systems. Ashland shall have the right to review and examine such accounting systems and records by agents and representatives of its choice. Ashland shall have the right to request review of any financial information and statements based upon its review and examination thereof.

9.4 Inspections

9.4.1 Ashland has the right to inspect and test any equipment which Southborough is required to

install and/or maintain under this Agreement such as, but not limited to, the Master Meter and back flow device located at the Hosmer Pump Station. Inspection does not include Southborough's Water Distribution System. Southborough shall repair and replace any such equipment that the Ashland Board finds is not to be operating properly.

9.5 Audits by Ashland

9.5.1 Ashland at its sole expense may have the records and statements referenced in Sections 9.2. and 9.3 audited by an independent Certified Public Accounting firm of recognized cumulative discrepancies determined by the auditor employed by Ashland measured over a two (2) year period exceed five percent (5%) of the Total OM&R Cost, Southborough shall pay for the reasonable cost of the audit and, in any event, shall reimburse Ashland any amount overpaid by it to Southborough.

9.6 Payment Schedules

9.6.1 The schedule for payment by Ashland to Southborough shall be quarterly. Payments for capital improvements under this Agreement shall be included in the quarterly assessments or bills.

9.7 Payment Obligations

9.7.1 Ashland shall make payment of all charges described in the Agreement within sixty (60) days of receipt of the invoice relating to such charges. If Ashland fails to make payment within sixty (60) days, Ashland will pay interest at the rate of 1.5% per month on all overdue amounts. If Ashland detects any error or inaccuracy in any invoice received by it, it shall promptly notify Southborough in writing of the same. Any sum affected by such notice shall be paid by Ashland pending resolution of such discrepancy. If Southborough finds that an error or inaccuracy did occur, Southborough shall promptly rebate the amount overcharged. In the case of a dispute over a payment, interest shall not accrue following notice by Ashland of the disputed payment.

10 Capacity Limits

10.1 Plant Output

10.1.1 Southborough's obligation to supply water is dependent upon the Pump Station output sufficient to meet the needs of both communities. If there is a deficiency in the Pump Station output such that these levels cannot be maintained, then the deficiency shall be borne by both communities in the same proportion as the obligated capacities established under this Agreement.

10.2 Notification

10.2.1 Southborough has no responsibility to notify Ashland customers of any decision to ration or curtail service under the provisions of the Agreement. If Southborough decides to ration or curtail service it will only notify the Department of Public works, Water department, and not

Ashland customers. Such notice shall be given to the Department of Public works, Water department as soon as practicable after the decision is made to ration or curtail service. If Southborough determines to ration or curtail service as above provided, it shall concurrently ration or curtail service to its own customers in the same manner and to the same extent. Ashland notifies Southborough Water department about when the water withdrawal will start. This is also monitored using the SCADA system installed at the connection vault. Ashland shall be responsible for notifying Ashland customers of any change in flow that will impact Ashland customers.

10.2.2 Ashland shall notify Southborough at any time the flow of water is started or when the connection with Southborough is turned off or terminated.

10.3 Curtailment

10.3.1 Southborough shall only ration or curtail service in the event the Hosmer pump station output is not at the level anticipated hereunder, or as a result of the order of a public authority or agency having jurisdiction over the Pump Station, or as the result of an emergency condition, at the Pump Station, a specific result of which rationing or curtailment of service is required. Southborough shall take such measures as are necessary or appropriate to restore full water service as promptly as possible.

11 Funding and Appropriation

Ashland and Southborough both agree to appropriate annually sufficient money to pay for its obligations under this Agreement for both the OM&R costs of the Project and their proportionate share of capital. Prior to the first of February preceding the beginning of each Fiscal Year hereunder, Southborough shall prepare and deliver to Ashland a copy of an estimated operating budget for OM&R costs. The operating budgets as well as the previous year's water consumption shall be used in the forecasting of Southborough's and Ashland's anticipated costs in any given fiscal year. Prior to the close of each fiscal year, Southborough and Ashland shall encumber sufficient funds or if sufficient funds are not available, shall appropriate at the next town meeting such funds in order to properly credit either Southborough and/or Ashland with its prorata share of the OM&R costs. It is understood that Southborough may prepare consolidated budgets and forecasts, and it is agreed that they will be in such form as to permit complete and concise identification of those portions of the total budget and forecast that relate to the Project, and sufficient for Ashland to encumber those funds as are properly related thereto.

12 Rates and Billing

Attached hereto and incorporated herein as part of Exhibit 2 is a spreadsheet setting forth the direct and indirect OM&R costs of the Project. It should be noted that certain line items in Exhibit D are actual, specified amounts while other portions thereof are variable amounts. The actual, specified amounts relate to: (i) operations, administrative, and support personnel, and (ii) other listed items; and Ashland's share thereof shall be the percentage of the line items set forth on the schedule.

13 Limited Rights

Ashland's right to buy and use Southborough's treated water under this Agreement does not include or

vest any to continue to buy or use Southborough's water subsequent to the termination of this Agreement. Upon termination of this Agreement, by expiration of the term without subsequent extension, or after adjudication and expiration of all appeal periods of a dispute, Ashland and its customers shall have no right under this Agreement to purchase or use water from Southborough; however, nothing herein shall be deemed to foreclose Ashland from having and exercising such water rights as derive from other agreements between the parties and under acts of the Legislature.

14 Future Capital Upgrades

14.1 Pump Station

- 14.1.1 For future pump station upgrades and for construction of additional processes which increase the level of treatment (but not for increases in the hydraulic capacity which are covered in Section 16.0, which are required by federal or state regulations or statutes, Ashland shall pay its pro rata share based upon its maximum allocated capacity compared to the total capacity of the pump station.
- 14.1.2 Any upgrades or additional processes which either Party shall request to be installed and which are not required by federal or state regulations or statutes shall be paid solely by the Party requesting the same, unless the Parties otherwise agree.
- 14.1.3 In the event of any proposed future pump station upgrades or additional processes by Southborough, the Parties agree to confer with each other concerning such proposed modification at the earliest possible time and to provide each other with all information and documentation pertaining thereto with the intent that all such Pump station modifications shall be by and with the agreement of the Parties.

15 OM&R Costs

15.1 Apportionment

- 15.1.1 The formula for apportionment of OM&R costs shall be set out in Exhibit 2 of this Agreement.

16 Pump Station Expansion

16.1 Maximum Allocated Capacity

- 16.1.1 Southborough has no obligation to increase it's Maximum Allocated Capacity.
- 16.1.2 In the event Ashland exceeds 80% of its Maximum Allocated Capacity for average daily flows over any three month period, Southborough may expand the Pump Station and/or the Vault Connection site (whichever applies). In such event, Ashland shall pay part of cost of such expansion proportional to its share of the increase maximum capacity.
- 16.1.3 In the event either Party requires an increase in capacity or if an increase is required by state or federal laws and/or regulations, the cost of such expansion shall be prorated based on the amount of additional capacity each Party is to receive.

17 Renegotiation and Settlement of Disputes

It is contemplated that from time-to-time the Parties may desire to renegotiate certain terms of the Agreement in order, among other things, to connect to the Southborough system at new locations, alter or relocate one of their existing connections, change the water use regulations, change the user charge formula, or increase capacity over that set forth in the Agreement. The Parties intend that such renegotiations occur only if there has been a change of circumstances (including, without limitation, a change in federal or state law, regulations or other requirements, existence of a health emergency, or construction of new housing or commercial development) such that the requested change is appropriate or required, and each of the Parties agrees not to request renegotiation of this Agreement unless there has been such a change of circumstances.

It is further contemplated that from time-to-time either or both of the Parties may desire to settle disputes arising from alleged breaches of the terms of the Agreement, or from a failure to arrive at a mutually agreed interpretation of any of the terms or conditions of this Agreement, or from a failure to arrive at a mutually agreed course of conduct for implementation of any of the provisions of this Agreement, or from the failure to provide or prepare any records, reports or other documentation referred to herein, on in the event the content of any such records, reports or other documentation required hereunder are not satisfactory to either of the Parties hereto, or in the event of any dispute between the Parties relating to any of the terms, conditions or provisions of this Agreement

In each of such instances, the party requesting an amendment or supplement to the Agreement or desiring to settle any dispute arising from an alleged breach of the terms of the Agreement or from a failure of agreement as to the interpretation of a term of the Agreement or the contents or means of preparation of any records, reports or statements required hereunder shall notify writing the other Party of such request or desire and identify the terms which such Party is to the reason for the requested change, and the specific change requested or which such Party is seeking to settle, and the Parties shall (a) meet within (30) days of such request to commence negotiations in response to the request, (b) exchange within twenty (20) days of such initial meeting all necessary information and documents (c) make all reasonable efforts to reach agreement. The Parties in such negotiations shall at all times act in the utmost of good faith and shall adhere to the applicable governmental laws and regulations and the general framework and principles set forth in the Agreement

18 Resolution of Disputes:

18.1 Exclusive Remedy

18.1.1 The exclusive remedy for disputes arising out of any aspect or interpretation of this Agreement shall be through the Commonwealth of Massachusetts judicial system. Prior to filing any such matter for adjudication in the court, the Parties agree that each shall participate in mediation. Said mediation shall be conducted under the auspices of a person jointly selected by the parties who is qualified by professional training and experience in the field of public works engineering. If a dispute arises out of a request to renegotiate any term of this Agreement, the Parties agree to engage a qualified mediator to assist them in resolving the dispute.

19 Default

The Parties shall at all times comply with the terms of the Agreement. Any Party in default and/or in breach of the Agreement, as determined under Sections 17.0, shall reimburse and repay to the non-breaching and/or non-defaulting Party for application to its appropriate fund all reasonable

expenses and other sums incurred by the non breaching Party and/or non-defaulting Party as a result of such default and/or breach after reasonable notice thereof has been given to the breaching or defaulting Party.

Neither Party hereunder shall, however, be obligated for any consequential, special or incidental damages. Default shall not be deemed to have occurred hereunder until the notice referred to in section 17.0 has been given and the alleged defaulting Party has not remedied such alleged default or undertaken the cure of such alleged default in good faith within such fourteen (14) day period and proceeded with such cure in good faith to completion.

20 Term and Renewal of Agreement

20.1 Term

20.1.1 The term of the Agreement is twenty-five (25) years from the effective date hereof, pursuant to the authority of M.G.L. c.40 §4A as amended.

20.2 21.2. Government Intervention:

20.2.1 If an administrative agency, board, Commission or division state or federal government or any court impairs, alters, restricts or limits, directly or indirectly to a material extent Southborough's rights, powers or authority to obtain, sell, contract for, or distribute water as described in this Agreement, or directly or indirectly materially increases the costs of doing so, Southborough in its sole discretion may request institution of the procedure for renegotiation and resolution of disputes set forth in section 17.0 hereof in order that this agreement be revised or amended to most fully effectuate the intention and purposes of the Parties,

20.3 Public Safety

20.3.1 Either party has the right to suspend its obligations under this Agreement by sixty (60) days written notice to the other in order to protect the public health and safety of its inhabitants pursuant to a written declaration of a health or safety emergency by either Party's Board of Health. Both Parties shall forthwith thereafter jointly address any issues raised by the Board(s) of Health so as to promptly remedy same and effectuate the intention and purposes of the Parties hereunder,

20.4 Renewal

20.4.1 Commencing on or before four (4) years from the end of the term of the Agreement, the Parties shall meet to negotiate a renewal of the Agreement. The Parties shall continue negotiations in the utmost of good faith with the objective of reaching agreement and entering into an amendment to the Agreement or a new agreement. If the parties do not accomplish the foregoing on or before one (1) year prior to the end of the term of the Agreement, the parties agree to utilize the following procedure:

20.4.1.1 If the Parties do not reach agreement on or before eight (8) months prior to the end of

the term of the Agreement, the Parties agree to submit the matter of renewal to MassDEP DEP (or any government authority that has succeeded to the powers of the DEP) and MassDEPDEP (or such government authority) shall issue orders relating to all terms of renewal and such orders shall be enforceable under applicable laws and regulations, If at the end of the term of the Agreement the Parties have neither reached agreement (to enter into an amendment to the Agreement or a new agreement) nor received such orders from the MassDEPDEP (or such government authority), the terms of the Agreement shall remain in full force and effect until such time as the agreement is reached or the enforceable orders issued.

20.5 Termination of Agreement

Either municipality by a vote of its authorizing board may withdraw from and terminate this Agreement at the end of any fiscal year with a provision of at least six (6) months prior written notice to the other party to the agreement.

In the event of termination by the Town of Southborough prior to June 30, 2032, the Town of Ashland shall be entitled to recover a pro rata share of capital costs incurred under this Agreement, according to the following schedule:

- Termination on or before June 30, 2022 – Ashland shall recover 75% of capital costs
- Termination after June 30, 2022 but on or before June 30, 2027 – Ashland shall recover 50% of capital costs.
- Termination after June 30, 2027 but on or before June 30, 2032 – Ashland shall recover 25% of capital costs.
- Termination after June 30, 2032 – Ashland shall not recover any portion of capital costs.

No such termination shall affect any obligation of indemnification that may have arisen hereunder prior to such termination on all outstanding payments, fees, charges and outstanding financial obligations shall be paid.

21 Rights and Duties

21.1 Indemnity by Southborough

21.1.1 Southborough shall defend, indemnify, and hold harmless Ashland, including Ashland's Board of Selectmen its agents, servants, employees, and/or elected officials from and against all liability, damage, loss, costs, claim, demands, and actions of any nature whatsoever for any personal injury, death, or physical damage which arises out of or are connected with, or are claimed to arise out of or be connected with, Southborough's violation of its water use regulations or DEP regulations.

21.2 Indemnity by Ashland

21.2.1 Ashland shall defend, indemnify, and hold harmless Southborough, including Southborough's Board of Selectmen, its agents, servants, employees, and/or elected officials from and against all liability, damage, loss, costs, claim, demands, and actions of any nature whatsoever for any personal injury, death, or physical damage which arises out of or are connected with, or are claimed to arise out of or be connected with, Ashland's violation of its water use regulations or DEP regulations.

22 General Provisions

22.1 Successors Bound

22.1.1 The Agreement shall inure to the benefit of and shall be binding upon the parties and their successors and assigns.

22.2 Force Majeure

22.2.1 In the event of floods or other natural disasters that cause water flows in the system to exceed capacity limits set forth in this Agreement, and/or that result in an unsafe condition, and/or that cause, or threaten to cause, harm to the public health, the time periods for holding meetings and making decisions under the Agreement shall no longer apply and the Parties shall cooperate fully in all reasonable ways to resolve such capacity, safety, and public health concerns in accordance with the broad objectives of the Agreement and applicable laws and regulations.

