TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT
ISSUE No. 19 — JUNE 2019

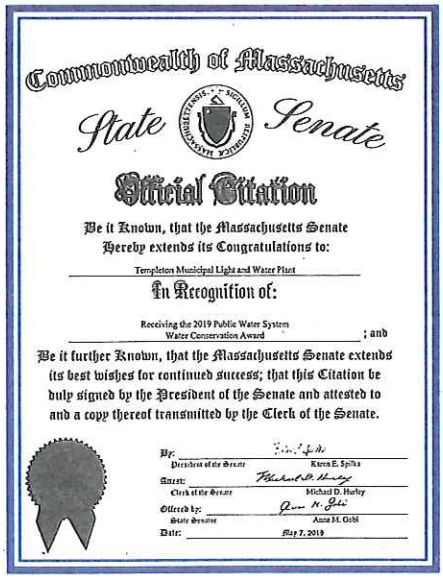
2018 Water Quality Report

We are happy to present our 2018 Water Quality Report to our customers. In accordance with the Safe Drinking Water Act, all water utilities are required to issue a Annual Consumer Confidence Report to promote awareness of the quality of their drinking water.

To ensure we maintain high standards by providing you with high quality tap water, including water quality monitoring, water treatment and distribution system upgrades. Water conservation tips are also promoted to save water.

The Templeton Water Department is pleased to report that your water meets all federal and state requirements.

Templeton Water Department Efforts Recognized


Commonwealth of Massachusetts
State Senate
Official Citation
Be it Known, that the Massachusetts Senate
Hereby extends its Congratulations to:
Templeton Municipal Light and Water Plant
In Recognition of:
Receiving the 2019 Public Water System Water Conservation Award ; and
Be it further Known, that the Massachusetts Senate extends its best wishes for continued success; that this Citation be duly signed by the President of the Senate and attested to and a copy thereof transmitted by the Clerk of the Senate.
By: President of the Senate Karen E. Spilka
Attest: Clerk of the Senate Michael D. Hurley
Offered by: State Senator Anne M. Gobi
Date: May 7, 2019


The Commonwealth of Massachusetts
Department of Environmental Protection
Drinking Water Program
2019
Public Water System Award
is presented to
Templeton Municipal Light and Water Plant
PWS ID #2294000
For Outstanding Performance and Achievement for Water Conservation in 2018.
Yvette dePaola - Program Director
MassDEP Drinking Water Program

"MassDEP realizes that it is no easy task to keep up with the ever-evolving federal and state drinking water regulations. While most systems strive just to comply with the regulations, your system has put forth an extra effort."

