March 24, 2016

This document is a summary of questions and comments raised to date to the Water Policy Committee, and its responses. It is periodically being updated. It includes information provided by the Committee, DPW staff, MWRA, DCR, and DEP.

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2. We need to focus on public education

## **EMERGENCY (OR LACK THEREOF)**

1. The Town leaders are playing off our fears to push through an MWRA connection by using past situations where we had an emergency connection and assuming that we will need one in the future.

2. What constitutes an emergency connection to the MWRA and who determines when we open the valve from Southborough?

3. Who is telling us that we have to have another source of water and what gives them the right to tell us what to do?

4. I am not convinced that there is a water shortage and I want proof

5. If we have only taken water from Southborough on one occasion, why is there such a rush for an emergency connection? Where is the emergency?

6. We are not at maximum withdrawal levels and we can do more with conservation, so there is no real crisis.

## RATES

1. The basic water fee is a mixed incentive

2. The Town needs to look at a water rate structure that is fair. For example, we need to provide free or affordable access to the minimum amount of water that is essential for living.

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1. Nobody is talking about fluoride. MWRA adds fluoride to their water and Ashland doesn't.

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1. Resiliency of our water system is important and we need to plan for long term resiliency in the event of a long term drought.

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1. Why can't people use grey water for in ground irrigation systems?

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1. The sustainability committee implemented the irrigation system ban as the first phase of a program to reduce outdoor water use.

2. Irrigation system ban has likely reduced public water use but has increased the number of private wells being installed.

3. We should look at the state recommendations for lawn and landscape when updating the Water Use Regulations (Section 270), especially the recommendations for having a bylaw that regulates the installation and use of private wells, and a bylaw that promotes the use of rainwater for irrigation.

## GENERAL MWRA QUESTIONS/COMMENTS

1. You know the Quabbin Reservoir experienced drought conditions in the 1960s and it could happen again. What if there is a major drought and the MWRA begins to restrict water use?

2. Is the Quabbin a sustainable source of water? What is the future outlook for the availability of water from the Quabbin?

3. The debt that MWRA is carrying is concerning. How will that impact us in the future?

4. I have heard the MWRA has a tremendous amount of debt; how will this impact the cost of MWRA water in the future?

5. What is the price of MWRA water?

6. Once we connect to the MWRA, isn't that going to open Ashland up to all types of development?

7. If we connect to the MWRA, could the state (DEP or DCR) tell us that we have to go on the MWRA entirely and force us to abandon our wells?

8. There is a general distrust with the MWRA and that once we are hooked up the conditions of our agreement will change.

9. What is the quality of MWRA water compared to water withdrawn from Howe Street?

## **MWRA CONNECTION QUESTIONS**

1. Residents are concerned that there is already a warrant article for Fall Town Meeting and that we are marching forward

2. Need to take a holistic approach to our water sources. It sounds as though the approach is the MWRA or nothing

3. If the Town's people agree to connect to the MWRA, what else must be done before we can obtain water from the MWRA?

4. Could we chose to get off the MWRA system at some point in the future?

- 5. How much MWRA water do we plan on using?
- 6. What type of control does MWRA have over our use of water?
- 7. Once we have a connection to the MWRA system, do we have to use any of their water?
- 8. Who will control the MWRA connection and determines when we draw water from MWRA?

9. If we connect to MWRA, could the activation of flow be initiated by some type of pressure differential in the distribution system?

### **SPRING STREET**

- 1. The pipes are in the ground for Spring Street.
- 2. No one wanted to discuss the quality of the well
- 3. Public deserves an opinion on Spring Street well
- 4. Why are we abandoning the idea of Spring Street?
- 5. What are the issues with Spring Street and could they be dealt with?
- 6. What is the cost of Spring Street vs. MWRA?
- 7. We already spent the money on the Spring Street pipes and should use them.

8. Need to at least consider Spring Street in our holistic approach to water sources and possibly offer the town people a combined Howe St/Spring St/MWRA water source. Not advocating for Spring St, but only noting that it should be in the conversation.

## **ALTERNATIVE OPTIONS**

1. What are the choices other than the MWRA connection, what is their price tag, and how long would those choices take to bring on-line?

## WATER POLICY AND RESTRICTIONS

1. We need to put harsh growth restrictions in town to limit the impact on our water supply because the community is growing too fast.

