

# ASHLAND'S REQUEST TO JOIN THE MWRA UNDER THE INTERBASIN TRANSFER ACT

WRC Staff Recommendation

September 13, 2018

# Facts Pertaining to the Application

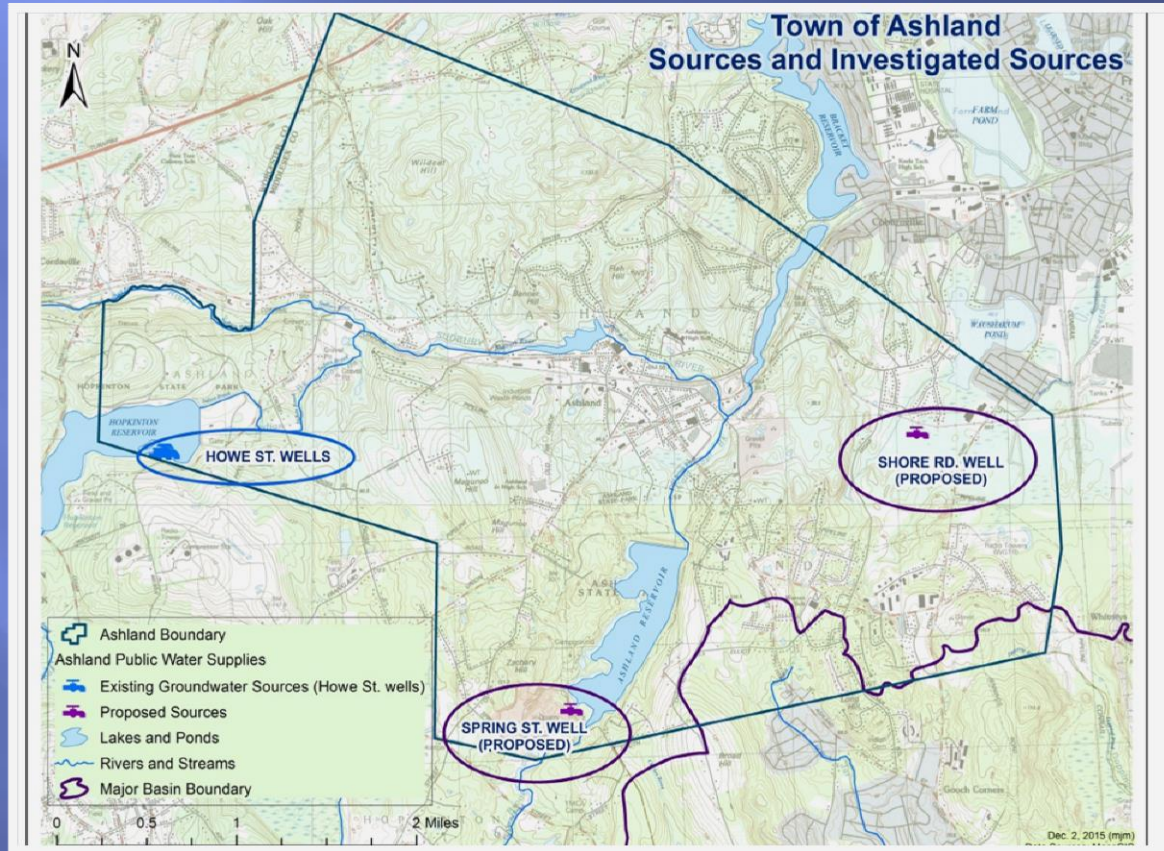
- ❑ Ashland has land area in the Concord River basin.
- ❑ Five existing water supply sources
  - All adjacent to the Hopkinton Reservoir, which is managed by DCR for recreation and flood control purposes. The capacity of these sources is limited by the treatment plant at 5.90 mgd.
  - Two of these sources have shut-off thresholds to be implemented when the reservoir reaches an elevation of 295.85 feet NGVD.
- ❑ Proposing to purchase up to 1.6 million gallons per day to supplement its existing water supply sources. Ashland will use MWRA water when the level in the Hopkinton Reservoir is at or below 293 feet.
- ❑ MWRA Waterworks System has sources in the Chicopee River basin and the Nashua River basin.