❖ ❖ ❖ ❖ ❖

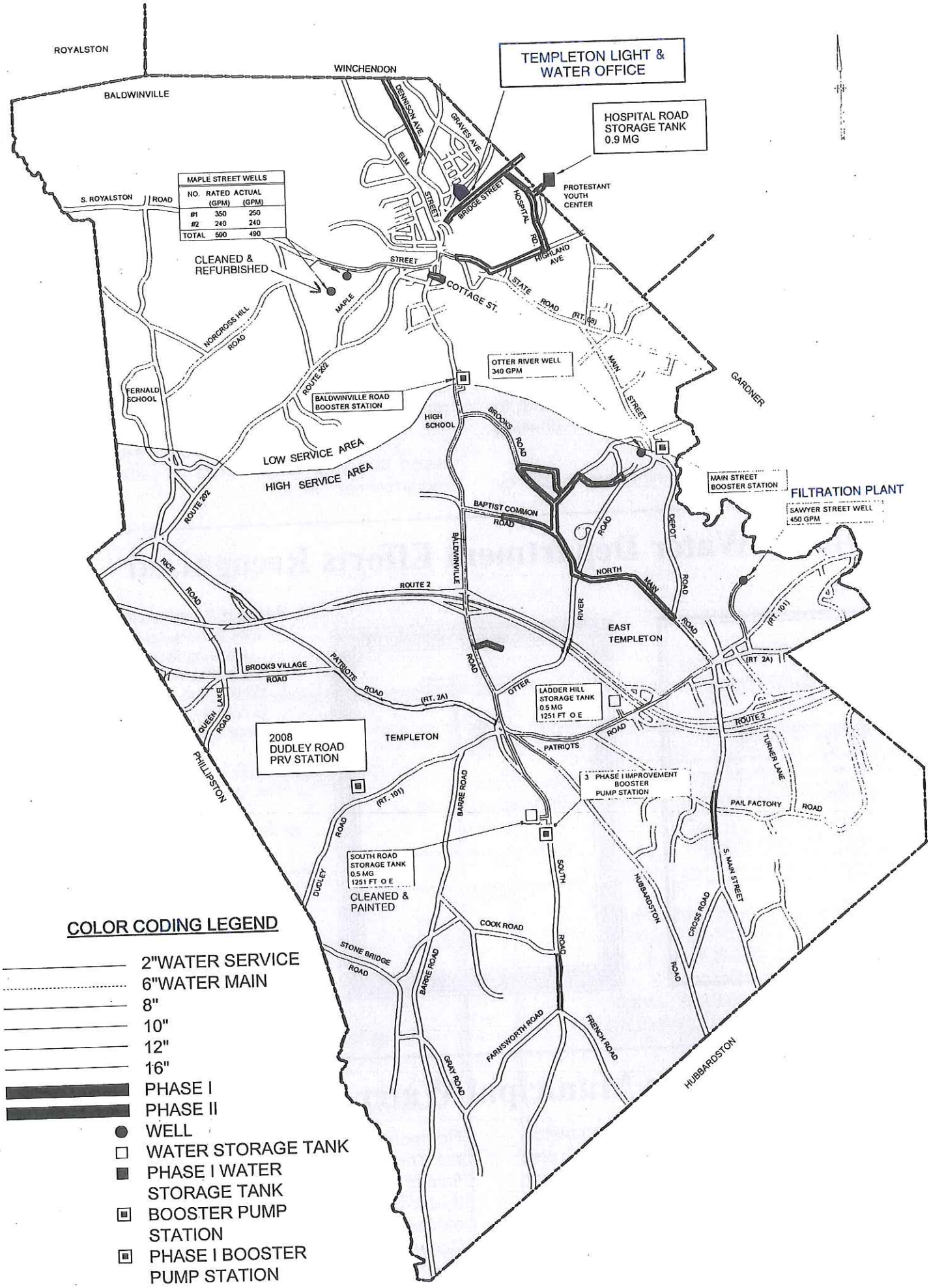
"The Massachusetts Department of Environmental Protection's (MassDEP) Drinking Water Program is pleased to extend its congratulations to the Templeton Municipal Light and Water Plant for its outstanding performance in 2018. Your system is being recognized in the Water Conservation System category of the 2019 Public Water Systems Awards Program."

FY2018 Templeton Municipal Water Plant Report

Herein submitted for inclusion in the Templeton Annual Report for FY2018 are the financial and statistical data for the Templeton Municipal Water Plant.

The Templeton Municipal Water Plant is an enterprise fund formed as a result of the Special Acts of 2000 duly passed by the State House of Representatives, the State Senate, the Governor and the Templeton voters. This new legislation put the financial management and operational oversight of the town's water department directly under the control of the Templeton Municipal Lighting Plant, its Commission and its Manager. The purpose of this was to allow the water department to operate under

(continued on page 3)


ROYALSTON
WINCHENDON
BALDWINVILLE
TEMPLETON LIGHT & WATER OFFICE
HOSPITAL ROAD STORAGE TANK 0.9 MG
PROTESTANT YOUTH CENTER
DENNISON AVE
GRAVES AVE
ELM STREET
BRIDGE STREET
HOSPITAL RD
HIGHLAND AVE
MAPLE STREET WELLS
NO. RATED (GPM) ACTUAL (GPM)
#1 350 250
#2 240 240
TOTAL 590 490
S. ROYALSTON ROAD
CLEANED & REFURBISHED
MAPLE STREET
COTTAGE ST.
STATE ROAD (RT. 68)
NORCROSS HILL ROAD
OTTER RIVER WELL 340 GPM
MAIN STREET
GARDNER
FERNALD SCHOOL
ROUTE 202
BALDWINVILLE ROAD BOOSTER STATION
HIGH SCHOOL
BROOKS ROAD
LOW SERVICE AREA
HIGH SERVICE AREA
MAIN STREET BOOSTER STATION
FILTRATION PLANT
SAWYER STREET WELL 450 GPM
BAPTIST COMMON ROAD
DEPOT ROAD
NORTH MAIN ROAD
RIVER ROAD
BALDWINVILLE ROAD
RICE ROAD
ROUTE 2
EAST TEMPLETON
(RT. 101)
(RT 2A)
BROOKS VILLAGE ROAD
PATRIOTS ROAD
(RT. 2A)
OTTER ROAD
LADDER HILL STORAGE TANK 0.5 MG 1251 FT O.E
QUEEN LAKE ROAD
2008 DUDLEY ROAD PRV STATION
TEMPLETON
PATRIOTS ROAD
ROUTE 2
TURNER LANE
PHILLIPSTON
(RT. 101)
BARRE ROAD
3 PHASE I IMPROVEMENT BOOSTER PUMP STATION
PAIL FACTORY ROAD
DUDLEY ROAD
SOUTH ROAD STORAGE TANK 0.5 MG 1251 FT O.E
CLEANED & PAINTED
SOUTH ROAD
HUBBARDSTON ROAD
CROSS ROAD
S. MAIN STREET
COOK ROAD
STONE BRIDGE ROAD
BARRE ROAD
FARNSWORTH ROAD
FRENCH ROAD
GRAY ROAD
HUBBARDSTON
COLOR CODING LEGEND
2"WATER SERVICE
6"WATER MAIN
8"
10"
12"
16"
PHASE I
PHASE II
WELL
WATER STORAGE TANK
PHASE I WATER STORAGE TANK
BOOSTER PUMP STATION
PHASE I BOOSTER PUMP STATION
TL&W OFFICE