2. Why does the level of the Hopkinton Reservoir determine the stage of Ashland's water restrictions?

3. If we are having a water ban, how come we are selling water to Hopkinton? Why don't we save that water for our use?

4. What are Hopkinton's water restrictions? If we are in a water ban, shouldn't they be too? Why do they get to use all the water?

5. How come residents are allowed to drill a private well for irrigation and draw water from the same aquifer as the Howe Street wells even when we are in a Stage 2 water ban?

6. EMC has groundwater wells and is in the same sub basin as the Howe Street wells. How much water do they use and what gives them the right to use water when Ashland is in a water ban? Why isn't Ashland screaming about this? What the hell?

## **Conservation – General**

- 1. Saying the quabbin reservoir has an abundant supply is misleading and discourages conservation.
- ANS: Quabbin and Wachusett Reservoirs, just like any other fresh water reservoir, depend on annual precipitation. Because these reservoirs are significantly larger with more drainage area and are withdrawing well below their firm yield they are a more reliable source than the Hopkinton Reservoir.

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# 2. In addition to what we are not replacing back to the ground, we must also make up for development.

ANS: Ashland does not have a Waste Water Treatment plant. Our waste water is transported through Framingham for a fee and eventually MWRA does the treatment for a fee. Water level in the Aquifers are usually replenished by rainfall and water collected from impervious areas. Per the SWMI Map, the aquifer at the Hopkinton reservoir has significant groundwater depletion which will only increase when there is more development and more demands on the current water source.

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- 3. We still need to have conservation measures in place if we connect to MWRA
- ANS: Yes, Conservation measures will still remain and DEP will require that we continue following conservation through the various stages of water supply.

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#### 4. We need to continue to focus on conservation

ANS: Our Conservation guidelines and various stages of water bans are determined for the most part by the Hopkinton reservoir level. DEP will require that we meet specific performance standards and restrict nonessential uses under certain conditions. The water policy committee is also focusing on methods for promoting conservation, including education, water rates, and regulations.

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# 5. What will we do to keep the per capita water use below 65 gallons per day per person?

ANS: It has been determined that out of the 7000+ households there are approximately 2500 households with old meters that either leak / do not calibrate correctly. We have identified and notified various residents, and are in the process of replacing meters with a more current technology. Here is what the residents can do, Please check online at: http://www.ashlandmass.com/168/Water-Meter-Replacement-Program

# **Responses to Comments**

Download the map and open it with Adobe Reader. Zoom into the location of your home and let us know if you are one of the residents that could use an updated meter. Note: All ARB, Badger, Touch Pad Meter types are old water meters. Call DPW at: 508-881-0120 ext 7952 to schedule an appointment. If you do not have the Adobe software to view the map, contact us at <u>dpw@ashlandmass.com</u> to check if you are eligible for a new water meter.

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# 6. The overall goal of the water policy committee should be to decrease the amount of water used per person (aka per capita water use).

ANS: Agreed, Water Policy Committee was established in order to accomplish many missions. Including: a) updating the Town's water use regulations, b) reviewing the water rate structure, c) looking at better source protection, d) reviewing the water capital plan, and e) recommending conditions for turning on the MWRA connection

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- 7. If we connect to the mwra, residents are going to think that we have an endless supply of water which will affect conservation efforts.
- ANS: Connection to the MWRA water source does not mean that we start getting water from that source on a regular basis. MWRA connection is only for supplemental water source. From historic precipitation data as well as the Town's withdrawals data, we noted that consistently over the past decade water from the Hopkinton reservoir is barely able to and at times unable to meet the demands. Currently our only water source for the Town of Ashland is the Hopkinton Reservoir. The other potential sources were researched and identified as not as feasible options by an independent Engineering consultant.

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- 8. Can't we just implement more conservation measures so that we don't have to connect to an alternative source?
- ANS: Our current Town bylaw for conservation is one of the more stringent and most defined measures. Our Permits for the Hopkinton Reservoir wells since 2001 have required us to follow the water use restriction and implement a well shut down process. Reservoir levels determine the type/duration of use restrictions. Reservoir Levels are monitored continuously. At 295.85 ft. above sea level, we reach Stage 1 and at 295.35 ft. (3 feet below Spillway) we reach Stage 2. In 2012, WMA Permits required additional use restrictions for outdoor water use. Restriction details are in our water by-law as well as the water/ sewer web page. We have a few violators at every water stage ban even though we publicize the water bans through various channels. Ideally when all residents follow the current guidelines that would be a good step forward to proving that our community as a whole cares for water conservation.

