



TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT
ISSUE No. 18 — JUNE 2018

2017 Water Quality Report

We are pleased to present our 2017 Water Quality Report. The report presents important information about our operations, the quality of water and useful water conservation tips on water use.

The Water Department is governed by 3 elected water commissioners and operated by a

General Manager and 6 employees. We are here to serve you 24 hours a day - 365 days a year. The Water Department continues to improve ways to better serve our customers.

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

FY17 Templeton Municipal Water Plant Report

Herein submitted for inclusion in the Templeton Annual Report for FY17 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.

During FY17 our customers purchased a total of 118,498,519 gallons of water compared to 114,200,590 gallons in FY16. This 4,297,929 increase in water usage can be attributed to a net positive value in homes occupied for FY17 versus FY16, however it will likely be some time before Templeton Water recovers back to the level of 140,000,000+ gallons of water usage circa FY09.

Templeton Water connected 4 new water

services in FY17 and collected \$1,480,190 in water sales revenue and \$70,000 in miscellaneous revenue.

Additions and Improvements

→ The Water Plant made improvements to its water distribution stations in FY17 amounting to \$48,410 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 FY17 amounting to \$15,912.

→ The Water Plant made improvements to its water storage tanks in FY17 amounting to \$515. It also constructed a new 500,000-gallon concrete water storage tank on Johnson Avenue ("Ladder Hill") amounting to \$1,239,000. This new tank replaces an older tank constructed circa 1960. Project funding was secured through a new 20-year General Obligation Bond for \$950,000 at 2.25% PLUS a \$289,000 Grant made possible by the United States Department of Agriculture Office of Rural Development.

→ The Water Plant made improvements to its water treatment plant on Sawyer Street in FY17 amounting to \$22,259.