22.3 Emergencies

22.3.1 Each party shall immediately notify the other of any emergency condition in either Party's system of which it learns which may affect the quality or quantity of water supplied to Ashland by Southborough or quality or quantity of Southborough's treated and or raw water.

22.4 23.4. Control of Operations

22.4.1 The Pump Station shall be under the management and control of Southborough. Southborough shall have the option to privatize or operate through a separate governmental authority all or some of the Plant operations or upgrades but shall retain oversight management and control of the Pump Station and shall remain primarily obligated under and responsible for the terms of the Agreement. The Pump Station operations shall be under the direction of a person possessing all licenses and experience necessary in order to operate or upgrade the Pump Station irrespective of the appointment of any successor in interest to Southborough.

22.5 Covenant of Good Faith and Fair Dealing:

22.5.1 Each Party shall use its best efforts and take and employ all necessary actions to ensure that the rights secured by the other Party through this Agreement can be enjoyed and neither party shall take any action that will deprive the other Party of the enjoyment of the rights secured through this Agreement.

22.6 Employees

22.6.1 Southborough employees, servants, and agents shall not be deemed to be Ashland's employees, and Ashland's employees, servants and agents shall not be deemed to be Southborough's employees for any including, but not limited to, either Workers' Compensation or unemployment purposes.

22.7 Attorney's Fees

22.7.1 In the event any litigation or mediation between the Parties regarding an alleged breach of this Agreement, neither Party shall be entitled to any award of attorneys' fees as such fees shall be the sole responsibility of each respective party.

22.8 Governed by Massachusetts Law

22.8.1 The Agreement shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts.

22.9 No Reliance by Third Parties

22.9.1 Nothing contained in the Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against any or all of the Parties.

22.10 Service of Notice

22.10.1 All notices or Communications permitted or required by the Agreement must be in writing and shall:

As to Southborough, be delivered or mailed by certified mail, return receipt requested, to the

Board of Selectmen

Town of Southborough

17 Common Street

Southborough, MA-01772.

As to Ashland, be delivered or mailed by certified mail, return receipt requested, to the

Board of Selectmen

Town of Ashland

101 Main Street

Ashland, MA, 01721

or for any Party such other person or address delivered in writing to the other Party.

22.11 Entire Agreement

22.11.1 The Agreement and the exhibits hereto represent the entire agreement among the Parties pertaining to the subjects covered therein and expressly supersede all prior negotiations, representations and formal or informal agreements leading up to the final approval and execution of the Agreement respecting such subjects.

22.12 Amendments in Writing

22.12.1 The Agreement may be amended only by written instrument signed by all the Parties,

22.13 Effect of Invalidity of One Part of the Agreement

22.13.1 The invalidity or unenforceability of any one or more phrases, sentences, clauses or sections herein contained by a Court of competent jurisdiction shall not affect the validity or enforceability of the remaining portions the Agreement.

22.14 Exhibits.

22.14.1 All exhibits attached hereto are incorporated by reference into the Agreement.

22.15 Effective Date

22.15.1 The effective date of the Agreement shall be _____, 2017

22.16 23.16. Original Agreements

22.16.1 This Agreement may be executed in any number of counterpart copies, all of which constitute one and the same agreement and each shall constitute an original.

IN WITNESS WHEREOF, each party has executed the Agreement as an instrument under seal as of the date first written above.

Authorized by Vote of the

TOWN OF ASHLAND
By its Board of Selectmen



Chairperson

Authorized Vote of the

TOWN OF SOUTHBOROUGH
By its Board of Selectmen



Chairperson

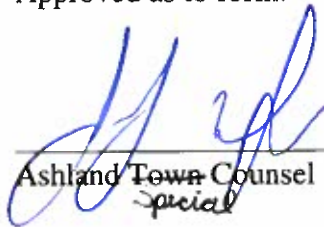
ASSENTED TO

MASSACHUSETTS DEPARTMENT OF
ENVIRONMENTAL PROTECTION

By: _____
Commissioner

By: _____
Director

Approved as to form:



Ashland Town Counsel
Special

Approved as to form:



Southborough Town Counsel

EXHIBIT A GLOSSARY

- 1 EPA -U.S. Environmental Protection Agency
- 2 DEP -Massachusetts Department of Environmental Protection
- 3 OM&R -Operation, Maintenance, and Repair
- 4 GPD -Gallons Per Day
- 5 MGD -Million gallons per day

LIST OF EXHIBITS

- A. Glossary
- B. Description of the Pump Station
- C. Map of the Areas in Town of Ashland and Southborough to receive water from the Pump Station.
- D. Ashland OM&R Enterprise Budget
- E. Southborough's and Ashland's Water Use Regulations
- F. Southborough's Record Keeping
- G. Southborough's Cost Accounting Records and Annual Financial Statement.



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Matthew A. Beaton
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
<http://www.mass.gov/eea>

June 29, 2018

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Supplemental Water Supply
PROJECT MUNICIPALITY : Ashland
PROJECT WATERSHED : Concord River
EEA NUMBER : 15388
PROJECT PROPONENT : Town of Ashland
DATE NOTICED IN MONITOR : May 23, 2018

Pursuant to the Massachusetts Environmental Policy Act (MEPA) (M.G. L. c. 30, ss. 61-62I) and Section 11.07 of the MEPA regulations (301 CMR 11.00), I have reviewed the Final Environmental Impact Report (FEIR) and hereby determine that it **adequately and properly complies** with MEPA and its implementing regulations

Project Description

The Town of Ashland intends to purchase up to 1.6 million gallons per day (mgd) and up to 73 million gallons per year (mgy) from the Massachusetts Water Resources Authority (MWRA). The purchase of water is intended to supplement the Town's existing water supply. The Town currently pumps water from five groundwater wells at the Howe Street Water Treatment Plant. A portion of the water supply is provided to the Town of Hopkinton. The average daily withdrawal authorized by the Massachusetts Department of Environmental Protection (MassDEP) from the five wells is 2.18 mgd, including 1.23 mgd authorized by Water Management Act (WMA) registrations and 0.95 mgd by WMA permits. The permitted volume includes 0.5 mgd for Hopkinton's use. In 2017, the Town withdrew 1.55 mgd from the wells, of which 1.17 mgd was used by Ashland and 0.38 mgd was used by Hopkinton.

The Howe Street wells are located adjacent to the Hopkinton Reservoir, a recreational waterbody owned by the Department of Conservation and Recreation (DCR). The Town's average daily water withdrawal has remained fairly constant over the last 10 years, ranging from

1.53 mgd to 1.81 mgd. However, in recent years the water level of the Hopkinton Reservoir has dropped precipitously under some conditions, indicating low groundwater conditions under the reservoir. The Town is concerned about the impact of this on the yield of the Ashland water supply wells. In addition, the Hopkinton Reservoir is a recreational resource that is adversely affected by lower water levels. The WMA permit for the groundwater withdrawals include a requirement that two of the wells be shut off if the level of Hopkinton Reservoir reaches elevation 295.35 National Geodetic Vertical Datum of 1929 (NGVD 29), which generally corresponds to a water level in the reservoir that would significantly impact its recreational use. Data prepared for the Commonwealth's Sustainable Water Management Initiative (SWMI) indicate that most of Ashland, including the Town's wells, is located in an area where the groundwater is severely depleted.

The Town obtained approval from MassDEP and MWRA for emergency connections to the MWRA water system in 2007, 2013 and 2016. Approximately 5.6 million gallons of water were purchased from the MWRA in December 2007 and January 2008; in 2013, the connection was made but not used. The Town purchased a total of approximately 3 million gallons of water in September and October of 2017. As a condition of its approval of the 2007 emergency connection, MassDEP required the Town to develop a plan to address its long-term water supply needs. As described below, the Town determined that purchasing water from the MWRA would address its current and future water needs. The Preferred Alternative described in the FEIR consists of a connection to the water system of the adjoining town of Southborough, which already receives its water from the MWRA. Physical components of the project include:

- A connection to the Southborough water system through a buried meter vault (seven-foot (ft) by 15-ft) on Oregon Road in Ashland;
- New pumps, a new transformer and pad, and a new gate valve and fittings at Southborough's Hosmer Pump Station to support pumping of up to 2.8 mgd, of which 1.0 mgd would be intended for Ashland;
- Construction of a building (12-ft nine-inch by seven-ft five-inch) at Southborough's Overlook water storage tank to house a new altitude valve and pipe fittings; and
- A water main (12-inch and 1,550-ft long) running south from the Hosmer pump station which will be installed under an existing access road adjacent to the Sudbury Reservoir for most of its length.

Jurisdiction and Permitting

The project is subject to a mandatory EIR pursuant to 301 CMR 11.03(4)(a)(2) of the MEPA regulations because it requires State Agency Actions and involves a New interbasin transfer of water of 1,000,000 or more gpd or any amount determined to be significant by the Water Resources Commission (WRC). It requires an Admission of New Community to Water System Permit and an 8(m) Construction Permit from the MWRA. It also requires Approval of Distribution System Modifications for more than 3,300 People and a Renewal of its Water Management Act (WMA) Permit from MassDEP. The project will also require approval in accordance with the Interbasin Transfer Act (ITA) (M.G.L. c.21 ss. 8B-D; 313 CMR 4.00) from the WRC. The project is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol. The project will also require an Order of Conditions from the Southborough

Conservation Commission, or in the case of an appeal, Superseding Order(s) of Conditions from MassDEP.

Because the Town is not seeking Financial Assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required State Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to land alteration, water supply, wetlands, water quality and GHG emissions.

Environmental Impacts and Mitigation

The project involves an interbasin transfer of water from the MWRA Quabbin and Wachusett Reservoirs in the Chicopee and Nashua River watersheds, respectively, to the Sudbury/Assabet/Concord (SUASCO) watersheds in which the Town of Ashland is located. Environmental impacts are primarily associated with the construction period and land alteration associated with construction of the new building and installation of the pipeline. Mitigation measures include sedimentation and erosion control measures to prevent wetland impacts, a Traffic Management Plan, and use of mufflers and other measures to reduce construction noise.

The transfer of water from the MWRA's system will allow the Town to maintain a safe and reliable drinking water supply and reduce potential impacts to Hopkinton Reservoir and the aquifer from additional water withdrawals from the Town. The MWRA's reservoirs have sufficient capacity to provide water to Ashland while still providing mandatory releases to the Swift and Nashua Rivers and maintaining recreational, ecological, and other water-dependent uses.

Review of the FEIR

The FEIR was generally responsive to the limited Scope issued in the Certificate on the DEIR. During the review period, the Town provided supplemental information that clarified that the annual use of MWRA water will not exceed 73 mgd, which is a reduction of the 120 mgd reported in the DEIR, and provided additional analysis to support selection of the Preferred Alternative.¹ It included additional analysis of the potential effects on water levels in Hopkinton Reservoir, including information in support of the Town's proposal to intermittently purchase water from the MWRA and its contention that purchasing water to maintain higher water levels in Hopkinton reservoir during the summer months is infeasible. It reviewed the Town's activities to promote water conservation and water savings; these activities, including the replacement of old water meters, have reduced the Town's Unaccounted for Water (UAW) from 15.6 percent in 2015 to 8.7 percent in 2016. The FEIR provided an updated GHG emissions analysis, a response to comments received on the DEIR and draft Section 61 Findings.

Water Use

In their comments on the FEIR (and previous MEPA submittals), the WRC and DCR have noted that a supplemental water supply source for Ashland to address its water supply

¹ This information was submitted on June 27, 2018 by email from Rajitha Purimetla, Town of Ashland, to Alex Strycky of the MEPA Office.

needs could have the added benefit of maintaining higher water levels in the Hopkinton Reservoir for recreational uses during the summer if it were to be managed to achieve both goals. As directed in the DEIR Certificate, the Town provided an analysis of potential benefits and constraints associated with the use of MWRA water during the spring and summer months.

The use of MWRA water in in the spring and summer would maintain water levels in Hopkinton Reservoir throughout the summer and achieve groundwater levels later in the year that would support Ashland's use of its wells during that time period. DCR estimates that the use of 1.0 mgd of MWRA water from May to August would support maintenance of an additional two feet to the water level of the Hopkinton Reservoir. This water level may also allow Town residents to continue unrestricted water use during the summer; the Town's Water Conservation By-law restricts outdoor water use once the level of Hopkinton Reservoir drops below 295.85 feet NGVD 29. According to the Town, purchasing MWRA water in the spring and summer, which may not be required later in the year, would represent an unnecessary expenditure by the Town and its ratepayers. In addition, interbasin transfers would not be minimized because water from the MWRA basins would be used annually, even when not needed by the Town.

The Town's MWRA Supplemental Connection Use By-law would prohibit the purchase of MWRA water to maintain Hopkinton Reservoir water levels. The By-law authorizes the purchase of MWRA water under the following circumstances:

- The Hopkinton Reservoir water level is at or below 293 ft NGVD 29, which corresponds to the minimum level of groundwater at which the Town's wells may be operated;
- The Distribution system is damaged;
- Water Pressure in the system drops below a safe level for fire protection; or
- Routine maintenance of the connection between Ashland and Southborough is required.

I encourage the Town to closely monitor its use of MWRA water to understand the timing and volume of its supplemental water needs and opportunities for minimizing environmental impacts on the reservoir. According to the FEIR, Ashland's projected water use will continue to climb in excess of its permitted well capacity. In the future, the purchase of MWRA water may become a more predictable and necessary component of the Town's water supply. During permitting, the Town will be required to provide MassDEP with a plan for minimizing the impacts of its groundwater withdrawals to the greatest extent feasible while maintaining a safe water supply.

According to MassDEP, the town's groundwater supply and MWRA's water differ in orthophosphate content, pH and fluoride levels. In its WMA permit application, the Town must evaluate measures for avoiding impacts to drinking water quality associated with these differences. The Town has agreed to add orthophosphate to MWRA water entering its system to prevent an increase in lead levels. MassDEP has identified additional information that will be required as part of its review, including clarification of ownership and maintenance responsibilities among Ashland, Southborough and the MWRA; documentation to support the conditions specified in the By-law under which water will be purchased; and clarification the nominal flow rates and periods of supplemental water use. In response to MassDEP's requests in

its comments on the DEIR, the Town has updated its Emergency Response Plan and will complete a Drought Management Plan by the end of 2018.