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9. Where are the locations for recharge?

ANS: Our Aquifers can be recharged through 2 primary methods. 1) Precipitation.2) Groundwater recharging from irrigation water, rain runoff from impervious surfaces like roofs etc.

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## **General Questions**

#### 1. Why can't we use stormwater collection systems to irrigate?

ANS: Stormwater collection includes many contaminants like: Salt, Sand, Grease / Oil from pavement surfaces and hence stormwater should be treated before being used for irrigation / domestic purposes. Rain Barrels are provided at a discounted price by the Town of Ashland, DPW, which can be used to collect rain water runoff from roofs and used for irrigation. In the year 2015, approximately 25 Rain Barrels were used by residents of the Town of Ashland.

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- 2. We need to have a more sustainable approach to water and stop thinking that there is an endless supply of water.
- ANS: As mentioned earlier, connection to the MWRA water source does not mean that we start getting water from that source on a regular basis. MWRA connection is only for supplemental water source.

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- 3. What is the average per person water use in the state and in ashland?
- ANS: Per the Annual Statistical Report for 2014, the Residential Gallons per Capita Day (RGPCD) is 55 for Ashland. The goal for the state is 65 RGPCD.

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- 4. What are the Town's current water demands and what are the projected water demands?
- ANS: Per the Annual Statistical Report for 2014, 493.035 Million gallons were used for the year, which is 1.35 (MGD) Million Gallons per day. The population served was 16,592. Per Department of Conservation and Recreation (DCR) Forecasts, the estimated population in 2021 is 17,673 and estimated usage is 1.77 MGD. The estimated population in 2026 is 18,696 and estimated usage is 1.85 MGD. Reports are available in the Appendix section of the Environmental Impact report submitted. This and more information is available online at: <u>http://mwra.ashlandmass.com/</u>

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5. What is an aquifer and how does it work?

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ANS: An Aquifer is an underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand or silt) from which groundwater can be extracted using a water well. The Aquifers fill with moving water and the amount of water in storage can vary from season to season and year to year. Ground water may flow through an aquifer depending on the permeability. No matter how fast or slow, water will eventually discharge from an aquifer and must be replaced by new water to replenish or recharge the aquifer. Every Aquifer has a recharge zone and a discharge zone.

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# 6. What is the difference between "registered" withdrawal and "permitted" withdrawal?

ANS: Large water users had the ability to register their existing water withdrawals in use between 1981-1985. Registrations established a renewable right to existing water withdrawals over 100,000 gallons per day (gpd) on average, per river basin, withdrawn between the years of 1981-1985. DEP issued registration statements to document these registrations. The last day to register was January 4, 1988.

Persons making withdrawals or planning to withdraw water from ground or surface sources in excess of an annual average of 100,000 per day or 9 million gallons in any three-month period for consumptive uses after 1985 must apply for a Water Management Act Permit, if not already registered for those withdrawals.

Ashland's registered withdrawal volume is 1.23 MGD and permitted withdrawal volume is 0.45 MGD (for Ashland) and 0.5 MGD (for Hopkinton). We currently have Registered wells 4 and 5 and we have Permitted Wells #6, 7, and 8 (2001). Registration renewals for Wells #4 and #5 were done in 2008. All permit renewals are coming due and the paperwork has been submitted in the fall of 2015. Water Management Act Permit includes seasonal restrictions to manage the groundwater and surfaces water quantities and qualities from the Hopkinton Reservoir.

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## **Education**

- 1. The Town needs to do a better job of educating residents on the Water Policy and water conservation methods
- ANS: The water policy committee is developing educational materials to supplement those available through the department of public works in order to better educate residents about current water issues.

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#### 2. We need to focus on public education

ANS: Annually, the Town of Ashland hosts Green UP Ashland Day and Ashland Day. The Town provides residents with water conserving methods and handouts for various methods of conservation. The Town and Water Policy Committee members have conducted sessions on water conservation at the middle school for students and at the senior center for senior citizens. It can also publish a schedule for all the sessions held per year such that residents can attend based on their time availability. Other ideas for outreach and education are welcome.