FY2018 Water Plant Report cont'd. from pg. 1

the same Massachusetts General Law, Chapter 164, that the light department does. Further, it allowed the water department to operate solely from revenues from the sale of water to its customers rather than from town funds generated by taxation.

During FY2018 our customers purchased a total of 111,149,064 gallons of water compared to 118,498,519 gallons in FY2017. This 7,349,455-gallon decrease in water usage can be attributed to a net negative value in homes occupied for FY2018 versus FY2017. The local economic growth saw a slight recovery in FY2018 as opposed to FY2017, however it will be some time before Templeton Water recovers back to the level of 140,000,000+gallons of water usage circa 2009.

Templeton Water connected 4 new water services in FY2018 and collected $1,480,190 in water sales revenue and $70,514 in miscellaneous revenue.

Additions and Improvements

➜ The Water Plant made improvements to its water distribution stations in FY2018 amounting to $9,265 for our Maple Street and Willow Street Well Sites, our Baldwinville Road and Depot Road Booster Stations and our Pressure Relief Valve (PRV) Hut on Dudley Road.

➜ The Water Plant made improvements to a portion of its 53 miles of water distribution mains in FY2018 amounting to $8,903.

➜ The Water Department made improvements to its water treatment plant on Sawyer Street in FY2018 amounting to $44,867.

Capital Expenses

➜ In FY2018 the Water Plant installed a new driveway including a turnaround area at the Johnson Avenue Water Storage Tank in East Templeton at a cost of $5,516.

➜ In Fy2018 the Water Plant purchased 150 new water meters for water customers at a cost of $36,798. The majority of the existing water meters had surpassed their industry-accepted life spans of 12-15 years of operation. These new water meters would increase the amount of metered gallons to be billed for by1%-15%.

➜ In FY2018 the Water Plant purchased new green-sand filter media for the Sawyer Street Water Treatment Facility at a cost of $40,950. The previous green-sand filter media had lasted 14 years and had only been expected to last 8-10 years.

For Your Information . . .

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Templeton Light and Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at: *http://.epa.gov/safewater/lead*.

Fluoride Facts —

☺ Over 70 years ago, Grand Rapids, Michigan became the world's first city to adjust the level of fluoride in its water supply (1945).

☺ Earlier studies showed that Community Water Fluoridation (CWF) reduced tooth decay in children by 60% and in adults 35%.

☺ The Centres for Disease Control and Prevention proclaimed water fluoridation as one of the 10 great public health achievements in the 20th Century.

Water Saving Tips —

1. Limit showers to 5 minutes.
2. Run only full loads of laundry.
3. Use your dishwasher instead of sink.
4. Sweep, never hose a driveway.
5. Scrape dinner plates instead of rinsing.

Templeton Water Department
2018 Tables

The following tables provide the most recent water quality results for our water system. Only the detected contaminants are shown.

INORGANIC CONTAMINANTS	Dates Collected	Highest Result or Highest RAA*	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Sources
Nitrate (ppm)	2018	0.277	0 - 1.43	10	10	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Barium (ppm)	2018	0.023	0 - 0.0051	2	2	N	Erosion of natural deposits
Fluoride (ppm)	2018	0.7	0.7 - 1.1	4**		N	Water additive that promotes strong teeth. Fluoride has been added since 1950 to prevent tooth decay.
Hexachloro-cyclopentadien (ppb)	2018	None Detected	- -	50	50	N	Discharge from chemical factories
DISINFECTION CONTAMINANTS							
Haloacepic Acids (HAA5s) (ppb)	2018	4.0	- -	60	- -	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	2018	21	- -	80	- -	N	Byproduct of drinking water chlorination
Chlorine (ppm)	2018	0.59	0 - 0.10	4	4	N	Water additive used to control microbes

* Highest RAA = highest running annual average of four consecutive quarters.
** Fluoride also has a secondary maximum contaminant level (SMCL) of 2 ppm.