GHG Emissions

The FEIR provided a supplemental analysis of GHG emissions associated with operation of new pumps. The analysis used the updated emissions factor of 710 pounds of carbon dioxide (CO₂) per megawatt-hour (MWh) provided in the 2016 *Electric Generator Air Emissions Report* prepared by the Independent System Operator-New England (ISO-NE). The project includes the replacement of two small pumps (40 horsepower (hp) and 60 hp) at the Hosmer Pump Station with two 125-hp pumps. The new pumps will be larger than the existing pumps and will use more electricity. The Town compared GHG emissions of standard-efficiency motors and high-efficiency motors with variable frequency drives (VFD). The selected high-efficiency pumps will use electricity at a rate of 740,000 kilowatt-hours per year (kWh/yr) which will generate 262.7 tons per year (tpy) of GHG emissions, a reduction of 10.65 tpy (4 percent).

I note that the Town has implemented energy-efficiency measures for its water treatment and distribution systems as a result of an energy audit completed in 2009, including installing VFD on well pumps and High Service Water Pumps, operational controls on pumps to increase efficiency, and minimizing electric heat in well houses. In addition, solar photovoltaic (PV) systems supply approximately 70 percent of the electricity used at Ashland's Water Department offices and meets 20 percent of the electricity needs of the Howe Street Water Treatment Plant.

Mitigation/Draft Section 61 Findings

The FEIR contained updated draft Section 61 Findings. In order to ensure that all GHG emissions reduction measures adopted by the Town as the Preferred Alternative are actually constructed or performed by the Town, the Town shall provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their equivalent, have been completed.

Water Quality and Conservation

- Add orthophosphate to MWRA water entering the system to address chemical differences between water sources;
- Prepare a Drought Management Plan that includes a seasonal demand management strategy;
- Prepare an updated Emergency Response Plan;
- Continue its leak detection and system repair program;
- Continue its program to install, replace, repair and maintain water meters;
- Continue its public educational programs and participation in programs that provide low-flow plumbing fixtures and rain barrels to residents; and
- Enforce outdoor water use bans during low-groundwater conditions.

GHG

- Install two new pumps with an efficiency of 94 percent at the Hosmer Pump Station;
- Use LED lighting;
- Use Variable Flow Drives (VFD) on well pumps and High Service Water Pumps;
- Change control settings on raw water pumps;
- Operate only one High Service pump at full speed;
- Minimize electric heat in well houses;
- Operate treatment plant during off-peak hours to the extent practicable;
- Install an energy-efficient ozone generator; and,
- Evaluate the use of skylights and dimming controls in the treatment plant.


Construction

- Implement erosion and sedimentation controls within 100 feet of any wetland resource areas;
- Revegetate disturbed areas;
- Require contractors to refuel vehicles off-site and maintain spill control and cleanup materials at the work site;
- Require contractors to stockpile materials as far away from wetland resource areas as possible;
- Regular street cleaning to minimize dust and sediment;
- Manage any contaminated material excavated during the course of the project in accordance with the Massachusetts Contingency Plan (MCP);
- Use electronic message board to alert the public about construction activities and potential traffic delays;
- Require contractors to develop Traffic Management Plans;
- Require contractors to use Ultra Low Sulfur Diesel fuel (ULSD) in motorized equipment; and
- Require contractors to comply with the anti-idling provisions of 310 CMR 7.11.

Conclusion

Based on a review of the FEIR, comments letters, and consultation with State Agencies, I find that the FEIR adequately and properly complies with MEPA and its implementing regulations. Outstanding issues can be addressed during State and local permitting and review. No further MEPA review is required and the project may proceed to permitting. State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

June 29, 2018
Date


Matthew A. Beaton

Comments received:

- 06/18/2018 Water Resources Commission (WRC)
- 06/21/2018 Massachusetts Department of Environmental Protection (MassDEP) - Northeast Regional Office (NERO)
- 06/22/2018 Department of Conservation and Recreation (DCR)
- 06/22/2018 Massachusetts Water Resources Authority (MWRA)

MAB/AJS/ajs

Attachment C

Acts (2019)**Chapter 112****AN ACT AUTHORIZING THE MASSACHUSETTS WATER
RESOURCES AUTHORITY TO SUPPLY WATER TO THE TOWN
OF ASHLAND**

Whereas, The deferred operation of this act would tend to defeat its purpose, which is to authorize the Massachusetts Water Resources Authority to supply water to the town of Ashland, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public health._

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Paragraph (d) of section 8 of chapter 372 of the acts of 1984, as most recently amended by section 1 of chapter 350 of the acts of 2018, is hereby further amended by inserting after the word “Arlington”, in line 3, the following word:- , Ashland.

SECTION 2. Notwithstanding section 1, the provision of water services by the Massachusetts Water Resources Authority to the town of Ashland shall commence only after the board of directors of the authority has voted approval having first made the findings as required by clauses (1) to (6), inclusive, of paragraph (d) of section 8 of chapter

372 of the acts of 1984 and having made other such determinations in accordance with applicable policies of the authority and after all required approvals have been received including, as applicable, other regulatory bodies where required and the advisory board of the authority, but section 71 of said chapter 372 shall not apply.

Approved, November 13, 2019.



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

**REPORT OF THE FINDINGS, JUSTIFICATIONS AND DECISION
OF THE WATER RESOURCES COMMISSION
Relating to the Approval of the
Town of Ashland's Request for an Interbasin Transfer
Pursuant to M.G.L. Chapter 21 § 8C**

DECISION

On October 11, 2018, by a unanimous roll call vote of the ten (10) voting members present at a public meeting, the Water Resources Commission (WRC) approved the Town of Ashland's request for an Interbasin Transfer for admission to the MWRA Water Works System. This vote was taken after review of the facts provided by the applicant, analysis of the associated data, and consideration of comments received concerning this proposal.

INTRODUCTION

On October 8, 2015, the Massachusetts Water Resources Commission (WRC) received a request from the Town of Ashland for approval of an action to increase the present rate of interbasin transfer under the Interbasin Transfer Act (ITA) (M.G.L. Chapter 21 §§ 8B-8D) as part of a Draft Environmental Impact Report (DEIR) submitted to the Massachusetts Environmental Policy Act (MEPA) office. Additional information was requested and received in the Final EIR, submitted in May 2018. The WRC accepted Ashland's application as complete at its July 12, 2018 meeting.

Ashland is proposing to purchase a maximum of 1.6 million gallons per day (mgd) of water from the Massachusetts Water Resources Authority (MWRA) to supplement its existing water supply sources the Howe Street Groundwater Wells (Figure 1). This represents a maximum day demand. Ashland's average day demand (ADD), based on the years 2013 to 2017, has ranged from 1.25 mgd to 1.49 mgd.

The Town has five existing water supply sources, all adjacent to the Hopkinton Reservoir which is managed by the Department of Conservation and Recreation (DCR) for recreation and flood control purposes. Two of these sources have shut-off thresholds to be implemented when the reservoir reaches an elevation of 295.85 feet National Geodetic Vertical Datum (NGVD).

FACTS PERTAINING TO THE APPLICATION ARE:

1. Ashland has land area in the Concord River basin.
2. The Town is applying for admission to the MWRA Waterworks System, which has sources in the Chicopee River basin and the Nashua River basin.

3. Ashland is proposing to purchase water from the MWRA to supplement its existing water supply sources and will use MWRA water when the level in the Hopkinton Reservoir is at or below 293 feet NGVD29¹.
4. An environmental review, pursuant to Section 61 & 62H, inclusive, of Chapter 30, was required for this proposed action. The ITA application was submitted as part of the DEIR for this project (EOEEA #15388). Additional information for ITA review was requested through the MEPA process and provided in the FEIR.
5. The Secretary's Certificate on the Final EIR was issued on June 29, 2018, stating that no further MEPA review was needed.
6. Two required public hearings were held to take comment on this application, one in Belchertown, in the donor basin on August 21, 2018 and one in Ashland, in the receiving basin on August 23, 2018. Public comments were accepted until August 30, 2018.
7. A Staff Recommendation to approve the Request was presented to the WRC on September 13, 2018.
8. A public hearing on the Staff Recommendation was held in Boston on September 20, 2018. Written public comments were accepted until September 27, 2018.
9. Responses to comments received through the public comment periods are available in a separate report from the WRC.

EVALUATION OF THE PROPOSED INTERBASIN TRANSFER

This Interbasin Transfer application was reviewed on its own merits and is applicable solely to Ashland's use of MWRA water. The Decision is made on facts relevant to the Interbasin Transfer Act and its regulations. The application was evaluated against the seven criteria outlined in the regulations (313 CMR 4.09), as well as the Interbasin Transfer Act Performance Standards and with consideration of comments received at WRC meetings and through the public comment process.

SYNOPSIS OF THE EVALUATION CRITERIA (313 CMR 4.09)

Criteria	Application Meets?
Criterion #1: MEPA Compliance	Yes
Criterion #2: Viable In-Basin Sources	Yes
Criterion #3: Water Conservation	Yes
Criterion #4: Forestry Management	Not Applicable
Criterion #5: Reasonable Instream Flow	Yes
Criterion #6: Groundwater/Pumping Test	Not Applicable
Criterion #7: Cumulative Impacts	Yes

BASIS FOR THE WRC DECISION

This application was reviewed by WRC staff at the DCR Office of Water Resources, and by staff at Department of Environmental Protection (DEP), and Department of Fish and Game's (DFG) Divisions of Fisheries and Wildlife and, Environmental Restoration Program. This Decision was made after an extensive evaluation of the project and of Ashland's compliance with the five

¹ NGVD of 1929

applicable criteria of the Interbasin Transfer Act regulations. The following section describes in detail, compliance with the criteria.

Criterion #1 MEPA Compliance

An environmental review, pursuant to Section 61 through 62H, inclusive, of Chapter 30, and the MEPA regulations, 301 CMR 11.00 was required for this proposed action. The ITA application was submitted as part of the Draft Environmental Impact Report (DEIR) for this project (EOEEA #15388). The Secretary's Certificate on the DEIR was issued on November 13, 2015 and required that a Final EIR (FEIR) be developed. The FEIR Certificate was issued on June 29, 2018 and stated that no further MEPA review was necessary.

Criterion #2 Viable In-Basin Sources

To meet this criterion, Ashland had to demonstrate that it had made all reasonable efforts to identify and develop all viable sources in the receiving area. Ashland compiled a "Potential Water Supply Study" in 2012. The Town reviewed several areas in town and conducted in-depth investigations on three potential in-basin sources, prior to deciding to apply for ITA approval (See Figure 1). These were:

- An additional well at the site of its existing sources (Howe Street): This site has limited yield and is limited by the capacity of the treatment plant. Ashland's existing sources currently impact and are impacted by DCR's prior rights to manage the adjacent Hopkinton Reservoir. Two of Ashland's existing wells must shut down when the Hopkinton Reservoir reaches a level of 295.35 NGVD29. Any additional source developed here would likely only provide redundancy and would be subject to shut-off triggers during the times of year when Ashland would most need supplemental water. In addition, the wells are relatively shallow. In 2007 and 2013 groundwater levels were so low the wells were not useable and an emergency connection to Southborough was needed. DEP has indicated that the subbasin where the Howe Street wells are located (#12029) is identified as Biologic Category (BC) 5 and Groundwater Withdrawal Category (GWC) 5², and has a significant estimated seasonal net August groundwater depletion of 236%. Increasing withdrawals from these wells would likely exacerbate impacts to recreational uses and Hopkinton Reservoir levels and require additional permit conditions. In addition, DEP's revised Water Management Act regulations (310 CMR 36.22(5)(a)) will require that Ashland evaluate alternatives to pumping at this location in order to minimize impacts.
- Spring Street site: A source here will need Article 97 legislative approval to secure proposed access through DCR property and a portion of the Zone I, which would extend into DCR's Ashland State Park. Recreational use of the park, including DCR's management of water levels at the Ashland Reservoir, cannot be impacted by use of the well. Therefore it will likely be subject to shut-off thresholds during the times of year when Ashland will need the water. There are also water quality issues associated with the site. In addition, any source developed here will need Interbasin Transfer Act approval, because Ashland discharges its wastewater out of basin, and would likely have restrictions imposed to prevent impacts to Cold Spring Brook.
- Shore Road site: Any source developed here will need Interbasin Transfer Act approval, because Ashland discharges its wastewater out of basin. It is unclear if it would meet the criteria for approval due to wetlands and other environmental concerns. If it could be

² These are the most impacted of the Sustainable Water Management Initiative Framework categories.

approved, the well would likely be subject to shut-off triggers during the times of year when Ashland would most need supplemental water. There are also water quality issues associated with this site.

Figure 1
Ashland Investigated In-Basin Sources



In its comments on this ITA request, DEP indicated that the Spring Street and Shore Road sites are both located in subbasins currently categorized as GWC 2. Very small increases in withdrawals from either subbasin would result in a change of the GWC of that subbasin. The revised Water Management Act regulations require that permittees changing a subbasin’s GWC category demonstrate that there is no feasible alternative source that is less environmentally harmful before being granted approval to increase withdrawals (310 CMR 36.22(7)(a)). Hence, there would be significant permitting issues associated with their development and use as viable long-term options for new or increased withdrawals.

At the request of a Commission member, the following additional sites were reviewed and Ashland was consulted on the possibility of developing wells there:

- A parcel near the Hopkinton border, near Legacy Farms: A review of the stratified glacial drift deposits in this area as shown on the Hydrologic Investigation Atlas mapped by the United States Geological Survey (USGS) in cooperation with the Water Resources

Commission, indicates that the area of stratified drift virtually ends at the Hopkinton border. The parcel in Ashland consists of mostly till, and according to the USGS map, is not good aquifer material.

- The former Girl Scout Camp, adjacent to Ashland State Park: Although a portion of the property is shown on MassGIS as having glacial stratified deposits, MassGIS does not show the property as having a potential medium or high-yield aquifer. This site is in close proximity to the Ashland Reservoir. It would have the same challenges faced by the Spring Street site under DEP's Water Management Act, described above. It could also be affected by shut off thresholds needed to protect levels in the Reservoir. In addition, this site was purchased expressly to provide additional wastewater capacity for the Town of Ashland (currently sewered to the MWRA), through a groundwater discharge system. Given this use, it is unlikely that a water supply located at this site could meet Zone I requirements.
- The former Warren Conference Center site, now owned by Framingham State College: Ashland does not own this site and would need Article 97 legislative approval to develop a well here. In addition, a review of the stratified drift deposits in this area indicates that this area is till, and not good aquifer material.

The Town also reviewed other sites, but dismissed them due to contamination issues, lack of suitable aquifer material, and/or groundwater and biological category issues identified through the Sustainable Water Management Initiative Framework.