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## **Emergency (or lack thereof)**

- 1. The Town leaders are playing off our fears to push through an MWRA connection by using past situations where we had an emergency connection and assuming that we will need one in the future.
- ANS: The option of connecting to MWRA was not arrived at lightly. Besides evaluating other water sources in the town, we have researched and collected precipitation data and water usage information. We have various graphs and data points plotted and consistently identified that during the months of October through January, when the water has depleted in the reservoir during the summer month usage and there is not enough precipitation that recharges the aquifer, we have entered Stage 1 and Stage 2 levels in the reservoir. Daily reservoir levels have been noted in our website as well at: http://www.ashlandmass.com/167/Water-Conservation-and-Restrictions During Stage 2 when water levels reach so low that the pumps are air-bound, we do not have a choice but to connect with MWRA supply, which has happened once in 2007, and also came very close to in 2012. Most data is available at mwra.ashlandmass.com. This website was set up in fall of 2014 and has always had information publicized.

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- 2. What constitutes an emergency connection to the MWRA and who determines when we open the valve from Southborough?
- ANS: The various stages of conservation are described in the Water / Sewer web page: http://www.ashlandmass.com/167/Water-Conservation-and-Restrictions

During Stage 2 when the water level goes lower to such a point that the well pump heads turn air bound, the pumps will have to be shut down, since they will not be pumping any water. Once the water level reaches Stage 2, DPW works towards getting the MWRA Board of Directors approval, the MWRA Advisory Board Approval, and DEP approval.

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# 3. Who is telling us that we have to have another source of water and what gives them the right to tell us what to do?

ANS: Ashland's population growth and consistent rise in water demand when the sole source of water cannot cater to its needs all year long was a driving force for DPW to start research and look for alternate sources. In addition the state requires the Town to seek alternate sources when it makes emergency connections.

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#### 4. I am not convinced that there is a water shortage and I want proof

ANS: Ashland's water shortage has been recorded from factual data and any specific information that a resident needs related to water metering / rainfall data can be provided. Please contact DPW at <u>dpw@ashlandmass.com</u> for any additional information that is not already provided in the website: <u>http://mwra.ashlandmass.com</u>

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- 5. If we have only taken water from Southborough on one occasion, why is there such a rush for an emergency connection? Where is the emergency?
- ANS: Ashland's water shortage is not a sudden occurrence. Over the past 10-15 years, we have collected data for precipitation and reservoir levels. Historically during the winter and spring, reservoir levels come up due to precipitation. During the summer months, evaporation increases, plants use water and human use increases (lawns, car washing, pool filling etc.) which all contribute to the reservoir dropping In the fall, all these factors often result in the reservoir continuing to drop which is when we usually reach a stage 2 water ban.. In winter, the ground is frozen and any water resulting from snow melt does not get absorbed through to the ground water aquifers. During the months of November to February we consistently have reached a point where the supply is low and demand is consistent, and it is during these months where we had to shut off the wells because the pumps were air -bound and on one occasion we had no choice but to connect to MWRA supply. In another year, we came very close to connecting, when by chance the reservoir levels improved from precipitation and we were able to continue pumping through the reservoir and did not need to make the connection. If nothing is done for a supplemental water source, as the population grows in Ashland, we estimate that emergency connections to MWRA water are going to be consistent on a yearly basis and the emergency connections are expensive.

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# 6. We are not at maximum withdrawal levels and we can do more with conservation, so there is no real crisis.

ANS: Ashland's water withdrawals through the year range from 1 Million Gallons per Day to 2.6 Million Gallons per Day (in summer). These demands have remained for the most part consistent (proportional to population increases). We have used multiple channels to let residents know about conservation at the various stages (like: Ashlandmass.com

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webpage, WACA TV, Electronic Message boards, Signage at Town borders, Reverse 911 / Blackboard connect(phone / email notifications for registered residents). It is the responsibility of the Ashland Water customers to comply with water use restrictions. We have given out citations for any violations to the conservation restrictions and plan to do so over the coming years.

