



# TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT  
ISSUE No. 20 — JUNE 2020

## 2019 Water Quality Report

We are once again pleased to present our Annual Water Quality Report covering testing performed between January 1 and December 31, 2019.

Over the years we have dedicated ourselves to producing drinking water that meets all state and federal standards. This is accomplished in a manner that protects public health, preserves our environ-

ment, protects of our water source, along with water conservation, and community education while continuing to serve the needs of our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

## FY2019 Templeton Municipal Water Plant Report

Herein submitted for inclusion in the Templeton Annual Report for FY2019 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 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.

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Templeton Water connected 4 new water services in FY2019 and collected \$1,616,690 in water sales revenue and \$99,320 in miscellaneous revenue.

## Additions and Improvements

→ The Water Plant made improvements to its water distribution stations in FY2019 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 FY2019 amounting to \$8,903.

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its water treatment plant on Sawyer Street in FY2019 amounting to \$44,867.

## Capital Expenses

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ROYALSTON

TEMPLETON LIGHT & WATER OFFICE

HOSPITAL ROAD STORAGE TANK 0.9 MG

MAPLE STREET WELLS		
NO.	RATED (GPM)	ACTUAL (GPM)
#1	350	250
#2	240	240
TOTAL	590	490

CLEANED & REFURBISHED

OTTER RIVER WELL 340 GPM

BALDWINVILLE ROAD BOOSTER STATION

MAIN STREET BOOSTER STATION

FILTRATION PLANT

SAWYER STREET WELL 450 GPM

LADDER HILL STORAGE TANK 0.5 MG 1251 FT O E

2008 DUDLEY ROAD PRV STATION

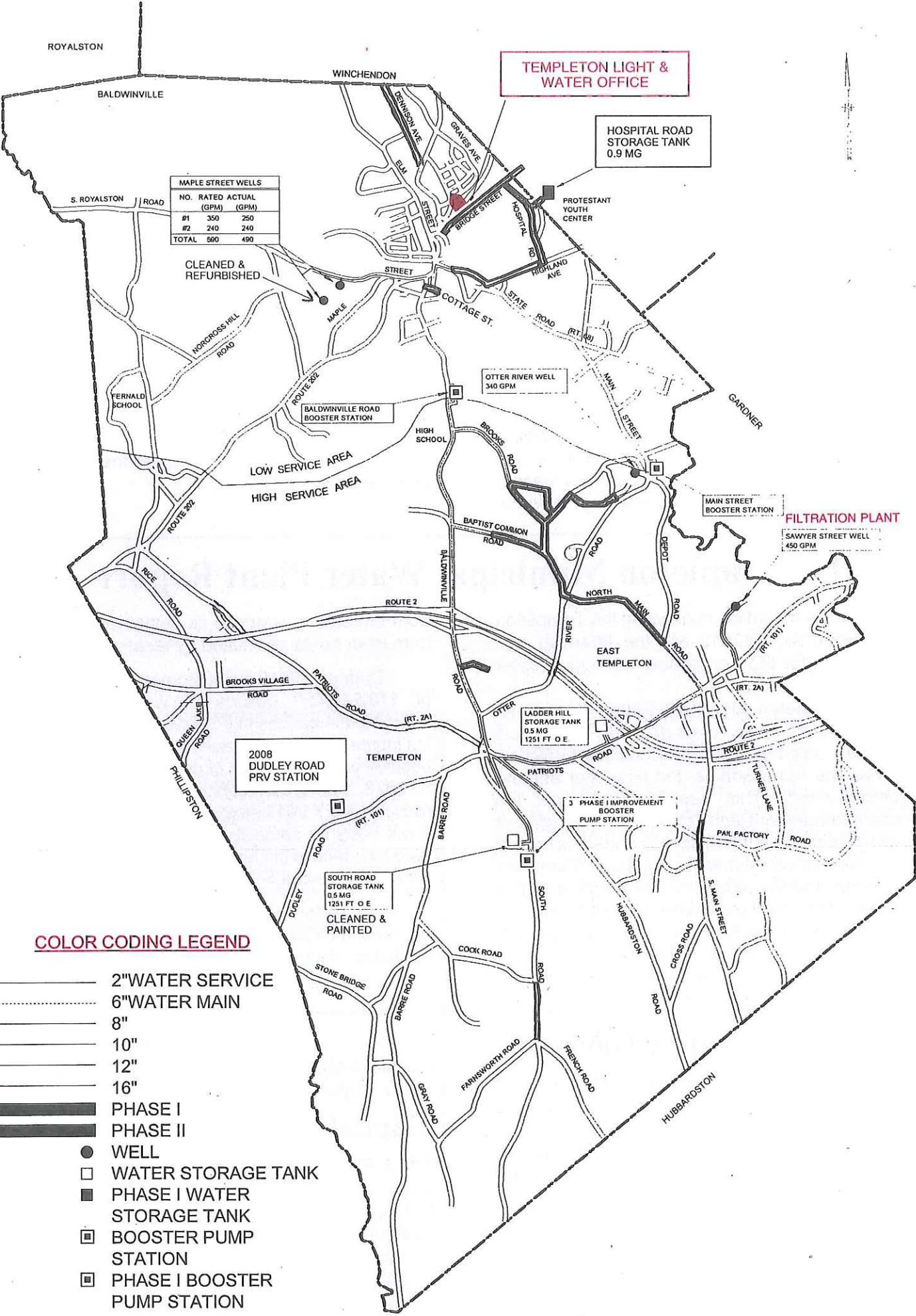
3 PHASE IMPROVEMENT BOOSTER PUMP STATION

SOUTH ROAD STORAGE TANK 0.5 MG 1251 FT O E  
CLEANED & PAINTED

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





## Financials:

Below is a breakdown of the Water Plant's FY2019 water sales summary by customer class:

Account #	Rate Code	Gallons Sold	Revenue	# of Bills
461-01	21 Residential	92,240,070	\$ 1,336,096	8,312
461-02	22 Agricultural	9,286,380	\$ 90,149	20
461-03	23 Commercial	12,470,650	\$ 138,466	384
461-04	24 Municipal	2,088,620	\$ 22,935	54
461-05	25 Industrial	2,165,940	\$ 22,452	33
461-07	27 Other	39,000	\$ 1,535	20
461-08	28 Irrigation	554,790	\$ 5,326	104
<b>Totals</b>		<b>118,845,450</b>	<b>\$1,616,959</b>	<b>8,927</b>

## Hydrant Flushing

Flushing is done to clean out distribution pipelines by removing any impurities or sediment in the pipe. This sediment comprised mainly of iron compounds, does not pose a health risk, but may cause aesthetic concerns such as the taste, odor or color to the water.