Criterion #3 Water Conservation

Ashland has an existing water conservation program which meets most of the ITA Performance Standards for Criterion #3 and the Massachusetts Water Conservation Standards (<https://www.mass.gov/files/documents/2018/09/11/ma-water-conservation-standards-2018.pdf>). Ashland's application was received before the approval of the updated 2018 Massachusetts Water Conservation Standards, however, its water conservation program conforms with the updated standards.

Ashland has been working steadily to meet the Performance Standard for unaccounted-for water. Ashland's unaccounted-for water has averaged 10.85% over the past 5 years. Ashland has identified the cause of high unaccounted-for water to be older, inefficient meters and so has implemented a meter replacement program. As a condition of this approval, Ashland must provide annual reports of the progress with this program to WRC Staff.

Based on this, the WRC has determined that Ashland is in the process of addressing the ITA Performance Standard for unaccounted-for water, and finds that Ashland meets this Criterion.

Table 1 lists Ashland's water conservation accomplishments with respect to all of the water conservation standards.

Table 1
Ashland's Water Conservation Status

CONSERVATION MEASURE	IBT PERFORMANCE STANDARD	ACCOMPLISHMENTS	MEETS STANDARDS?
1) Leak Detection and Repair	Full Leak Detection survey within the previous two years of the application	Leak Detection yearly; last in 2016	Yes
	Documentation of survey and of leaks identified and repaired	All identified leaks repaired by January 2017. Documentation of the survey was provided.	Yes
	Completed by methods at least as comprehensive as the MWRA's regulations for leak detection	Yes	Yes
2) Metering	100% Metering	100% Metered	Yes
	Regular maintenance, calibration, testing and repair program; description of program included in application	Ongoing program – especially since they have identified meter age as major factor in UAW	Yes
	All public buildings should be metered	Yes	Yes
	Master meters calibrated annually; documentation of annual master meter calibration	Yes; documentation of calibration provided	Yes
	Quarterly billing, based on actual meter readings; bills should be easily understood by customer	Residential customers billed quarterly; large users billed monthly	Yes
3) Unaccounted-for water	Unaccounted-for water should be at 10% or less	UAW = 10.85% (2013 to 2017 average), but Town has implemented an aggressive meter replacement program to reduce; UAW was 8.2% in 2017	Yes
4) Pricing	Documentation of full cost pricing	Dedicated water/sewer enterprise fund. Water rates are based on the cost of water and include the costs of operation and maintenance of the wells and distribution system.	Yes
	Rate structure must encourage water conservation	Rates encourage conservation through an increasing block rate, with the highest tier more than twice that of the lowest tier, and separate, highest tier rates for irrigation meters.	Yes
	Decreasing block rates prohibited	Does not have decreasing block rates.	Yes

CONSERVATION MEASURE	IBT PERFORMANCE STANDARD	ACCOMPLISHMENTS	MEETS STANDARDS?
5) Drought/emergency contingency plan	Written Drought/emergency contingency plan, to include:	Ashland has an extensive emergency contingency plan that is available to all town departments. The Town has a permanent water restriction by-law (updated in September 2015) which restricts outdoor water uses year-round. The Town's website provides information concerning water use restrictions and Hopkinton Reservoir levels.	Yes
	- seasonal use guidelines		
	- measures for voluntary and mandatory water use restrictions and describe how these will be implemented		
	- tie water use restrictions to streamflow and/or surface water levels in the affected basin(s) where this information is available		
6) Public sector water use	All public buildings should be metered	All public buildings are metered	Yes
	Retrofit all public buildings with low-flow devices	Yes	Yes
	Proponents should provide records of water audits conducted on public facilities. The most recent audit should have occurred within two years prior to the application for Interbasin Transfer approval.	An audit on public buildings was conducted in September 2015.	Yes
7) Residential water use	If the community's residential gallons per capita/day is greater than 65, the proponent should be implementing a comprehensive residential conservation program that seeks to reduce residential water use through a retrofit, rebate or other similarly effective program for encouraging installation of household water saving devices, including faucet aerators, showerheads and toilets and through efforts to reduce excessive outdoor water use.	RGPCD = 55 (average 2013 to 2017)	Yes
		Water Efficient Plumbing Fixtures Provided	Yes
		Comprehensive residential water conservation program implemented	Yes
		Outdoor water use restrictions in place	Yes

CONSERVATION MEASURE	IBT PERFORMANCE STANDARD	ACCOMPLISHMENTS	MEETS STANDARDS?
8) Public Education	A broad-based public education program which attempts to reach every user at least two times per year- - refer to the WRC's 2018 "Massachusetts Water Conservation Standards" and the Massachusetts Water Works Association for recommended public education measures	Water use restrictions, posted on an electronic message board at the center of town and signage at major primary roads notify the public about the restrictions on water usage. Notices are also published in the local newspaper. Information to promote water conservation and the use of water conserving devices published in the local newspaper	Yes
	Targeting largest users	Ashland is primarily a residential town with few industrial properties that might be considered target large water users.	Yes
9) Outdoor water use		Ashland has a water use restriction by-law which mandates outdoor water use restrictions year-round. The Town's website provides information concerning water use restrictions and Hopkinton Reservoir levels.	Yes
10) Other	A program of land use controls to protect existing water supply sources of the receiving area that meet the requirements of the Department of Environmental Protection.	In place	Yes
	A long-term water conservation program which complies with the 2018 <u>Massachusetts Water Conservation Standards</u> should be in place.	Yes	Yes

Criterion #4 Forestry Management

This criterion is not applicable to this proposal. Ashland's sources are ground water sources.

Criterion #5 Reasonable Instream Flow and Criterion #7 Cumulative Impacts

Ashland is proposing to purchase up to 120 million gallons of water from the MWRA per year. System hydraulics and the maximum interbasin transfer amount requested will result in a maximum transfer of 1.6 mgd.

The ITA regulations (313 CMR 4.09(e)) direct the WRC to consider that "reasonable instream flow in the river from which the water is transferred is maintained" in making its decision to approve or deny an Interbasin Transfer request. In this case, the WRC, through its Staff, evaluated the impacts of transferring 1.6 mgd on the operations of the MWRA Water Works System, which include impacts to reservoir levels, drought levels, low flows, intermediate flows, high flows, and the MWRA's mandated downstream releases. In addition, the cumulative impacts of the Ashland transfer, other recently approved transfers and other potential new communities which may be added in the near future were evaluated on a monthly basis. These transfers could result in an additional combined annual average of 10 mgd of system demand. In its analysis of these criteria, the WRC relied on data provided in the Ashland DEIR, FEIR, information regarding the MWRA system in a document titled, "MWRA Water System Supply and Demand" (May, 2002), and previous WRC Decisions. Streamflow data and reservoir release data for the analysis were obtained from the US Geological Survey and previous WRC ITA reviews.

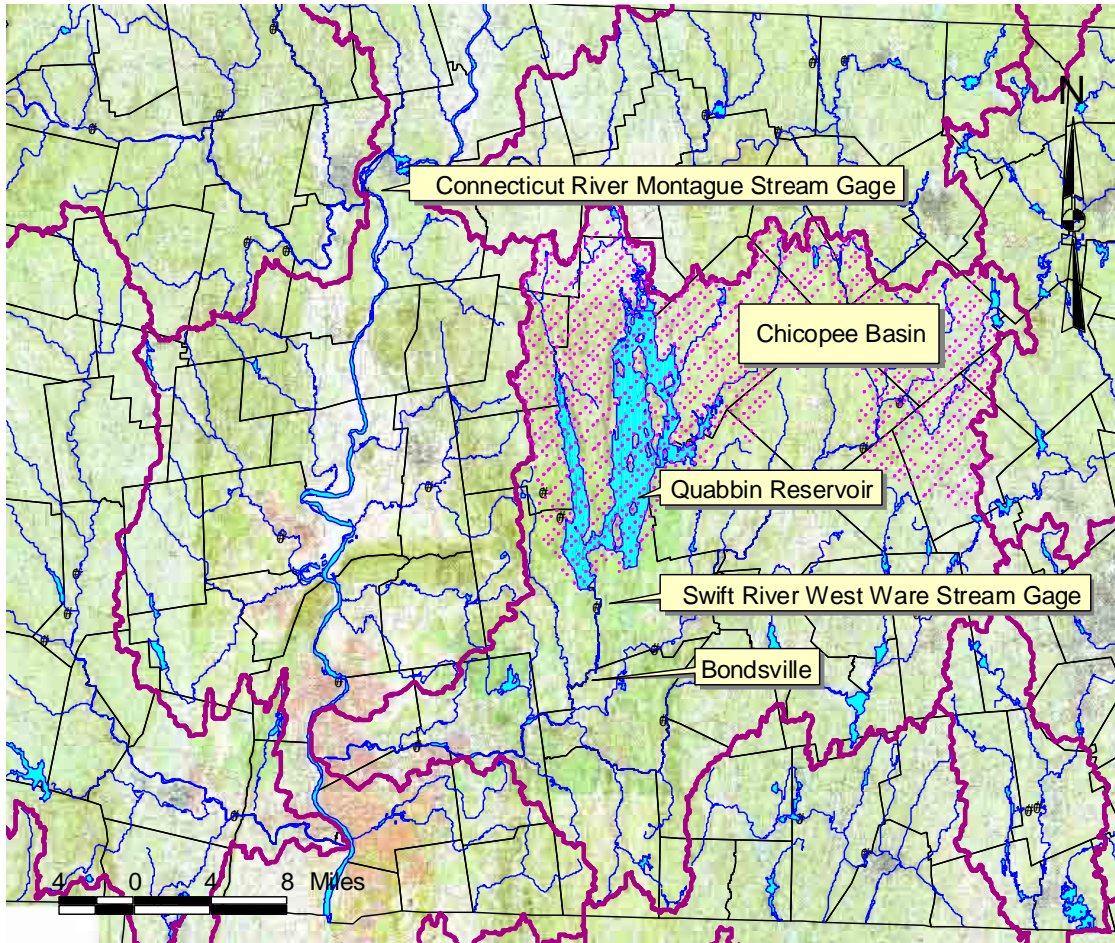
MWRA Water Works System Operations

The MWRA Water Works System obtains water from the Quabbin Reservoir, the Wachusett Reservoir, and the Ware River intake (Figures 2-4). The Quabbin Reservoir has a watershed area of 186 square miles, and maximum storage capacity of 412 billion gallons, equivalent to about five years worth of supply. In addition to the water flowing into the Quabbin directly, Quabbin Reservoir can receive water from the Ware River (also in the Chicopee River basin) via the Ware River intake. The Ware River at its intake has a watershed area of 96.8 square miles. The Quabbin Reservoir is connected by pipeline (the Quabbin Aqueduct) to the Wachusett Reservoir in the Nashua River basin. Wachusett Reservoir has a capacity of 65 billion gallons and a watershed area of 107 square miles. The Quabbin Reservoir came on-line in 1940's to supplement the existing reservoir system (including the Wachusett Reservoir) that had been serving the Boston metropolitan area.

The Quabbin and Wachusett reservoir system is operated with the primary objective of ensuring an adequate, high quality water supply. Secondary operational objectives include maintaining an adequate flood protection buffer particularly during the spring melt and hurricane seasons and maintaining required minimum releases to both the Swift and Nashua Rivers. The Wachusett Reservoir elevation is controlled through transfers from Quabbin Reservoir. The objective is to operate Wachusett Reservoir over a narrow operating range (between elevation 390 and 391.5 feet BCB³) while allowing Quabbin Reservoir to freely fluctuate. The Quabbin Reservoir elevation at the primary spillway is 530 feet BCB. There is also a smaller, low-level spillway at elevation 528 feet BCB.

³ Boston City Base

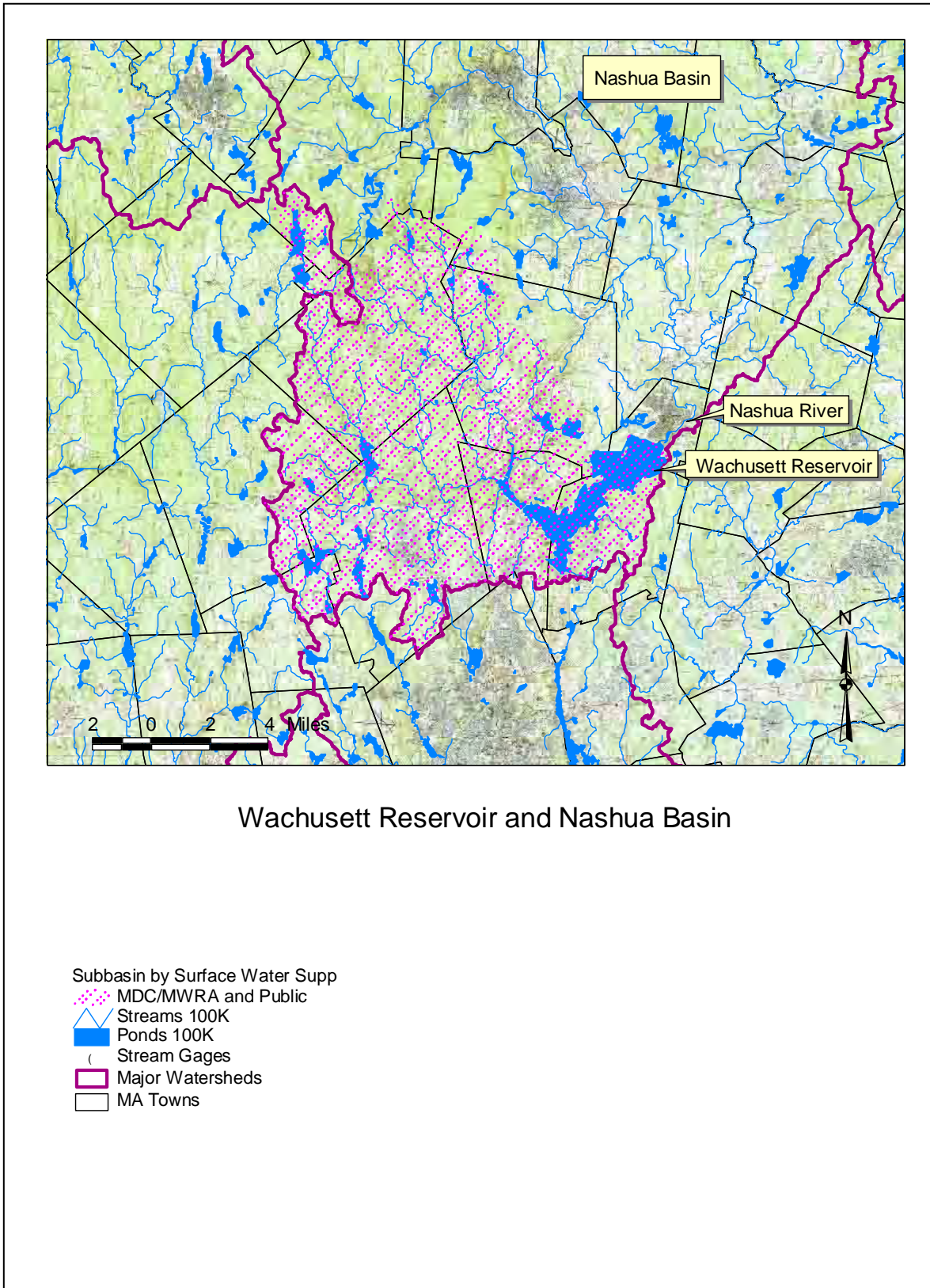
Figure 3. Quabbin Reservoir Donor Basin



Quabbin Reservoir, Chicopee Basin, and Stream Gaging Locations of Interest

- Subbasin by Surface Water Supp
- MDC/MW RA
- Major Watersheds
- Maj Streams
- Maj Ponds
- Stream Gages
- MA Towns

Figure 4. Wachusett Reservoir Donor Basin



The operation of Quabbin Reservoir includes maintenance of a minimum flow in the Swift River at Bondsville (five miles downstream of Winsor Dam) of 20 mgd, or 30 cubic feet per second (cfs). This threshold was mandated in Chapter 321 in the 1927 Acts of Massachusetts. A 1929 War Department permit (now overseen by the Army Corps of Engineers) also requires seasonal releases from the Winsor Dam to maintain flow for navigability on the Connecticut River between June 1 and November 30. The seasonal releases are 70 cfs (45 mgd) if the flow in the Connecticut River, as measured at the Montague stream gage, falls below 4,900 cfs, and 110 cfs (70 mgd) if the flow in the Connecticut River falls below 4,650 cfs.

