

TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT ISSUE No. 22 — JUNE 2022

2021 Water Quality Report

As a service to our customers, the Templeton Light & Water Plant is pleased to share this water quality report with you. This report covers from January to December 2021. This is designed to inform you about your drinking water quality along with the services you receive each day.

There is a continuous commitment on our part to provide the highest quality water service that meets and exceeds all State and Federal drinking water standards. We are always available should you ever have any questions about your water.

FY2021 Templeton Municipal Water Plant Report

Herein submitted for inclusion in the Templeton Annual Report for FY2021 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 FY2021 our customers purchased a total of 117,349,590 gallons of water compared to 111,948,770 gallons in FY2020. The Water Plant's highest gallon usage by our customers was 144,143,850 gallons in FY 2008.
- → Templeton Water connected 10 new water services in FY2021 and collected \$1,575,549 in water sales revenue and \$93,936 in miscellaneous revenue for total revenues of \$1,669,515.

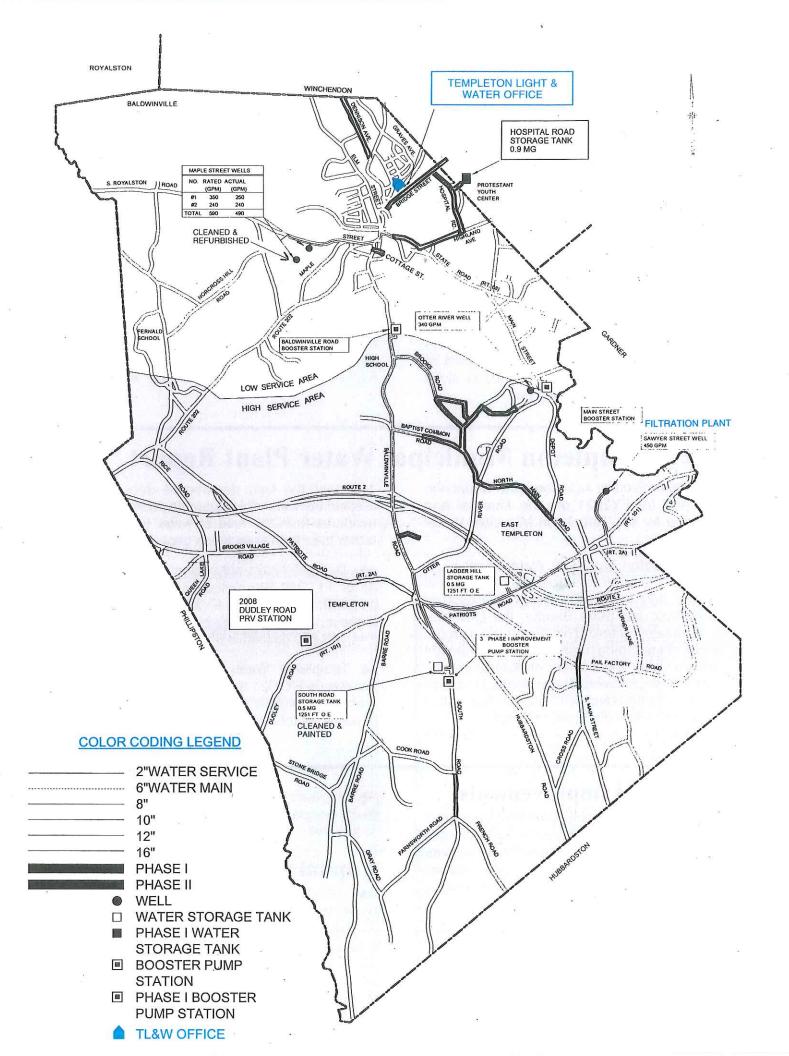
Additions and Improvements

- → The Water Plant made improvements to its water distribution stations in FY2021 amounting to \$12,654 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 FY2021 amounting to \$11,228.
- → The Water Plant made improvements to its water storage tanks in FY2021 amounting to \$4,109.

→ The Water Plant made improvements to its water treatment plant on Sawyer Street in 2021 amounting to \$32,084.

Capital Expenses

In FY2021 the Water Plant purchased 313 new water meters for water customers at a cost of \$75,485. The majority of the existing water meters had surpassed their industry-accepted life span of 12-15 years of operation. These new water meters are accurate enough that it would increase the amount of metered gallons to be billed for by 1%-15% and have 20-year useful life spans.