ROYALSTON

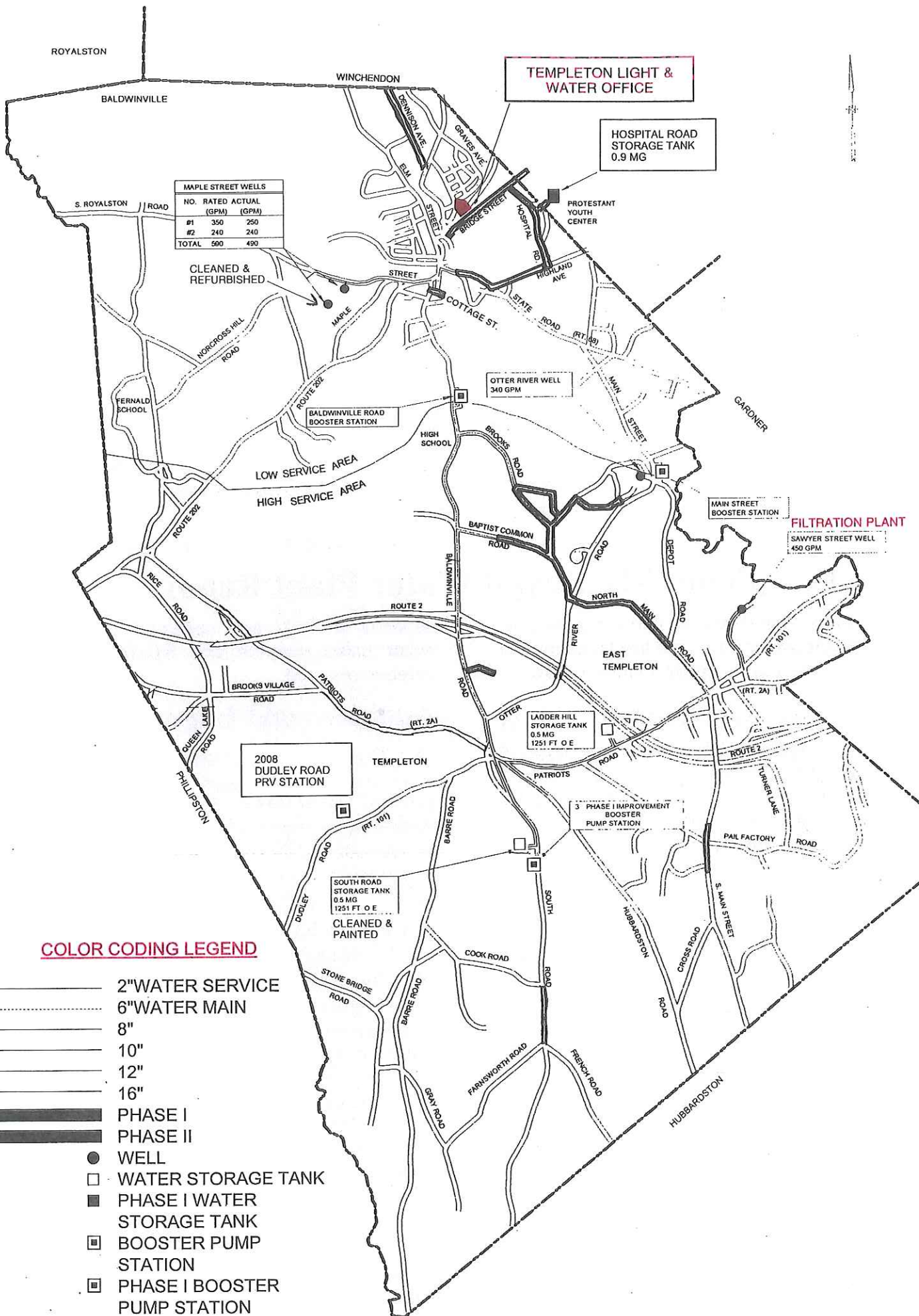
WINCHENDON

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



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
- ◆ TI & W OFFICE

Capital Expenses

➡ In FY 17 the Water Plant installed new SCADA equipment at the TMWP Operations Facility on Bridge Street at a cost of \$8,000 and new SCADA equipment at the TMWP Johnson Avenue Water Storage Tank at a cost of \$3,682.

➡ In FY17 the Water Plant purchased 104 new water meters for water customers at a cost of \$32,106. The majority of the existing water meters have surpassed their industry-accepted life spans of 12-15 years of operation. The new water meters would increase the number of metered gallons to be billed by 1%-2%.

➡ In FY17 the Water Plant purchased a 2017 Chevrolet Silverado Pickup Truck at a cost of \$32,076 designated for use by the Water Superintendent. The newer 2017 truck would replace an older 2006 Ford F-150 Pickup Truck that would have needed extensive front-end repairs.

➡ In FY17 the Water Plant re-developed the Willow Street Well Site ("Otter River") at a cost of \$16,245, the most extensive work ever done here since 2001. The original well was put into service circa 1950 and provided water with much lower iron/manganese content than Maple Street or Sawyer Street did. This redevelopment project will buy the Water plant another 15-20 years of reliable municipal water pumped from the Willow Street site.

➡ In FY17 the Water Plant installed new URD cable from the Willow Street Well Site to the Depot Road Booster Station at a cost of \$762. This cable had failed due to improper weather-proofing of an electric pedestal when the cable was first put underground due to the railroad bridge reconstruction. New URD cable typically has a useful life of 30-40 years depending on frost and ground-water composition.

Water Saving Tips —

Ways to Save Water Indoors

- ✓ Check all faucets, pipes & toilets for leaks.
- ✓ Install water saving showerheads and ultra-low-flush toilets.
- ✓ Take shorter showers.
- ✓ Never use your toilet as a wastebasket.
- ✓ Fully load dishwasher.
- ✓ Wash full loads of clothes.
- ✓ Turn off water while brushing your teeth or shaving.
- ✓ Rinse dishes in a full sink or pan of water.

Ways to Save Water Outdoors

- ✓ Don't over-water landscaping.
- ✓ Water your lawn or garden early in the morning or late in the evening.
- ✓ Don't water on cool, rainy or windy days.
- ✓ Equip all hoses with shut-off nozzles.
- ✓ Use drip irrigation systems.
- ✓ Use pool cover to avoid evaporation.
- ✓ Plant drought-tolerant or low-water-use plants and grasses.
- ✓ Use a bucket instead of a hose to wash your car.



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>.

Templeton Water Department

2017 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)	2017	0.277	0 - 1.71	10	10	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Barium (ppm)	2015	0.023	0 - 0.023	2	2	N	Erosion of natural deposits
Fluoride (ppm)	2017	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)	2017	None Detected	--	50	50	N	Discharge from chemical factories
DISINFECTION CONTAMINANTS							
Haloacetic Acids (HAA5s) (ppb)	2017	1.5	--	60	--	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	2017	10.9	--	80	--	N	Byproduct of drinking water chlorination
Chlorine (ppm)	2017	0.44	0 - 0.75	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 2015	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 th 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 MCLGs 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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FIRST CLASS
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BALDWINVILLE, MA
01436
PRE-SORTED



2017 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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Public Water Supply ID:
2294000