# More Facts

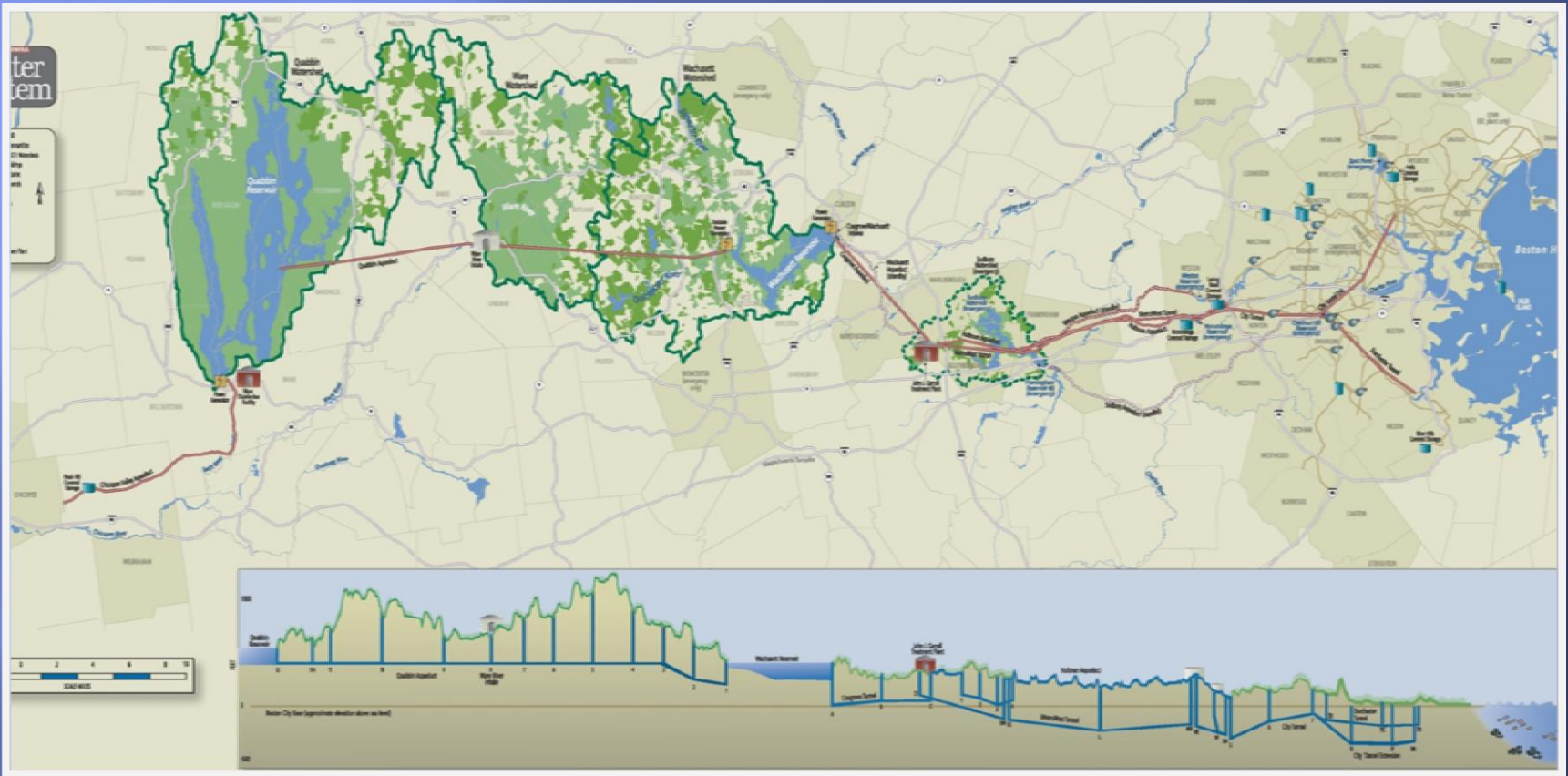
- ❑ The Secretary's Certificate on the Final EIR was issued on June 29, 2018, stating that no further MEPA review is needed.
- ❑ The WRC accepted Ashland's application as complete on July 12, 2018.
- ❑ Agency comments were received from DEP and DFG.
- ❑ Public Hearings were held in the donor and receiving basins on August 21 and 23, 2018.
- ❑ Public comments were received from the Town of Hopkinton, M. Joseph Geary of Woodard & Curran, Michael Hebert (Ashland Town Manger), Catherine Rooney of the Ashland Water Policy Committee, the MWRA, the Water Supply Citizens Advisory Committee, the Nashua River Watershed Association and Ashland Department of Public Works.
- ❑ Late comments were received from Julie Nardone and Steve Morgan, both Ashland citizens.