During its normal operation, the Quabbin Reservoir maintains the required streamflow thresholds stated above through controlled releases through a combination of a turbine bypass (formerly used for hydropower production) plus a Ross valve. The reservoir has been historically controlled to maximize safe yield and assure water quality, while at the same time satisfying the regulatory required releases. Uncontrolled releases, or unintended spills, can occur occasionally over the spillway. If the reservoir is close to full and a storm event occurs, excess water may be spilled over the spillway down the Swift River. There have also been extended multi-year periods when no spillway discharges have occurred.

Transfers from the Ware River to Quabbin Reservoir are only allowed at Ware River flows above 85 mgd (131 cfs), and must be limited to the period from October 15 to June 15. In addition, permission must be obtained from the Army Corps of Engineers to transfer water during the periods of June 1 through June 15 and October 15 through November 30. Under the “limited Ware” operating approach currently implemented by the MWRA, transfers from the Ware River are made only on a limited basis for flood control or to help fill the Quabbin when Quabbin Reservoir levels are beneath their seasonal normal values.

Minimum releases are also statutorily mandated for the operation of the Wachusett Reservoir on the South Branch of the Nashua River. Chapter 488 of the 1895 Acts of Massachusetts requires a release of 12 mg per week or 1.71 mgd (equivalent on average to approximately 2.6 cfs).

Hydrologic Analysis—Overview

Several types of data are available to evaluate the potential impact of the Ashland transfer, as well as any planned or proposed transfers, on the Quabbin Reservoir. Streamflow data, or a hydrograph showing the impact of the proposed transfer on the donor river basin, is usually evaluated as part of an interbasin transfer review. However, several factors make the use of downstream flow data difficult in this case. First, the Quabbin Reservoir has a huge storage capacity, which is used to maintain a constant minimum flow. Second, the current MWRA system demand is significantly lower than its historic demand; therefore superimposing the transfer on a historic downstream hydrograph would not be realistic. For these reasons, other types of data, including releases and reservoir levels, are being used to evaluate these criteria. To account for the change in system demand, some of the analyses have used a shortened period of record on which to superimpose the transfer. Due to the presence of large water supply dams and their associated reservoirs, Aquatic Base Flow (ABF) criteria were not applied to

downstream releases, since the outflows from the dams would not reflect the size of the watersheds above the dams on a cubic feet per second per square mile (cfs/m) basis.

The Ashland application indicates that in general, given the relatively small size of the Ashland transfer in comparison to the capacity of the reservoir and the magnitude of discharges over the spillway, and the discharges governed by regulatory requirements, the effects from Ashland's withdrawals on hydraulic characteristics will be imperceptible. Intended downstream releases at Quabbin, Ware, and Wachusett will not change. There would only be a slight reduction in unintended spillway flows at Quabbin.

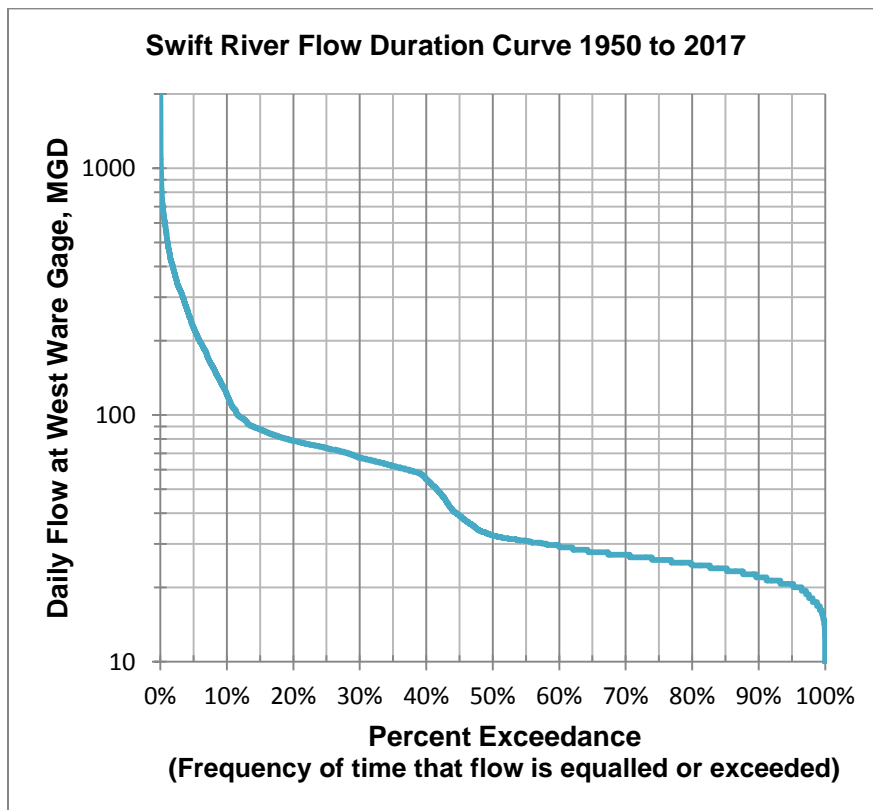
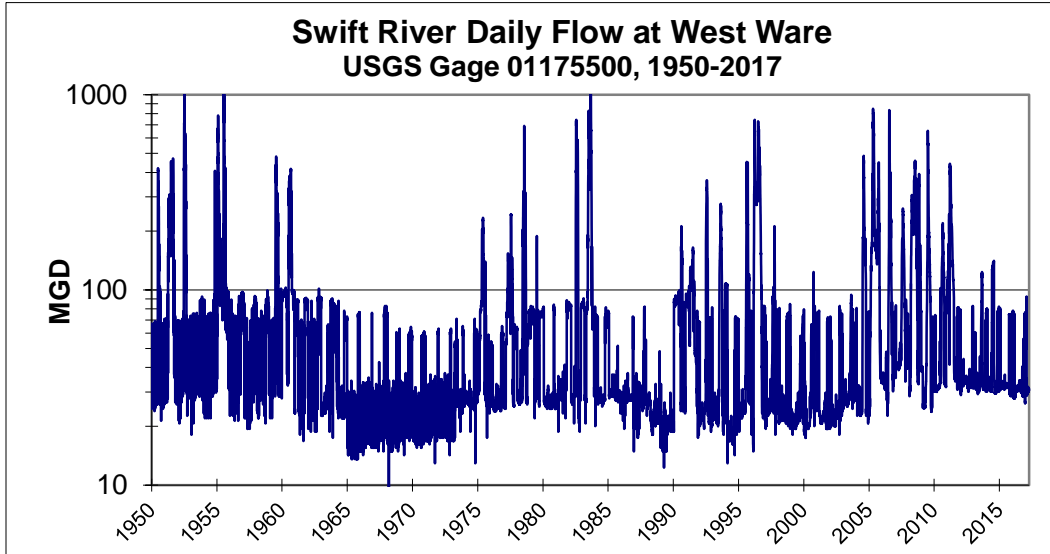
Quabbin Reservoir and Swift River

Both time series flow graphs and flow duration curves are used to describe river flow conditions. Figure 5 shows both the time series and flow duration curve for the Swift River at the West Ware gage for the time period of 1950 to 2017. The Swift River West Ware gage is located 1.4 miles downstream from Winsor Dam and has a period of record from 1913 to present. The West Ware gage is located approximately 3.6 miles upstream of the compliance point at Bondsville. The intervening drainage area between the two points is reported to contribute 4 mgd of base flow (MWRA Water System Supply and Demand, 2002); therefore, releases of at least 16 mgd are made from the Quabbin Reservoir to maintain the minimum 20 mgd flow required at Bondsville. MWRA has commented that releases are more typically about 20-25 mgd. In addition, 6 mgd is supplied to the McLaughlin Fish Hatchery and ultimately returns to the Swift River. Significant flow variation is evident in the time series graph, and the flow duration curve depicts the very high frequency of flows that exceed the minimum release requirement from the Quabbin Reservoir.

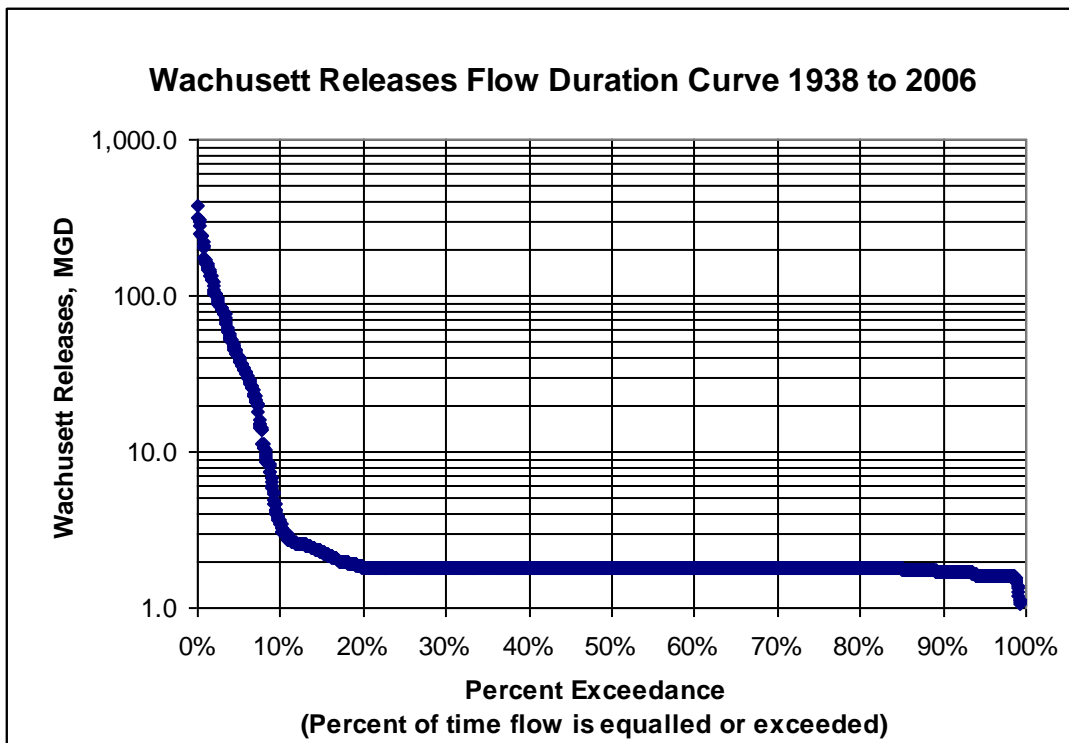
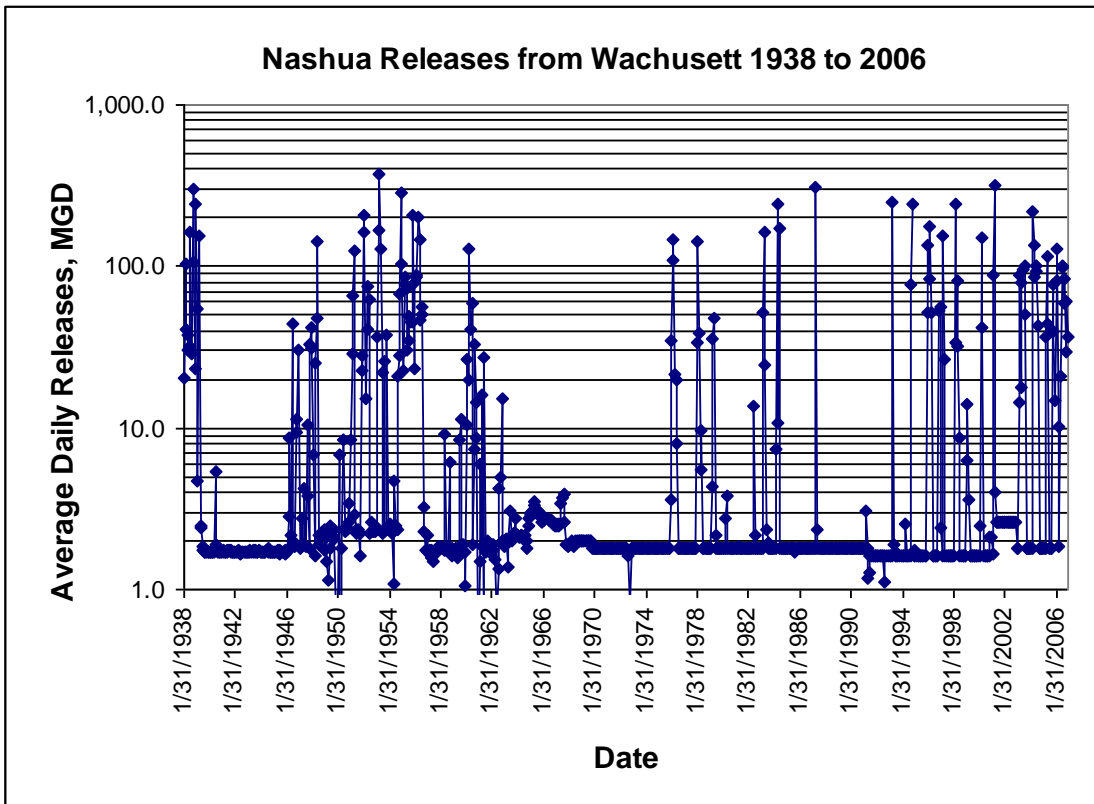
Wachusett Reservoir and Nashua River

Statutory releases from Wachusett Reservoir typically occur through a fountain on the downstream side of the dam at the headwaters of the Nashua River. MWRA staff also estimates that an additional 0.9 mgd of seepage occurs from the Wachusett Reservoir dams and dikes. A pressure-reducing sleeve valve installed in 2003 has provided better operational control and allows additional discharges up to 100 mgd. Flows between 1.8 and 100 mgd may be released through the sleeve valve to control the reservoir level or when Wachusett Reservoir is being supplemented with Quabbin water for water quality purposes. Flows above 100 mgd occur when the Wachusett Reservoir spillway crest gate is activated for larger releases and spilling. Previous analysis for the time period of 1938 to 2006 showed that the minimum of 1.71 mgd release or greater occurred 92.5 percent of the time; however, between since 2002 the minimum release was achieved greater than 99 percent of the time. Figure 6 shows a previous analysis of releases to the Nashua River times series and flow duration curve from 1938 to 2006. Figure 7 shows a times series of Nashua River daily releases from 2003-2015 taken from the FEIR. Figure 8 shows a times series of Nashua River flow from the relatively new USGS Gage 01095503 from July 2011 (when the period of record starts) through 2017.