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## Rates

#### 1. The basic water fee is a mixed incentive

ANS: One of the areas the water policy committee is reviewing is the fee structure. Water rates help create incentives for use and should be aligned with the goals of the community. Annually Ashland revises the fee structure based on water treatment and distribution costs (including repairs and resources), state costs and many other water related expenses. Our Water fee structure (FY 15) is as follows:

#### QUARTERLY BILLING

#### Rates per 100 cubic feet

ServiceBase F	<u>ee 1st 999</u>	<u>Next 3</u> ,	,000 <u>Next 5</u> ,	<u>,000</u>	<u>)ver 9,000</u>
Water	\$16.00	\$ 2.96	\$ 3.38	\$ 5.01	\$ 6.21
Sewer	\$16.00	\$11.29	\$12.25	\$13.63	\$16.93
Irrigation	\$16.00	\$ 6.21	\$ 6.21	\$ 6.21	\$ 6.21

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2.

The Town needs to look at a water rate structure that is fair. For example, we need to provide free or affordable access to the minimum amount of water that is essential for living.

ANS: Water treatment and Distribution along with many other costs incurred by the Water enterprise in the Town of Ashland is reflective of the water rate structure. These costs are analyzed on an annual basis before the rate structure is determined. If we come up with a formula for subsidizing water for any demographic, costs will need to be covered by the rest of the residents / water users.

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## **Fluoride**

1. Nobody is talking about fluoride. MWRA adds fluoride to their water and Ashland doesn't.

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ANS: On April 27, 2015, the CDC released a recommendation that water suppliers reduce their fluoride dosage to 0.7 ppm(Parts per Million) According to the CDC, the dose is being lowered because Americans now receive fluoride from a variety of sources, other than just water, and the dental benefits can be achieved with a lower dose in water. MWRA's water supply follows the CDC guidelines. Ashland's Water supply has natural fluoride a sample was tested and the amount was 0.19 ppm (Parts per Million).

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### **Future**

# 1. Resiliency of our water system is important and we need to plan for long term resiliency in the event of a long term drought.

ANS: The water policy committee is looking at water system infrastructure in part to improve resiliency. In addition, the option of local (town wells) and regional (MWRA/ Quabbin) water supplies enhances resiliency. Currently the Hopkinton reservoir is our sole source of water. The historic and forecasted precipitation and water demand data, show that we are actually at a higher risk for a water system that is not resilient. Which is why after considerable research of options water sources, we have arrived at this discussion for the MWRA indirect connection.

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#### **Grey Water**

#### 1.

#### Why can't people use grey water for in ground irrigation systems?

ANS: Although not directly one of the primary charges of the water policy committee, the committee is supportive of the use of grey water for ground irrigation. Including Grey water for relieving water demands from the reservoir is a novel idea. However, this would require complete separation of water. The sewer discharge from each home would need to be divided grey from toilet and showers / sinks. They would need a new pumping system and storage. There is also a concern of foreign chemicals that can be introduced in the grey water. One would need significant funding and to be able to store a large supply of water on a continuous basis for this system to work.

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## **Irrigation**

- 1. The sustainability committee implemented the irrigation system ban as the first phase of a program to reduce outdoor water use.
- ANS: One of the main goals of the ban was to promote more responsible use of a finite resource. The water policy committee looks to build on the work of the sustainability committee.

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# 2. Irrigation system ban has likely reduced public water use but has increased the number of private wells being installed.

ANS: While raising awareness about irrigation and water use, the ban on in-ground irrigation being tied to the municipal system has in a few cases encouraged people to drill wells for irrigation. In the long run this doesn't serve the goals of the ban. Town of Ashland has multiple ground water aquifer zones. In the last 3 years for Ashland we have approved for 11 Private Wells. We currently have 13 private wells that draw from the same aquifer as the Hopkinton Reservoir.

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- 3. We should look at the state recommendations for lawn and landscape when updating the Water Use Regulations (Section 270), especially the recommendations for having a bylaw that regulates the installation and use of private wells, and a bylaw that promotes the use of rainwater for irrigation.
- ANS: The water policy committee is also looking at ways to address those issues. Private wells are regulated by the Board of Health and not the Board of Selectmen acting as water commissioners.