Financials:

Below is a breakdown of the Water Plant's FY2021 water sales summary by customer class:

Account #	Rate Code	Gallons Sold	Revenue	# of Bills	
461-01	21 Residential	101,031,630	\$ 1,390,702	8,470	
461-02	22 Agricultural	1,062,690	\$ 11,193	20	
461-03	23 Commercial	11,885,990	\$ 135,200	416	
461-04	24 Municipal	1,306,560	\$ 15,879	65	
461-05	25 Industrial	1,211,320	\$ 13,226	33	
461-07	27 Other	24,000	\$ 1,406	20	
461-08	28 Irrigation	827,400	\$ 7,943	108	
Totals		117,349,590	\$1,575,549	9,132	

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.



Water Saving 7ips



GARDENING, LANDSCAPING & CAR



- * 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 less frequently in dry times.
- Limit lawn area by using bark mulch.
- Do not water on cool, rainy or windy days.
- Equip all hoses with shutoff nozzles.
- Use a bucket instead of a hose to wash your car.

IN THE HOME



- * Showers and Faucets: Install low-flow shower heads, faucet aerators or flow restrictors.
- * 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?
- * Avoid using your toilet for a wastebasket. Every flush you eliminate can save between two and seven gallons of water.

 * Test your toilet: Add several
 - Test your toilet: Add several drops of food coloring to the toilet tank. If it is leaking the coloring will appear in the toilet.
- * 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.



Templeton Water Department 2021 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)	2020	1.04	0 - 1.43	10	10	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Barium (ppm)	2020	0.0281	0 - 0.0051	2	2	N	Erosion of natural deposits
Fluoride (ppm)	. 2021	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)	2021	N.D.	2.	50	₁ 50	N	Discharge from chemical factories
DISINFECTION CONTAMINANTS		- LEI 10"	i eu				
Haloacepic Acids (HAA5s) (ppb)	2021	2.21	/	60		N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	2021	11.6		80		N	Byproduct of drinking water chlorination
Chlorine (ppm)	2020	0.65	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 2020	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)	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.

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 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.

^{**} 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.

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:

- <u>Microbiological</u> 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.

Templeton Water Assessment & Protection —

The SWAP Program

The Department of Environmental Protection completed a Source Water Assessment and Protection (SWAP) report of the Templeton Water Department in June, 2003. A SWAP report is a planning tool to support local and state efforts to improve supply protection by identifying land uses within water supply protection areas that may be potential sources of contamination. The report helps focus protection efforts on appropriate best management practices a susceptibility ranking of high was assigned to the Templeton department using information collected during the assessment. A copy of the report is available upon request from the Templeton Water Department office or online at:

www.mass.gov/dep/water/drinking/swap/2294000.pdf

Where Does My Water Come From?

Templeton's water comes from four gravelpacked wells:

- Otter River Well
- Maple Street Wells #1 & #2
- Sawyer Street Well

These wells supply ground water from an aquifier of high vulnerability because of an absence of barriers such as clay. Each well has a Zone 1 protective radius close to the well and shares a large Zone 2 area, which includes the land that supplies water to the wells. The Zone 2 was determined by a scientific study. The system map can be seen on page 2.

Cross Connections —

A cross connection between a drinking water pipe and a non-potable source. Fluctuation in water pressure can cause water to be back siphoned backwards through pipes and hoses in your home. Hoses are often connected to swimming pools, laundry sinks, Jacuzzis, and lawn chemical sprayers. Water can flow backwards into your home bringing contaminants or poisons with it. To prevent this every hose connection faucet at your home should have a device called **HOSE Bibb VACUUM Breaker**. These are available at your local hardware and plumbing supply stores. As required by Massachusetts Drinking Water Regulations, 310 CMR 22.22 [3] [b], the Templeton Water Department has an approved Cross Connection program. This means that all businesses that are connected to drinking water in the town of Templeton are surveyed by a certified backflow tester on an annual basis.

Templeton Water Department

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



2021 Board of Commissioners

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

Staff

John Driscoll, General Manager Ron Davan, Superintendent Brigid Lambert, Secretary Randy Brown, Foreman Dick Blodgett, Jr., Utility Specialist Greg Cheney, Utility Specialist Scott Schwinger, 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:

Templeton Light & Water Plant 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

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Public Water Supply ID: # 2294000