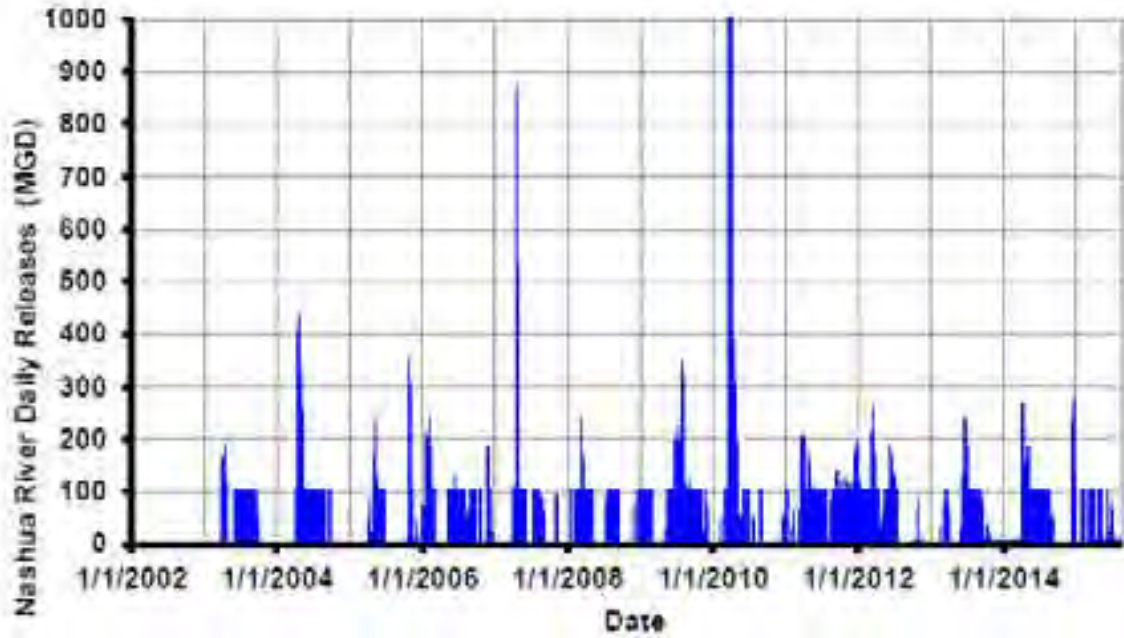
Figure 5. Swift River Time Series and Flow Duration Curve 1950 to 2017



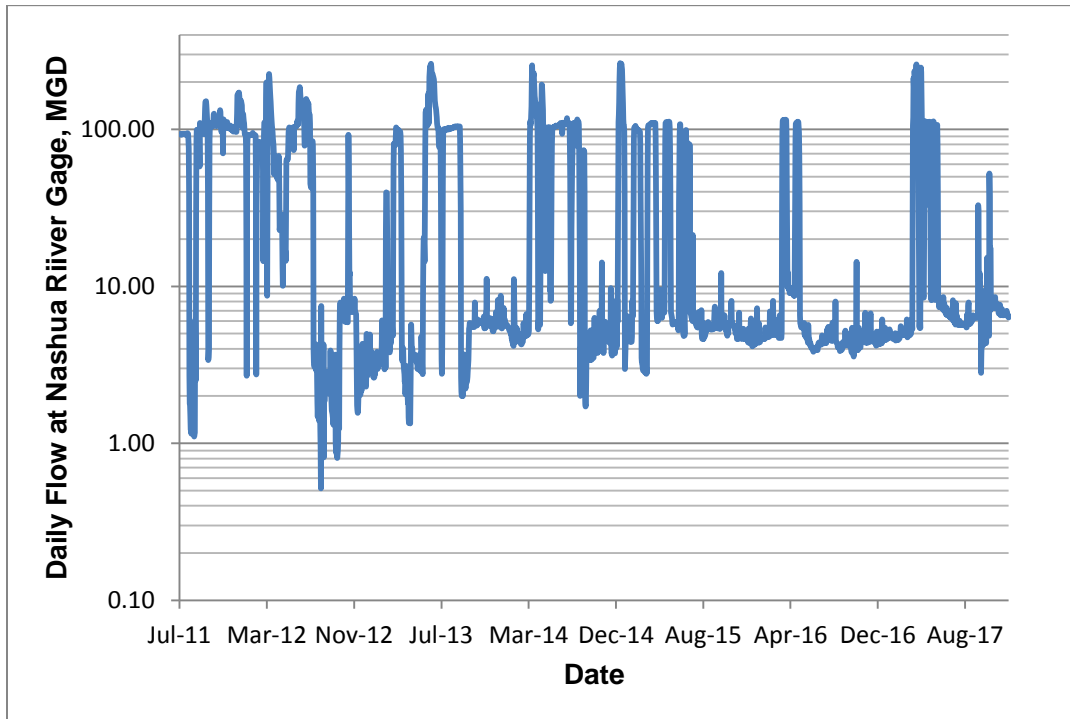
**Figure 6. Releases from Wachusett Reservoir to Nashua River, 1938 to 2006
Time Series and Flow Duration Curve**



**Figure 7 Nashua Daily Releases 2004-2015
From FEIR**



**Figure 8 Nashua River Flow, MGD
USGS Gage 01095503**



Ware River

According to MWRA, the Ware intake at Barre was designed to pass the first 85 mgd before flow can be siphoned into the intake. Flow is measured by MWRA using its own meter at the intake. However, since the diversions are only allowed at flows exceeding 85 MGD (and the operating practice is to not divert below 89 mgd), there are no impacts to low flows caused by the diversions. It is noted that diversions from the Ware River to the Quabbin Reservoir are typically only made when the reservoir level is below normal or the Army Corps of Engineers requests it for flood control. Figure 9 shows the time series and flow duration curve from a previous analysis for the Ware River for the time period 2002 to 2006. The USGS gage 01173000 data time series has superimposed on it the reduced flow as a result of diversions to the Quabbin Reservoir during that time

Low Flows

USGS data indicates that the minimum Quabbin release to the Swift River (16 mgd) as measured at the West Ware gage was maintained over 99 percent of the time between 1950 and 2017. Because the mandated flow requirements have been maintained, even during periods when demands were nearly 100 mgd over the current level, and through the drought of record, it is assumed that those releases will continue to be met and permit conditions will be satisfied under the proposed transfer demand scenarios, which are significantly less than the historic use. Additional demands from Ashland and other proposed users are not expected to affect Swift River releases from the Quabbin Reservoir, which represent the majority of low flows.

Previous analysis for the period of 1938 to 2006 indicate that releases from Wachusett Reservoir to the Nashua River have met the 1.71 mgd requirement more than 92.5 percent of the time and 99 percent of the time since 2002. Again, additional demands of Ashland and other proposed users are not expected to affect Nashua River releases from the Wachusett reservoir.

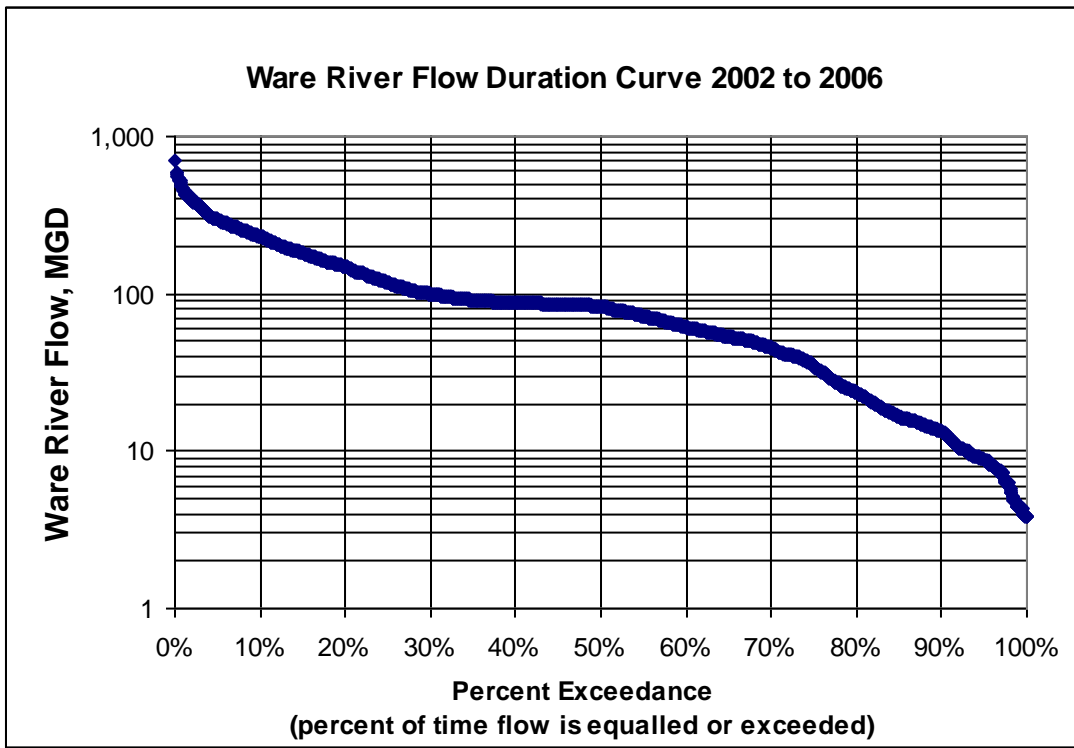
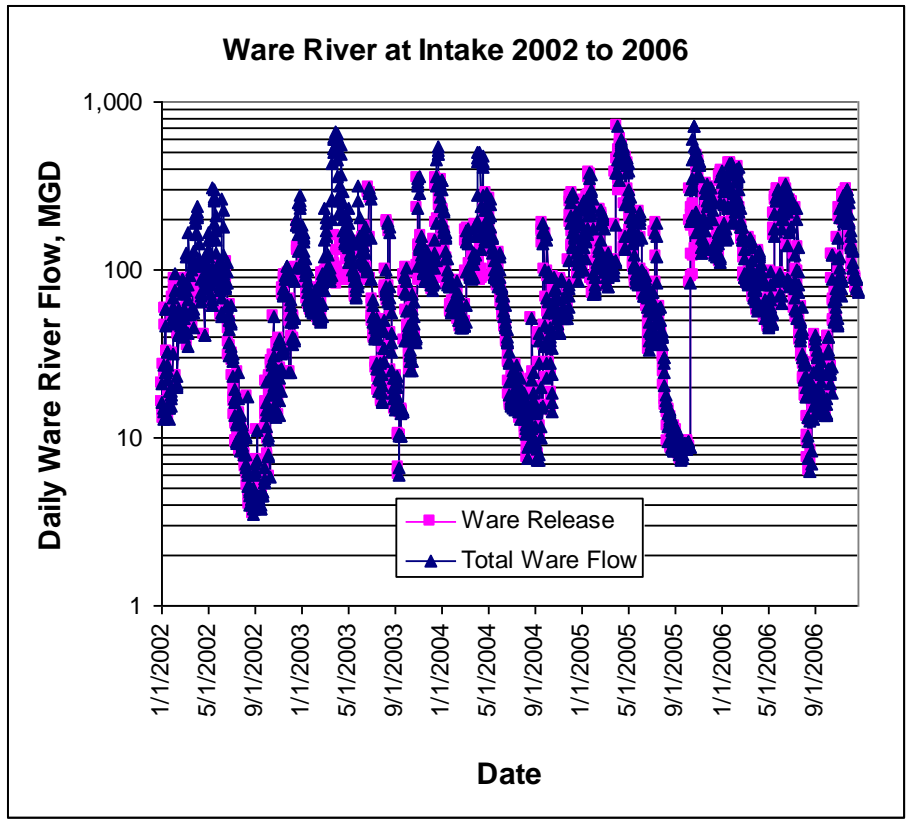
Low-flow impacts on Ware River diversions as a result of the additional demands posed by Ashland are not expected. Ware River diversions are limited to non-low-flow months (November through May), and to periods when flow exceeds 85 mgd.

Intermediate Flows

While only “minimum” release requirements apply to the Quabbin and Wachusett Reservoirs, data from USGS gages indicate that intermediate flows occur as a result of releases above the minimum requirements for both the Swift and Nashua Rivers. There will only be a slight reduction in unintended spillway flows at Quabbin. The additional demand of Ashland will not in itself cause any change in how the Wachusett Reservoir is operated, nor in releases to the Nashua River.

Previous analysis showed that intermediate flows at the Ware River intake (classified herein between 50 to 100 mgd) occurred 38 percent of the time between 2002 and 2006. During this period, at times when the diversion was activated, up to 85% of Ware River flow was diverted, while maintaining at least the minimum 85 MGD downstream release. For the period analyzed (2002 to 2006), the Ware diversion was operated 184 days, or about 27 percent of the time

Figure 9. Ware River Flows and Flow Duration Curve, 2002 to 2006



during the intermediate flows. It is acknowledged that Ware diversions are limited based on MWRA's operating principles. Even with the diversions, however, the frequency and magnitude of intermediate flows in the Ware River appear nearly normal.