# Ashland's Existing and Investigated Local Sources

The proposed Spring Street and Shore Road Wells were eliminated from consideration as "viable local sources" due to water quality and quantity, Article 97, and wetlands issues



# MWRA Sources



# Criteria of the Act

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

# Criterion 2

- ▣ Additional Source at Howe Street
- ▣ Spring Street Site
- ▣ Shore Road Site
- ▣ Parcel adjacent to Legacy Farms in Hopkinton
- ▣ Former Girl Scout Camp
- ▣ Former Warren Conference Center

# Criterion 3

- ▣ Meets most of the Performance Standards for Water Conservation and Conforms with the 2018 Water Conservation Standards
- ▣ In the process of addressing High Unaccounted-for water Issues via an on-going meter replacement program. UAW was 8.2% in 2017.



# Criterion 5 Reasonable Instream Flow

## Criterion 7 Cumulative Impacts

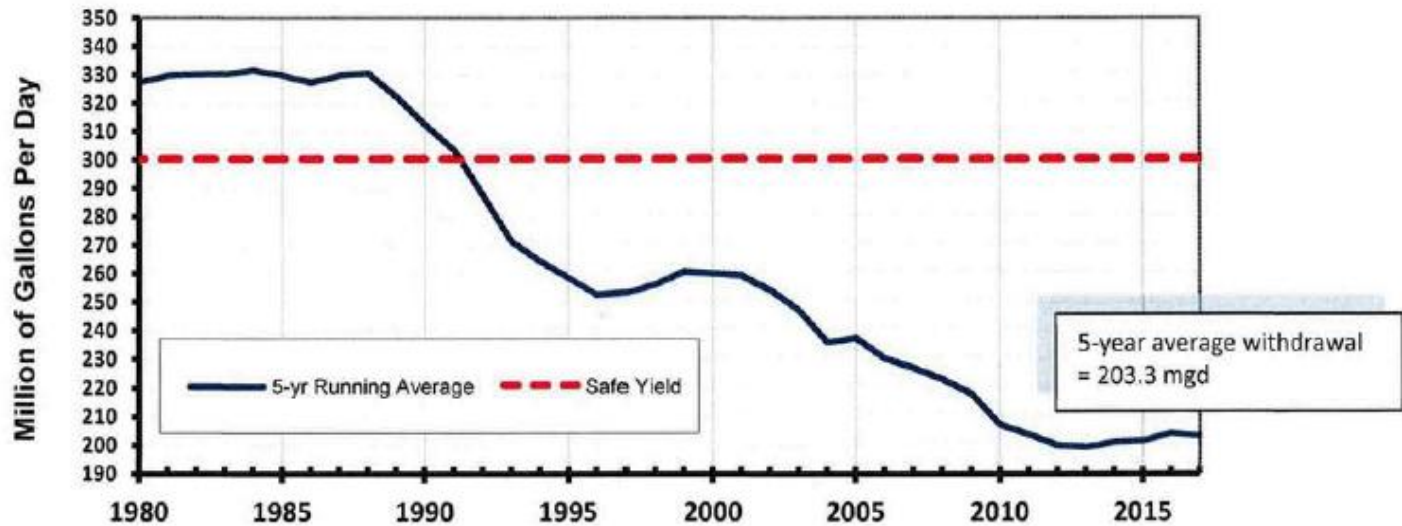