## 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>.

## Questions?

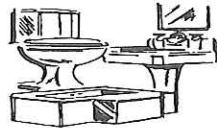
If you have questions, would like additional information or comments about this newsletter feel free to contact us at:

Templeton Light & Water Plant  
86 Bridge Street - P.O. Box 20  
Baldwinville, MA 01438-0020  
978-939-5323

## Tips for Saving Water



✓ **Bathroom Sink:** Don't let the water run while you brush your teeth or shave. Turn the faucet on briefly to rinse. An electric shaver saves the most.



✓ **Bathtub:** Filling the tub uses about 50 gallons of water. Try bathing in just 10 gallons. Plug the tub when you shower; how full does it get?

✓ **Toilet:** Avoid using the toilet for a wastebasket. Every flush you eliminate can save between two and seven gallons of water.



Test your toilet. Add several drops of food coloring to the toilet tank. If it is leaking the coloring will appear in the toilet without flushing.

✓ **Showers and Faucets:** Install low-flow shower heads, faucet aerators or flow restrictors.

✓ **Gardening and Landscaping:** Water in the early morning or evening to avoid excess evaporation. Landscaping and gardens benefit most from slow, thorough, infrequent watering.



Install drip irrigation and automatic timers to eliminate over-soaking. Mow lawn less frequently in dry times. Limit lawn by using bark mulch.



# Templeton Water Department 2019 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)	2019	1.37	0 - 1.43	10	10	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Barium (ppm)	2019	0.0071	0 - 0.0051	2	2	N	Erosion of natural deposits
Fluoride (ppm)	2019	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)	2019	None Detected	--	50	50	N	Discharge from chemical factories
<b>DISINFECTION CONTAMINANTS</b>							
Haloacetic Acids (HAA5s) (ppb)	2019	2.5	--	60	--	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	2019	18.3	--	80	--	N	Byproduct of drinking water chlorination
Chlorine (ppm)	2019	0.62	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	90 <sup>th</sup> Percentile	Action Level (AL)	MCLG	# of Sites Sampled	# of Sites above AL	Exceeds AL (Y/N)	Possible Sources
Lead (ppb)	2019	0.0013	15	0	20	0	N	Corrosion of household plumbing
Copper (ppm)	2019	0.0182	1.3	1.3	20	0	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)

**90<sup>th</sup> 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 available 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 parti-

cularly 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 compounds. 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 <http://www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2294000.pdf>. For more information, call the Water Department at 978-939-5323.





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