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## **General MWRA Questions/Comments**

- 1. You know the Quabbin Reservoir experienced drought conditions in the 1960s and it could happen again. What if there is a major drought and the MWRA begins to restrict water use?
- ANS: During drought conditions everyone should be restricting water use. Based on current metrics the Town's wells will be restricted long before the Quabbin is restricted.

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- 2. Is the Quabbin a sustainable source of water? What is the future outlook for the availability of water from the Quabbin?
- ANS: Fresh water sources are a concern all around the world and none of them have a guaranteed supply for centuries to come. Quabbin Reservoir also had a drought, but in

# **Responses to Comments**

comparison with many reservoirs the water supply has been pretty consistent and the withdrawals have reduced over the past few years. MWRA's source reservoirs (Both Quabbin and Wachusett) can be counted on to safely provide about 300 Million Gallons per day of water even during periods of extended drought. This is called the "Firm yield". Below is a graph from data collections on the Quabbin Reservoir for withdrawals from the reservoir. For more information visit the water supply and demand from MWRA website: http://www.mwra.state.ma.us/04water/html/wsupdate.htm



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- 3. The debt that MWRA is carrying is concerning. How will that impact us in the future?
- ANS: The MWRA accounts for its debt outlook when setting its rates on an annual basis. More detail on MWRA debt can be found at <u>http://www.mwra.state.ma.us/finance/ratefacts.htm</u>

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- 4. I have heard the MWRA has a tremendous amount of debt; how will this impact the cost of MWRA water in the future?
- ANS: Please see above.

#### 5. What is the price of MWRA water?

ANS: Based on the prices provided in fall of 2014, cost of MWRA water is \$2.70 per hundred cubic feet of water. At the same time, the cost of treating the Hopkinton reservoir water was similar.

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# 6. Once we connect to the MWRA, isn't that going to open Ashland up to all types of development?

ANS: MWRA water is only a supplemental source and the water connection is intended to be made only when Hopkinton reservoir is unable to attend to the water demands. Ashland just like any other town has zoning restrictions and only a certain amount of land is available for development. The open space committee and Planning department would be able to provide more information on percentage of land Ashland has for conservation, open space and wetland where developments are not approved. The rate of development in any town changes depending on various factors including schools, cost of living, and access to highways.

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# 7. If we connect to the MWRA, could the state (DEP or DCR) tell us that we have to go on the MWRA entirely and force us to abandon our wells?

ANS: Town of Ashland applies for water consumption permit renewals on a regular basis to state agencies such as MassDEP and DCR. While our permitted volumes are granted based on forecasted water demands, they are well aware that Ashland's primary source of water is the Hopkinton reservoir and they grant these permits based on availability of the volume of water at that source. They consider various factors including conservation methods we are currently implementing and source protection for the wells.

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- 8. There is a general distrust with the MWRA and that once we are hooked up the conditions of our agreement will change.
- ANS: Town of Ashland has used MWRA via the sewer lines in the town of Framingham for waste water treatment and discharge. MWRA has abided by the conditions of our initial agreement and the rate increases if any had been forecasted at the time of the agreement.

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# 9. What is the quality of MWRA water compared to water withdrawn from Howe Street?

ANS: MWRA treated water samples and Hopkinton reservoir treated water samples are very close in composition. MWRA connection and usage of MWRA water is only supplemental and on an as needed basis. The volume of MWRA water entering the system if any is forecasted to be much smaller. MWRA water has won national awards for its taste.

## **MWRA Connection Questions**

#### 1. Residents are concerned that there is already a warrant article for Fall Town Meeting and that we are marching forward

ANS: MWRA connection and reasons for the connection was brought forward as a warrant article in fall of 2014. Since then, we have worked with state agencies and developed an Environmental Notification form as well as a draft Environmental Impact report to obtain permissions from the various state conservation agencies and MassDEP. Various public meetings have been scheduled to inform residents about the MWRA connection and information was publicized at http:// mwra.ashlandmass.com. The summarization of work towards a potential MWRA connection has been provided to public when asked. A warrant article for fall 2015 was taken off the warrant after resident feedback expressed concerns that not enough information was available.

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- 2. Need to take a holistic approach to our water sources. It sounds as though the approach is the MWRA or nothing
- ANS: MWRA water is only a supplemental source and the water connection is intended to be made only when Hopkinton reservoir is unable to attend to Ashland's water demands after all conservation methods have been implemented. A holistic approach can look at water use, wastewater, and stormwater.