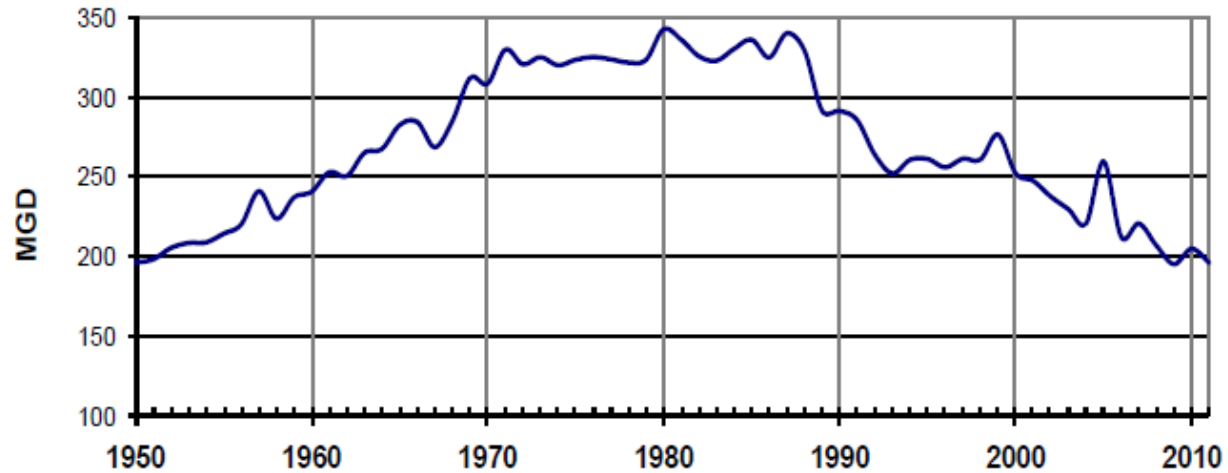
- ▣ How will the Ashland transfer affect flow:
  - Swift River
  - Ware River
  - Nashua River
- ▣ How will the Ashland transfer and other recent transfers affect Quabbin & Wachusett Reservoirs:
  - ability to supply existing customers
  - performance during drought

# System



# Demands

## MWRA Annual Average System Demand



# Criterion 5

- ▣ Swift River
  - Low flows: minimum releases continue
  - Intermediate & High flows: minimal impact unintended spillway flows



# Criterion 5

- ▣ Nashua River
  - Low flows: minimum releases continue
  - Intermediate & High flows: Ashland transfer not changing how Wachusett Reservoir operated



# Criterion 5

- ▣ Ware River
  - Low flows: Not affected; diversions only allowed above river flow of 85 MGD and seasonally
  - Intermediate & High flows: Ashland transfer not changing operations, minimal impact