High Flows

Increasing demands can impact the amount of water that is spilled from Quabbin. Ashland's ITA application stated that there is no correlation between flows in the Swift River and system demand; rather, variations in flow are related to operational practices as well as climatic conditions. Increasing transfers from the Quabbin Reservoir to meet water quality objectives and to meet increased summer demands decrease the likelihood of spills. Spills from Quabbin are undesirable because of their adverse impacts downstream including warm water releases and flooding issues.

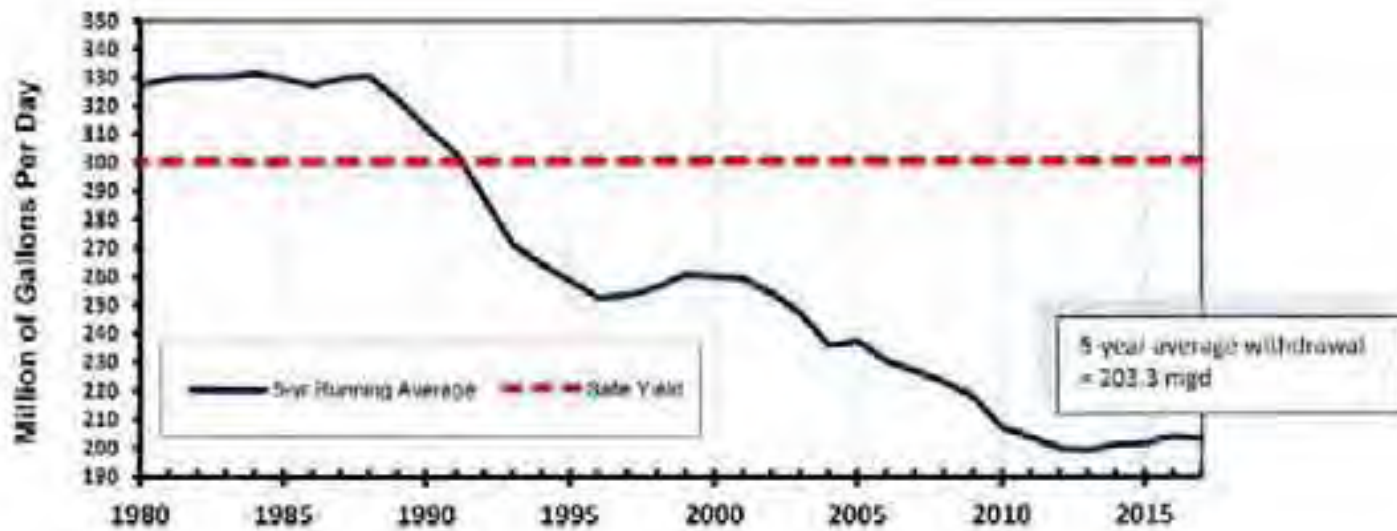
Since high flows from the Wachusett Reservoir are generally uncontrolled spills, and the reservoir level is intended to be managed to a narrow range of levels, the proposed Ashland interbasin transfer is not considered to have an impact on high flows in the Nashua River.

High flows on the Ware River are impacted by diversions to the Quabbin Reservoir. Previous analysis showed that high flows (above 100 mgd) at the Ware River intake occurred 30 percent of the time between 2002 and 2006. During this period, at times when the diversion was activated, up to 84% of Ware River flow was diverted, while maintaining at least the minimum 85 MGD downstream release. For the period analyzed (2002 to 2006), the Ware diversion was operated only 34 days, or about 6 percent of the time during high flows. As noted previously, Ware diversions are limited based on MWRA's operating principles. Even with the diversions, however, the frequency and magnitude of high flows in the Ware River appears nearly normal. The addition of Ashland will not likely have an impact on the use of Ware River diversions or high flows in the Ware River.

Quabbin Levels/Drought Analysis

The safe yield of the Quabbin and Wachusett reservoir system is approximately 300 mgd (MWRA, 2002). MWRA system demand has decreased dramatically since the 1980's (see Figure 10), as a result of aggressive water conservation efforts, water efficiency initiatives, response to price and rate increases, and regional economic conditions. In the FEIR, the baseline demand given was 200 mgd (5-year average 2009-2014). According to the MWRA, the most recent five-year average reservoir withdrawal (2013 to 2017) was 203.3 mgd, and the 2017 reservoir withdrawal was 195.64 mgd. Using population projections provided in the FEIR from the Metropolitan Area Planning Council and University of Massachusetts Donahue Institute, future demands for the existing system of an additional 18.5 to 22 mgd through 2035 were conservatively estimated. The FEIR drought analysis used a future demand of 232.6 MGD, which leaves a margin of safety for any communities that may approach MWRA in the near future.

Figure 10 Total Reservoir Withdrawals Five Year Running Average 1980-2017



Quabbin Reservoir levels fluctuate by design, but minimum percent full values have been established and are the basis for drought designations. The applicant evaluated maximum pool level reductions at various demands from 190 to 300 and hydrologic conditions simulated from 1948 through 2000. A withdrawal of 240 MGD was used in the EIR for evaluation of reservoir performance. This represents the base withdrawal, plus Ashland and future community demands (232.6 MGD total plus 6 MGD to the McLaughlin Fish Hatchery) in 2035. At a demand of 240 mgd, there would be one month spent in drought stage 1. In addition, at demands below 250 mgd, Quabbin's maximum descent would still be above 500 feet, well above the level at which reservoir performance could be affected.

Impacts to Flow Characteristics

Interbasin Transfer Act criteria require evaluating impacts of the transfer on specific flow statistics. No impact to the Swift River 95% flow duration (20.0 mgd) is expected, compared to existing conditions. The 95% flow duration is equivalent to the state-mandated release requirement of 20 mgd at Bondsville. Data from the Swift River gage indicate that the mandated release has been achieved at virtually all times and it is expected that it will be maintained into the future and will not be affected by the proposed transfer or those of future communities included in this analysis.

Likewise, the 95% flow duration at the Wachusett Reservoir is not likely to be affected by the proposed additional transfers requested by Ashland. Data previously provided by the DCR Office of Watershed Management and USGS gage data indicate that the mandated release has been achieved at virtually all times since 2002 and it is expected that it will be maintained into the future and not be affected by the proposed transfer. Thus, the 95% flow duration flow is expected to increase slightly with future operations to at least the 1.71 mgd threshold.

The 95% flow duration at the Ware River should not be impacted by the proposed increase in interbasin transfer since Ware River diversions are not allowed during low flow periods.

Impacts to Other Uses

Fisheries

According to the Massachusetts Division of Fisheries and Wildlife, the Swift River below Winsor Dam, down to the confluence with the Ware River, contains significant fisheries habitat. In addition, the river is one of only two rivers in Massachusetts which receive a cold-water release that significantly benefits habitat, such as the catch and release trout fishery directly below the dam. The current required flow releases are beneficial to the fishery, as they provide a continuous source of fresh cold water.

An instream flow incremental method (IFIM) study of the Swift River in 1997 by Normandeau Associates for MWRA indicated that the current flow releases were adequate to protect the Swift River trout fishery. The study found substantial, large, deep pools in the Swift River that serve as habitat refuge for adult trout. The efficacy of pools as low flow refuges is enhanced by an abundance of overhanging and downed trees that contribute substantial amounts of woody debris.

As a result of discussions and negotiations initiated during previous ITA reviews for admission to the MWRA, DFW, MWRA and DCR Office of Watershed Management considered habitat improvements that could be made within the limitations of existing permits. The MWRA and the DFW have entered into a Memorandum of Agreement (MOA) to tap raw water from the MWRA's Chicopee Valley Aqueduct (CVA) and convey six million gallons a day to DFW's McLaughlin Fish Hatchery, except during periods of drought. This work was completed in 2017. The pipeline to the Hatchery is used in the Hatchery's fish rearing facilities, and replaced the water that the Hatchery withdrew from Swift River. Ultimately, the water supplied for use in the Hatchery's operations is discharged after treatment to the Swift River (the Hatchery borders the Swift River) to supplement existing flows in the Swift River.

In addition, MWRA and DCR Office of Watershed Management have taken a number of steps to address fisheries issues in the Swift River, including:

1. Continuous 24-hour discharges from Quabbin into Swift River all year round, instead of higher releases for 5-7 hour periods.
2. Revision of MWRA operations to more slowly ramp up the higher volume controlled discharges made in the summer months, in response to a request of the Division of Fisheries and Wildlife.
3. Continued coordination with the Fish Hatchery regarding warm water spills in reservoir operating procedures.

MWRA has continued to use the new facilities at the Wachusett Dam to make additional releases to the Nashua River, above the required minimum. According to the MWRA, from 2003 to present, on average, over 25 times the required minimum release to the Nashua River has been made.

Hydropower

A hydropower turbine was in use at the Winsor Dam until 1991, when it was damaged by a fire. The 1997 Normandeau study was commissioned to determine suitable flow levels for fisheries during drought periods, as this information would directly impact the feasibility of generating hydropower while maintaining a trout fishery. However, no action was taken to re-implement the hydropower production, and according to MWRA, there are no plans at this time to reactivate the hydropower station at the Winsor Dam. The addition of the proposed community to the MWRA system would not likely have any impact on hydropower at the Winsor Dam nor on any downstream hydropower facilities.

Recreation

Aside from the sport fishery addressed above, there is some boating recreation on the impoundments in Bondsville. Again, these uses will not be affected because operation of Quabbin and Wachusett reservoirs will not change with the Ashland transfer.

Wetlands

Other than the Quabbin Reservoir itself, the only significant wetland in the Chicopee River basin that could be affected by the transfer is in Ware, along the Swift River. The area is 70 acres of

open water impounded by a dam in Bondsville. Because this area is open water and is part of the river, current minimum flow requirements appear to be adequate to protect the wetland area.

Summary of Reasonable Instream Flow Analysis

The analyses of release data indicate there will be no change in the operation of the Quabbin and Wachusett Reservoirs in response to the proposed Ashland transfer or to other potential transfers up to the 10 mgd used in the analyses of the MWRA Water Works System. Downstream flows will continue to meet all applicable permit and regulatory requirements. Low flows will not change, and intermediate and high flows will only be slightly affected possibly on the Swift and Ware Rivers. Current resources will be unaffected by the transfer. The proposed action to increase the Present Rate of Interbasin Transfer will still maintain reasonable instream flow in the donor basins. The Commission recognizes that current conditions represent a highly engineered environment. Modifications to the timing and magnitude of releases to the Swift and Nashua Rivers, undertaken as a result of previous ITA approvals for admission to the MWRA, may be beneficial to the downstream aquatic habitat. This Decision attempts to address the balance between water supply needs and aquatic habitat needs of flow, water quality and water temperature in the Swift, Ware, and Nashua Rivers.

Criterion #6 Groundwater/Pumping Test

This criterion is not applicable to this proposal. MWRA's sources are surface water sources.

OTHER ISSUES CONSIDERED

Timing of the MWRA Purchase

Ashland proposes to use MWRA water when levels in the Hopkinton Reservoir are at or below 293 feet NGVD29. However, DCR's operations of the Reservoir are impacted by use of the town's Howe Street wells. DCR operates Hopkinton Reservoir elevations within a range of 296 to 298 feet NGVD29 in May through August for recreational uses. Below an elevation of 296 feet NGVD29, the popular beach and boat ramp on Hopkinton Reservoir are essentially unusable.

Public water supply demands are greatest in the summer months, coincident with maximum annual evapotranspiration caused by high temperatures and vegetation growth. Given the Howe Street well field's immediate proximity to the Hopkinton Reservoir, in a transmissive sand and gravel aquifer, there is direct hydraulic communication between the wells and the Reservoir. The well water withdrawals likely have a nearly immediate impact on reservoir levels. During each summer month, Ashland's historic groundwater withdrawals have caused at least a foot of drawdown in Hopkinton Reservoir. In order to partially alleviate this situation, MassDEP has required that Wells #7 and #8 be shut down when the reservoir water level drops below 295.85 feet NGVD29. Ashland has tied this elevation level to its outdoor water use restriction by-law.

Although beyond the Commission's jurisdiction to require under this transfer request, we strongly urge Ashland to reconsider the parameters it has set for use of MWRA water and to purchase more water during the summer months, when use of the Howe Street wells conflicts with DCR's reservoir management requirements and causes other impacts. In their comments on

this application, DFG noted the GWC and BC of the subbasin containing these wells (discussed under Criterion 2, above) and stated “Extending the period when MWRA water is used will help reduce some of the existing alteration and maintain higher groundwater and Reservoir levels as well as potentially improve downstream flow in Indian Brook. When the Reservoir is at a higher elevation, there is more opportunity for it to spill or for water to be released downstream. Additionally, keeping groundwater higher in the summer months by using supplemental MWRA water could help alleviate some of the groundwater depletion as well as provide more base flow to Indian Brook.” Ashland may purchase water during other times of year and at higher reservoir levels than proposed in the ITA. Since Ashland is limited to the 1.6 mgd amount proposed to be purchased from the MWRA, use of MWRA water during other times of year and at higher reservoir levels should not result in adverse impacts to the MWRA Water Supply System, and will not require additional ITA review.

Impacts to Hopkinton/Ashland Intermunicipal Agreement

There was some question of how Ashland’s purchase of MWRA water would impact its contractual obligation to sell water to Hopkinton. In 1999, the WRC approved a Determination of Insignificance under the Interbasin Transfer Act from the Town of Hopkinton to receive up to 0.056 mgd from Ashland, for transfer and subsequent discharge as wastewater into the Charles River basin and Blackstone River basin sections of Hopkinton. This is part of a larger water sale from Ashland to Hopkinton of up to 1 mgd (most of which remains in the Concord River basin). There is a dedicated water main from Ashland’s Howe Street Treatment Plant directly to the Town of Hopkinton, separate from that which goes to Ashland. Therefore the purchase of MWRA water by Ashland will not directly affect the water sale to Hopkinton. The 1999 Determination of Insignificance remains in effect and is not superseded by this Decision to allow Ashland to purchase water from the MWRA. As long as Ashland and Hopkinton are not exceeding the parameters of the 1999 decision, the existing water sale to Hopkinton is beyond the Commission’s jurisdiction under this transfer request. If Hopkinton amends its Intermunicipal Water Agreement with Ashland, allowing it to purchase more water from Ashland’s Howe Street wells, and this results in an increase in the amount of water being discharged to the Charles River and Blackstone River basins, the ITA would be triggered and additional WRC review and approval would be required. As stated above, this Decision is based solely on Ashland’s purchase and use of MWRA water.