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- 3. If the Town's people agree to connect to the MWRA, what else must be done before we can obtain water from the MWRA?
- ANS: Connection to MWRA water is based on state agency approvals and permits based on various factual data collected. The Town would vote to authorize certain spending related to the connection.

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- 4. Could we chose to get off the MWRA system at some point in the future?
- ANS: The town has its own wells and has no plans to stop using them. It can choose not to use MWRA water any time it wants. It will need to decide whether its own infrastructure is adequate for its needs.

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- 5. How much MWRA water do we plan on using?
- ANS: The long term (20-year) request is for 120 million gallons per year. This is based on a buildout population projection for the Town and current per capita use patterns.

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6. What type of control does MWRA have over our use of water?

ANS: The MWRA has no control over the Town's use of its own water. The upfront license fee represents the fact that if the Town chooses not to use any MWRA water it pays nothing and MWRA can do nothing about it.

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- 7. Once we have a connection to the MWRA system, do we have to use any of their water?
- ANS: No. It is up to the Town. If the Town uses no MWRA water it pays nothing.

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- 8. Who will control the MWRA connection and determines when we draw water from MWRA?
- ANS: The water policy committee is developing guidelines for control over drawing MWRA water.

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- 9. If we connect to MWRA, could the activation of flow be initiated by some type of pressure differential in the distribution system?
- ANS: Yes, currently computer software monitors the water pressure and tank elevations in the system. When it drops more water is called for. This system would not change.

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## **Spring Street**

1.	The pipes are in the ground for Spring Street.		
ANS:	Pipes were installed connecting the well to the rest of the system but the design assumed the water would be treated on site before entering the pipes.		
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2.	No one wanted to discuss the quality of the well		
ANS:	Please see below		
3.	Public deserves an opinion on Spring Street well		
ANS:	Spring Street is a potential opportunity for a water source. It has a number of issues related to its use including lack of access, reservoir drawdown, and potential contamination.		
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4.	Why are we abandoning the idea of Spring Street?		

#### ANS: Please see below

#### 5. What are the issues with Spring Street and could they be dealt with?

ANS: A Gravel packed well and water main were installed in the early 1980's, the supply from the spring street well was not activated mainly due to water contamination. Including a potential for perchlorate treatment needs to be addressed. When the town filed an ENF (Environmental Notification Form) in 2005, DCR (Department of Conservation and Recreation) responded with several issues – Water Quality, No site access, surrounding land is protected under Article 97 Conservation Land. A detailed report for the issues and costs of developing the Spring Street well are detailed in the Haley and Ward report (3rd party Engineering firm). See http://mwra.ashlandmass.com. [Back to Table of Contents]

#### 6. What is the cost of Spring Street vs. MWRA?

ANS: Construction costs projected to 2013 for the development of the spring street well is \$ 3,965,000 (Note that this does not include costs for contamination removal prior to construction) and the construction cost for the MWRA Indirect connection projected to 2013 is \$2.1 Million for Construction and \$1.6 Million for license to connect.

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#### 7. We already spent the money on the Spring Street pipes and should use them.

ANS: The Spring Street pipes connected the well to both Olive Street and Chestnut Street. So although the well itself is not being used the pipes are being used to loop the Town system from Olive to Chestnut.

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- 8. Need to at least consider Spring Street in our holistic approach to water sources and possibly offer the town people a combined Howe St/Spring St/MWRA water source. Not advocating for Spring St, but only noting that it should be in the conversation.
- ANS: Haley and Ward, the Engineering firm, went through the detailed evaluation process of cost analysis and water quality tests of various sites including Spring Street. This is not a viable option for various reasons described.