# Criterion 7

## Cumulative Impacts

- Reservoir Performance- Drought Analysis



# Criterion 7

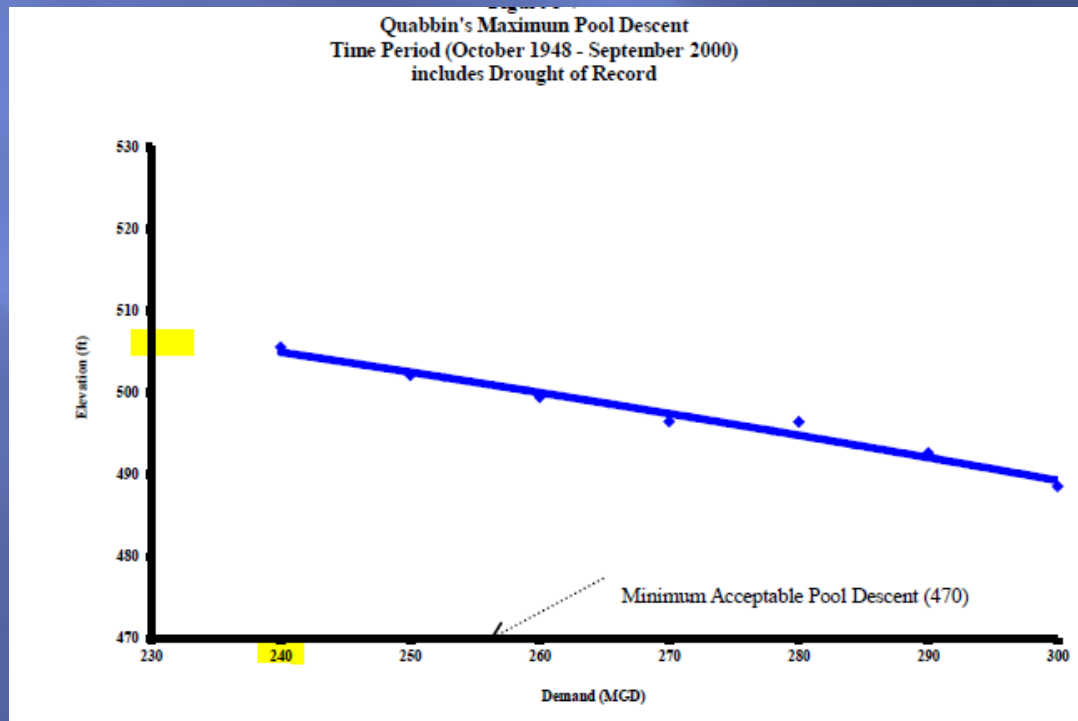
2009-2014 MWRA 5-year average baseline demand	200 MGD
UMDI/MAPC existing system additional demand 2035	18.5 to 22.6 MGD
Ashland + other potential communities	10 MGD
Future Estimate	232.6 MGD
+ fish hatchery 6 MGD	Use 240 MGD for analysis



# Criterion 7

## Safe Yield & Maximum Pool Descent

- Safe Yield for Quabbin/Wachusett/Ware System 300 MGD
- Demands below 250 MGD, maximum descent still above 500 ft



# Criterion 7

## Drought Actions

- At demand of 240 MGD, one month in Drought Stage I

**Table 3-4**  
**Number of Months in each Stage of MWRA's Drought Management Plan**  
**(including Drought of Record)**

Demand (MGD)	Below Normal	Drought Warning	Drought Emergency Stage 1	Drought Emergency Stage 2	Drought Emergency Stage 3
190	21	0	0	0	0
200	31	1	0	0	0
210	44	2	0	0	0
220	42	8	0	0	0
230	51	14	0	0	0
240	50	28	1	0	0
250	60	39	4	0	0
260	55	61	5	0	0
270	41	63	8	0	0
280	43	62	24	0	0
290	67	34	56	0	0
300	98	25	69	4	0

# Conditions of the Approval

## Part 1

- Ashland must commit in writing 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.

# Conditions of the Approval

## Part 2

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 1<sup>st</sup> of each year, until the program has 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 entities outside of its normal service area without prior approval from the WRC.

# Next Steps

- ▣ Public Hearing on this Staff Meeting on September 20<sup>th</sup>.
- ▣ Fuller discussion by the WRC at the October 11<sup>th</sup> meeting.
- ▣ Vote on the Staff Recommendation at the November 8<sup>th</sup> WRC meeting.
- ▣ (Deadline for vote: November 19, 2018.)