EO 385

This Decision is consistent with Executive Order 385, which has the dual objective of resource protection and sustainable development. This Decision does not encourage growth in areas without adequate infrastructure nor does it cause a loss of environmental quality or resources.

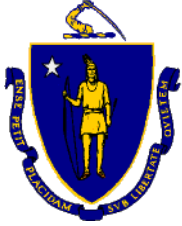
CONDITIONS FOR APPROVAL

Based on the analyses of this project, the approval of Ashland’s application under the Interbasin Transfer Act for admission to the MWRA Waterworks System is subject to the following conditions. **Ashland must commit in writing within 30 days of the approval to abide by any conditions required by the approval of this transfer.**

1. Ashland must continue effective demand management programs that meet the Interbasin Transfer Performance Standards for Criterion #3, Water Conservation. The Town must

- not amend its outdoor watering bylaw to make it less restrictive while the Town continues to use its existing ground water sources during the summer recreational season.
2. According to the FEIR, Ashland is updating its Emergency Response Plan and developing a Drought Management Plan. These were to have been completed this year. Ashland must provide copies of these plans to WRC Staff for review upon completion. If these plans are not completed in 2018, Ashland must provide a schedule for completion to WRC Staff by January 2, 2019.
 3. WRC Staff will monitor Ashland's DEP Annual Statistical Reports for the first five (5) years after the town begins to receive MWRA water, to determine if the programs in place are successful in reducing unaccounted-for water at or below 10% and residential gallons per capita per day (gpcd) at 65 or less and to confirm that the interbasin transfer from MWRA to Ashland meets the annual limit of 120 million gallons. After the five year period, this may be done periodically.
 4. If per capita residential water use increases above 65 gpd, the Town must implement a comprehensive residential conservation program that seeks to reduce residential water use through a retrofit, rebate or other similarly effective program for encouraging installation of household water saving devices, including faucet aerators, showerheads and toilets and through efforts to reduce excessive outdoor water use, including the imposition of seasonal water use rates and other measures. If this occurs, the Town must provide a plan for this program to the WRC for approval.
 5. Ashland must provide annual reports to WRC Staff outlining progress with its meter replacement program. These reports will be due on March 1st of each year, until the program has been completed. At the completion of the meter replacement program, the final report should discuss future plans for meter replacement, as these newer meters reach the end of their useful life.
 6. Ashland cannot sell MWRA water to Hopkinton or other municipalities or entities outside of the Town of Ashland without prior approval from the WRC, as this would represent a change in the operating rules, thus triggering the ITA (313 CMR 4.04(5)).

Approval under the Interbasin Transfer Act is just one of the approvals required for admission to the MWRA Water Works System. Ashland must obtain all other required permits and approvals before joining the MWRA.



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION

Massachusetts Water Resources Commission

Notice of Decision
Approval of an Action to Increase the Present
Rate of Interbasin Transfer
Town of Ashland's Request to
Join the MWRA Water Works System
Under the Interbasin Transfer Act
MGL Chapter 21 Section 8B-8D

On October 11, 2018, by a unanimous roll call vote of the ten (10) voting members present at a public meeting, the Water Resources Commission (WRC) approved the Town of Ashland's request for an Interbasin Transfer for admission to the MWRA Water Works System. The Report of the Findings, Justifications and Decision for this proposal has been filed with the clerks of the House of Representatives and the Senate, and with the Secretary of State for publication in the Massachusetts Register, as required by 313 CMR 4.11(3).

This Report was published in the November 16, 2018 issue of the Massachusetts Register and is available on the Interbasin Transfer web page at <https://www.mass.gov/service-details/interbasin-transfer-decisions>.

WATER SUPPLY AGREEMENT
BETWEEN
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF ASHLAND

This Water Supply Agreement (“Agreement”) by and between the Massachusetts Water Resources Authority (“MWRA”) and the Town of Ashland (“Town or Ashland”) (hereinafter jointly referred to as "the Parties"), documents the agreement and understanding of the Parties regarding the arrangement whereby MWRA will supply water to Ashland through the Southborough (“Southborough”) distribution system to Ashland’s local distribution system.

RECITALS

1. Whereas, MWRA was created by the Massachusetts legislature in December 1984 (chapter 372 of the Acts of 1984), to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area and currently provides water supply and distribution services, and wastewater collection and treatment services, to certain cities, towns and special services districts (“Communities”) within its service area.
2. Whereas, Section 8(d) of the Act permits the MWRA to extend its waterworks system to a new community and to provide the continued delivery of water to the new community under reasonable terms as determined by MWRA provided specific requirements are met.
3. Whereas, a regulation entitled “Continuation of Water Contract Supply”, promulgated by MWRA at 360 CMR 11.00 (“the Regulation”) defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to communities purchasing water from MWRA.
4. Whereas, on June 6, 2020 Burlington made a formal application to the MWRA to become a permanent member community of the MWRA water supply system in order to supplement its local sources due in ability to meet regular water system demand resulting from restrictions on the use of the Howe Street Well’s, Ashland’s only local water source. Ashland sought admission to MWRA to satisfy deficits created by restrictions on the use of the Howe Street Wells.
5. Whereas, Ashland’s goal in seeking admission to MWRA is to have the ability to reliably meet local water system demand;
6. Whereas, Ashland has fulfilled the requirements for membership found in the Act at section 8(d), as more fully described in 360 CMR §§11.07 and 11.08 of the regulations, and has submitted a Supply Analysis Report, a Demand Analysis Report, and a Water Management Plan that has been approved by the Water Resources Commission and has

further submitted a detailed description of a local user charge system and accounting system which meet the Regulation's requirement for conservation based rates.

7. Whereas, based on its review of the Town's submittals, MWRA finds that the requirements of sections 8(d) of the Act have been met as follows:
 - (1) The Safe Yield of the watershed system, on the advice of the Department of Conservation and Recreation (DCR), is sufficient to meet projected demand.
 - (2) No existing or potential water supply source for the local body has been abandoned unless the Department of Environmental Protection (DEP) has declared that the source is unfit for drinking and cannot be economically restored for drinking purposes.
 - (3) A Water Management Plan has been adopted after the approval by the Water Resources Commission.
 - (4) Effective demand management measures have been established including, but not limited to, establishment of leak detection and other appropriate water system rehabilitation programs.
 - (5) A local water supply source feasible for development has not been identified by either the local body or the DEP.
 - (6) A water use survey has been completed which identifies all users within the local body that consume more than twenty million gallons a year.
8. Whereas, the admission to MWRA's water system was approved by a majority vote of Ashland's Town Meeting on May 3, 2017.
9. Whereas, Ashland undertook the required series of actions related to regulatory review under the Massachusetts Environmental Policy Act and the Interbasin Transfer Act and received the approval of the Water Resources Commission in October 2019 to purchase from the MWRA up to 73 million gallons annually, or 1.6 mgd on an annualized average basis.
10. Whereas, Ashland now requests 32.8 million gallons of water annually, or .09 mgd from MWRA, but may in the future request an additional volume of 40.2 million gallons annually for a total of 73 million gallons annually, as permitted through regulatory reviews;
11. Whereas, Ashland, having received approval of the Legislature and of the Governor, the MWRA Advisory Board and the MWRA's Board of Directors, and having met the conditions of section 8(d) of the Act, and the conditions of MWRA OP #10 Admission of a New Community to the Waterworks System ("OP#10"), and having been duly admitted to the MWRA Waterworks System effective the date of the MWRA Board of Directors' approval, thereby acquiring certain rights and obligations conferred by that admission.

12. Whereas, Ashland, pursuant to MWRA’s Policies and Procedures for Emergency Water Supply Connections, Operating Policy #5 (“OP#5”) withdrew water from MWRA for two emergency periods prior to its application to MWRA for admission to the Waterworks System for a permanent water supply;
13. Whereas, OP#5 requires that beginning with the second emergency water withdrawal period, MWRA shall assess an asset value contribution charge, and accordingly Ashland made net asset value payments for emergency water withdrawal periods totaling \$3,451.23.
14. Whereas OP#5 provides that if an applicant has purchased MWRA water under an emergency supply agreement(s) and has paid charges which include an asset value contribution and subsequently is approved admission to the water system on a permanent basis, the asset value contributions paid will be treated as credits against the total entrance fee.
15. Whereas, MWRA and Ashland wish to formalize their rights and obligations regarding the supply of water to Ashland and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, MWRA and Ashland agree to the following:

1. The term (“Term”) of this Agreement shall be five (5) years beginning on or around December 16, 2020 and ending at midnight on December 15, 2025. It is MWRA’s policy that the initial agreement be for a term of 5 years in order that the Authority may reevaluate and assess the status of a community’s demand management programs under the provisions of 360 CMR § 11.00. It is the practice of MWRA to enter into water supply continuation contracts upon substantial compliance by a community with the requirements of that regulation and after completion of negotiations for such renewal satisfactory to the community and to the MWRA.
2. MWRA shall during the Term of this Agreement provide Ashland with water on an annual volume basis stated in millions of gallons as follows:

<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
32.8 mg	32.8 mg	32.8 mg	32.8 mg	32.8 mg

or 90,000 gallons per day on an average daily basis; up to 648,000 gallons per day on a typical maximum daily basis, subject to the hydraulic capabilities of MWRA’s distribution system. In the event that Ashland anticipates that its withdrawals from MWRA will exceed a flow rate of 90,000 gallons per day, Ashland shall notify MWRA Operations. Should Ashland’s withdrawals in excess of 90,000 gallons per day through Southborough coincide with peak withdrawals of other MWRA Communities in the

vicinity, MWRA reserves the right to restrict Ashland's withdrawal to a maximum of 90,000 gallons per day.

3. The parties understand that long-term water demand in Ashland is projected to increase and that Ashland was approved by the Water Resources Commission to purchase up to 73 million gallons annually from the MWRA. The parties agree that, with the exception of emergencies, any withdrawal in excess of 32.8 million gallons annually will require a written contract revision signed by each of the Parties hereto and a revision to the Entrance Fee.
4. The parties agree that in the event that Ashland determines that 32.8 million gallons per year to be supplied for the MWRA system are insufficient to meet the Town's non-emergency requirements, Ashland may petition the MWRA to amend this Agreement pursuant to pursuant to 360 CMR 11.11 and OP #10.
5. Notwithstanding the above, the Parties agree that in the event of an emergency, and in the absence of an Amended Agreement as described in paragraph 4 hereof, Ashland may request that MWRA supply in excess of 32.8 million gallons a year, and if approved, the supply of water in excess of 32.8 million gallons a year will be assessed pursuant to the charges provisions of OP#5.
6. Ashland agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum feasible use of local water supply sources subject to the limits and conditions imposed by the Water Resources Commission.
7. Ashland agrees to pay MWRA a Net Entrance Fee of \$388,336.34 for its share of the value of the waterworks system in place at the time of its entrance. The Net Entrance Fee reflects an Entrance Fee of \$391,787.57 minus the Total Net Asset Value contributions of \$3,451.23 previously paid pursuant to OP#5. Unless modified as provided in Paragraph 4, above, the Net Entrance Fee will be paid to the MWRA in accordance with the schedule of payments attached hereto as Exhibit A and incorporated herein. In consideration of the payment of the Net Entrance Fee by Ashland, the MWRA agrees to continue to assure a continuation of water supply to Ashland from the MWRA's water supply system in accordance with the provisions of 360 CMR § 11.00.
8. The MWRA shall bill Ashland and Ashland shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing and collection procedures, due dates, and interest charges for late payments shall be in accordance with the Act and MWRA's standard policies and procedures.
9. Ashland agrees that the MWRA shall not be liable to Ashland for any disruption of water supply delivery to Ashland attributable to the water distribution systems of either Ashland or of the MWRA.

10. Ashland agrees to pay the full cost of any required upgrades to connect to the MWRA via the Southborough distribution system. Any upgrades will be constructed by Ashland according to MWRA specifications and will be owned and maintained by Ashland.
11. Ashland agrees to continue in effect a full cost pricing system for water received from the MWRA water supply system.
12. Ashland agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: participation in MWRA conservation programs, distribution of MWRA-provided materials to all water users, compliance with the MWRA's regulations for town-wide leak detection and repair (360 CMR §12.00), maintaining metering in 100 percent of the Town's distribution system, including all municipal facilities, and maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial and residential areas.
13. Ashland agrees that during the Term it shall not abandon any local source and substitute for it water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
14. Ashland agrees to continue in full force and effect during the Term its Zoning Bylaw Aquifer Protection District to preserve and protect existing and potential sources of drinking water supplies.
15. Any rate disputes arising between MWRA and Ashland concerning the calculation of Ashland's assessment shall be resolved in accordance with MWRA's Rate Basis Data Review and Dispute Resolution Process. Any other dispute arising between MWRA and Ashland under the terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.
16. For the remainder of fiscal year 2021 (through June 30, 2021), Ashland will be assessed for water supplied at the current prevailing rate of \$4,320.63 per million gallons, and water provided in fiscal year 2022 will be at the approved prevailing rate. Beginning in fiscal year 2023 and for the remainder of the Term, Ashland will be assessed in accordance with MWRA's Community Charge Determination Policy. MWRA's Community Charge Determination Policy computes charges for water services on the basis of each community's metered water flows. The MWRA annual water rate revenue requirement is allocated according to each community's prior year's water use relative to the system as a whole. The annual rate revenue requirement is comprised of operation and maintenance (O&M) and capital (debt service) charges.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By: _____ Date: _____
Frederick A. Laskey
Executive Director

TOWN OF ASHLAND

By: _____ Date: _____
Michael Herbert,
Town Manager

DRAFT

Massachusetts Water Resources Authority

Town of Ashland

Water System Entrance Fee Payment Schedule

Entrance Fee:

\$388,336.34

Dec. 2023	\$17,651.66	Dec. 2034	\$17,651.65
Dec. 2024	\$17,651.66	Dec. 2035	\$17,651.65
Dec. 2025	\$17,651.66	Dec. 2036	\$17,651.65
Dec. 2026	\$17,651.66	Dec. 2037	\$17,651.65
Dec. 2027	\$17,651.65	Dec. 2038	\$17,651.65
Dec. 2028	\$17,651.65	Dec. 2039	\$17,651.65
Dec. 2029	\$17,651.65	Dec. 2040	\$17,651.65
Dec. 2030	\$17,651.65	Dec. 2041	\$17,651.65
Dec. 2031	\$17,651.65	Dec. 2042	\$17,651.65
Dec. 2032	\$17,651.65	Dec. 2043	\$17,651.65
Dec. 2033	\$17,651.65	Dec. 2044	\$17,651.65

TOTAL \$388,336.34