Bacteria in 2018	Highest Number Positive Samples in a Month	MCL	MCLG	VIOLATION (Y/N)	Possible Sources
Total Coliform	0	0	0	N	Naturally present in the environment
E. Coli	0	*	0	N	Human and animal fecal waste

* Compliance with E. Coli MCL is determined upon additional repeat testing.

Lead and Copper	Date Collected	90th Percentile	Action Level (AL)	MCLG	# of Sites Sampled	# of Sites above AL	Exceeds AL (Y/N)	Possible Sources
Lead (ppb)	2016 2016	0 2	15	0	20 20	0 0	N N	Corrosion of household plumbing
Copper (ppm)	2016 2016	0.20 0.38	1.3	1.3	20 20	0 0	N N	Corrosion of household plumbing

* US EPA and MassDEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects.
** Sodium-sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the levels of sodium in their drinking water where exposures are being carefully controlled.

IMPORTANT DEFINITIONS

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (ug/l)

90th percentile = Out of every 10 homes sampled, 9 were at or below this level. Compliance for lead and copper is determined by comparing this number to the action level.

Unregulated Contaminants – Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted. For some of these substances, the Massachusetts Office of Research and Standards (ORS) has developed state guidelines or secondary MCLs.

Office of Research and Standards Guidelines (ORSG) – This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Secondary Maximum Contaminant Level (SMCL) – These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCGLs as feasible using the best avaiable treatment technology.

Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

SAFE WATER

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

VULNERABILITY

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Hotline (1-800-426-4791).

SUBSTANCES FOUND IN TAP WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface over the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbiological contaminants such as viruses and bacteria, that may come from septic systems, agriculture and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- Pesticides and herbicides which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes, and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Protecting Templeton's Water Supply –

The SWAP Program

The Source Water Assessment and Protection (SWAP) Program, established under the Federal Safe Water Drinking Act, requires every state to:

- Inventory land uses within the recharge areas of all public water supply sources.
- Assess the susceptibility of drinking water sources to contamination from these land uses.
- Publicize the results to provide support for improved protection.

The Massachusetts Department of Environmental Protection (MassDEP) completed an assessment of Templeton's sources in June 2003 and prepared a report that documents specific threats, such as underground storage tanks, auto repair shops, and machine shops. It also recommends action we can take to protect our water supply. MassDEP assessed our susceptibility as high, based on the presence of at least one high-threat land use in our water supply protection areas.

Where Does My Water Come From?

The Town of Templeton receives its water from four gravel-packed wells:

- Otter River Well
- Birch Hill Well #1
- Birch Hill Well #2
- Sawyer Street Well

These wells supply ground water from an aquifer of high vulnerability because of an absence of barriers, such as clay.

Each well has a Zone I protective radius close to the well and shares a larger Zone II area, which includes all of the land that supplies water to the wells. The Zone II was determined by a scientific study. The wells are treated for corrosion control (to prevent the leaching of lead and copper from pipes) and to remove chlorinated volatile organic com-pounds. The system map can be seen on page 2.

Where can I See the SWAP Report?

The complete SWAP report is available at the Templeton Water Department and at hhtp://www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2294000.pdf. For more information, call the Water Department at 978-939-5323.

Templeton Water Department
86 Bridge Street
P.O. Box 20
Baldwinville, MA 01436-0020

FIRST CLASS
PERMIT NO. 8
BALDWINVILLE, MA
01436
PRE-SORTED

2018 Board of Commissioners

Dana Blais, Chairman
Gregg Edwards, Secretary
Chris Stewart, Member

Staff

John Driscoll, General Manager
Ron Davan, Superintendent
Brigid Lambert, Secretary
Randy Brown, Foreman
Dick Blodgett, Jr., Utility Specialist
Greg Cheney, Utility Specialist
Shane Murphy, Utility Laborer

Monthly Meetings

The Water Commissioners meet on the first Tuesday of each month at 6:00 PM at the Light/Water Department office. Please feel free to participate in these meetings.

Share Your Thoughts

Do you have any questions that you would like the report to answer or on how information is presented? Please let us know:

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86 Bridge Street - P.O. Box 20
Baldwinville, MA 01438-0020

Hours: Mon.-Fri. 7 AM - 4 PM
Telephone 978-939-5323
Fax: 978-939-4309

Nights, Weekends, Holidays
Emergency Call: 978-939-5638

e-mail:
rdavan@templetonlight.com

Website
www.templetonlight.com

Public Water Supply ID:
2294000