## Alternative Options

- 1. What are the choices other than the MWRA connection, what is their price tag, and how long would those choices take to bring on-line?
- ANS: Ashland has pursued potential additional sources. Spring street water supply Developed well and utilities adjacent to the Spring street reservoir, Water supply not completed due to various factors – funding, contamination and more recently WRC / DCR Restraints. Cost Projection to 2013 for construction - \$3,965,000

Shore Road Water Supply Reactivation – Ashland maintained a water supply at this site until mid to late 50's, Pump test performed in 2009 and redone again after DCR response. DCR responded and indicated an insignificance would not be granted due to anticipated streamflow impacts during low flow periods. Water samples taken several times during the 15 day pump test show higher Color, Iron and Manganese Levels. Sodium Levels were over the MCL. Presently there are treatment processes that will improve the water quality to meet the Drinking water standards; however the quantities of water treated will be substantial and would require extensive routine maintenance for the treatment facility. Besides Land Acquisition, there are Wetland Impacts as well as Stream flow impacts in this site. Cost Projection to 2013 for construction -\$6,320,000

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### Water Policy and Restrictions

- 1. We need to put harsh growth restrictions in town to limit the impact on our water supply because the community is growing too fast.
- ANS: http://www.bizjournals.com/boston/blog/bbj\_research\_alert/2014/05/the-fastest-growing-towns-and-cities-in.html

Massachusetts population increased by 2% from 2010 to 2013, with most of the growth coming from Middlesex and Suffolk counties. While Towns like Cohasset and Lunenburg had a 10% and 9% increase in population. Williamstown and North Adams have lost some population with a -2% increase (which means 2% of the population left those towns). Ashland shows a population increase of 3%. Which places Ashland right in the mid-range of all towns in Massachusetts. Review the link above for more information. The rate at which a Community grows depends on various factors including schools, facilities, access to highways etc.

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# 2. Why does the level of the Hopkinton Reservoir determine the stage of Ashland's water restrictions?

ANS: Ashland's current singular source of water are the wells adjacent to the Hopkinton Reservoir. We have two water storage facilities and the capacity of these storage facilities are 4.3 Million Gallons and 2.6 Million Gallons. The water treatment plant (WTP) located adjacent to the reservoir uses a 24/7 SCADA system to monitor water delivery to customers and storage facilities. As demand decreases, storage facility levels increase until WTP is not needed. The water demand is satisfied by the storage facilities until the level drops and WTP is required to meet the demand. Fire demand is met both by the storage facilities and the WTP.

## **Responses to Comments**

The Hopkinton Reservoir was built with a spillway which is 298.35 ft. above sea level. The overflow that passes through the spillway feeds into the lower beach area. When permitting the treatment plant DCR wanted to maintain certain reservoir elevations to allow continued beach use for Hopkinton State Park. This is why, the water level in the Hopkinton Reservoir is crucial to determine Ashland's water restrictions.

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# 3. If we are having a water ban, how come we are selling water to Hopkinton? Why don't we save that water for our use?

ANS: Hopkinton Reservoir is for the most part located in Hopkinton and water in the Hopkinton Reservoir is collected from a wide catchment area from both towns but mostly from Hopkinton. When the treatment plant was built on the Ashland border adjacent to the reservoir, per regulations we went through the Inter Municipal agreement (IMA). The Town of Hopkinton paid for portion of the construction costs for the treatment plant and Ashland supplies water to Hopkinton for a price. The IMA is available for view in the http://mwra.ashlandmass.com

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- 4. What are Hopkinton's water restrictions? If we are in a water ban, shouldn't they be too? Why do they get to use all the water?
- ANS: Unlike the Town of Ashland, Town of Hopkinton has multiple water sources / reservoirs used for water demands and the water conservation regulations in their town depend on various factors determined by the DCR / DEP.

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- 5. How come residents are allowed to drill a private well for irrigation and draw water from the same aquifer as the Howe Street wells even when we are in a Stage 2 water ban?
- ANS: Private Wells in the Town of Ashland have to follow the regulations set in the Town Bylaw: <u>http://ecode360.com/13018262</u>. Private wells are not subject to the Town's water bans.

We currently have 13 private wells that draw from the same aquifer as the Hopkinton Reservoir, and there are limits to how much water can be drawn per well as per the Town by-laws.

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6. EMC has groundwater wells and is in the same sub basin as the Howe Street wells. How much water do they use and what gives them the right to use water when Ashland is in a water ban? Why isn't Ashland screaming about this? What the hell?

# **Responses to Comments**

ANS: Private Wells in towns outside of Ashland are restricted by their local town. Each Town follows their own conservation guidelines approved and set by the DCR and Mass DEP. Along with ground water category boundaries, state agencies have vast data collections and research conducted prior to authorizing water conservation stages and water bans in various towns.

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