



# TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT  
ISSUE No. 14 — JUNE 2014

## 2012-2013 Water Quality Report

The Templeton Municipal Light & Water Department is committed to providing our customers with high quality drinking water that meets or surpasses State and Federal standards for quality and safety. The report is being sent to inform our customers of the results of water sampling completed in 2012 and 2013, as well as information regarding the operation of the water Department. We would like the residents of Templeton to feel confident that their drinking water complies with all required contaminant level monitoring. The Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MassDEP) have sections that are worded by them and must be included in this

report. Much of the information must pass from year to year, so you may notice a lot of repetition. Do not hesitate to call if you have any questions, or concerns.

### Purpose of the combined 2012-2013 Water Quality Report —

The Templeton Water Department was issued a Notice of Non-Compliance for the 2012 Water Quality Report in accordance to Mass 310 CMR 22.16A. The 2012 corrections were made and are reflected in the 2012-2013 report. The Templeton Water Department was in full compliance with all State and Federal drinking water requirements in 2012 and 2013.

## FY13 Templeton Municipal Water Plant Report

Herein submitted for inclusion in the Templeton Annual Report for FY13 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 Light Plant, its Commission and its Manager. The purpose of this was to allow the water department to operate under the same Chapter of Massachusetts General Law, Chapter 164, that the light department does. Further, it allowed the water department to operate solely from the revenues from the sale of water to its customers rather from the town funds granted by taxation.

During FY13 our customers purchased a total of 127,496,740 gallons of water compared to

123,895,730 gallons in FY12. This 3,601,010 increase in water usage can be attributed to a net positive value in homes occupied for FY13 versus FY12. The local economic growth was still basically stagnant in FY13 like in FY12 and it will be likely be some time before Templeton Water recovers back to the level of 147,953,220 gallons of water usage in FY08.

Templeton Water connected 11 new water services in FY13 and collected \$1,200,835 in water revenue and \$75,723 in miscellaneous revenue.

### Additions and Improvements

In FY13 the Water Plant maintained a constant presence when necessary in the Back Bay area for the construction associated with Phase V of the Community Development Block Grant (CDBG) Project focused on Fisher Street in Baldwinville. A total of \$30,000 in cash contribution and in-kind services was given by the Water Plant towards this project. In exchange for the funds donated, Templeton

(continued on page 3)

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

PROTESTANT YOUTH CENTER

S. ROYALSTON ROAD

BALDWINVILLE

FERNALD SCHOOL

NORCROSS HILL ROAD

BALDWINVILLE ROAD BOOSTER STATION

OTTER RIVER WELL 340 GPM

LOW SERVICE AREA  
HIGH SERVICE AREA

ROUTE 202

HIGH SCHOOL

BAPTIST COMMON ROAD

MAIN STREET BOOSTER STATION

FILTRATION PLANT

SAWYER STREET WELL 450 GPM

ROUTE 202

ROUTE 2

EAST TEMPLETON

ROUTE 202

2008 DUDLEY ROAD PRV STATION

LADDER HILL STORAGE TANK 0.5 MG 1251 FT. O.E.

3. PHASE I IMPROVEMENT BOOSTER PUMP STATION

ROUTE 2

TEMPLETON

PATRIOTS ROAD

ROUTE 2

BROOKS VILLAGE ROAD

TEMPLETON

TEMPLETON

OTTER RIVER

ROUTE 2

PATRIOTS ROAD

TEMPLETON

OTTER RIVER

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OTTER RIVER

ROUTE 2

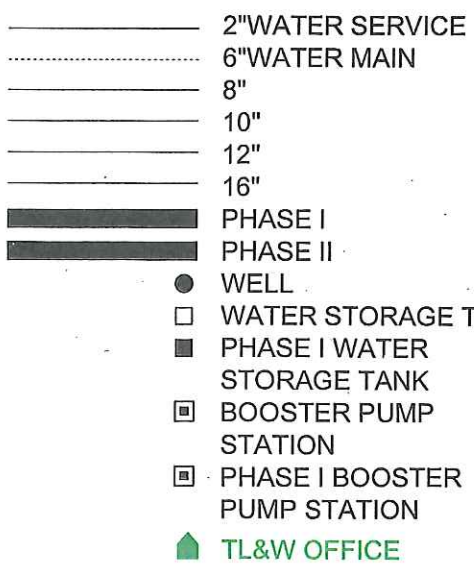
PATRIOTS ROAD

TEMPLETON

OTTER RIVER

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



# Templeton Water Department

## 2012 - 2013 CCR 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)	2012 2013	1.48 1.21	0 - 1.48 0 - 1.21	10	10	N N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Barium (ppm)	2011	0.027	0 - 0.027	2	2	N	Erosion of natural deposits
Fluoride (ppm)	2012 2013	1.2 1.1	0.7 - 1.2 0.7 - 1.1	4**	4	N N	Water additive that promotes strong teeth. Fluoride has been added since 1950 to prevent tooth decay.
<b>SYNTHETIC ORGANIC CONTAMINANTS</b>							
Hexachloro-cyclopentadien (ppb)	2013	0.1	--	50	50	N	Discharge from chemical factories
<b>DISINFECTION CONTAMINANTS</b>							
Haloacetic Acids (HAA5s) (ppb)	2011	2	--	60	--	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	2011	6	--	80	--	N	Byproduct of drinking water chlorination
Chlorine (ppm)	2012 2013	0.3 0.3	0 - 0.73 0 - 0.75	4	4	N 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 2013	Highest Number Positive Samples in a Month	MCL	MCLG	VIOLATION (Y/N)	Possible Sources
Total Coliform	1	1	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)	2010	0	15	0	20	0	N	Corrosion of household plumbing
	2012	2			20	0	N	
Copper (ppm)	2010	0.20	1.3	1.3	20	0	N	Corrosion of household plumbing
	2012	0.38			20	0	N	

Unregulated and Secondary Contaminants	Date Collected	Range Detected	Average	SMCL	ORSG	Possible Sources
Manganese (ppb)	2012	0 - 82	23	50	300*	Natural sources
	2013	0 - 210	133			
Iron (ppb)	2012	0 - 340	98	300	--	Natural sources; aging pipes
	2013	0 - 2900	294			
Sulfate (ppm)	2011	13 - 64	11	250	--	Natural sources
Sodium (ppm)	2011	20 - 29	24.5	--	20**	Natural sources; runoff from road salt

\* 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 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.

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## Additions and Improvements (from page 1)

Water saved \$162,300 in new water mains, hydrants, gate boxes & other associated equipment. The water customers on Fisher Street got the benefit of a new 8" water main with increased flow capability.

The Water Plant installed perimeter fencing around the Johnson Avenue (Ladder Hill) Water Storage Tank in East Templeton. This was done at a cost of \$8,576 and was a requirement by the Massachusetts Department of Environmental Protection (MassDEP), enforceable by the issuance of Notices of Non-Compliance (NONs).

The Water Plant made improvements to its distribution stations and distribution and treatment

plant amounting to \$47,968 for FY13, including maintenance at the Maple Street Wells, the Otter River Well, the Sawyer Street Well and Treatment Facility and its booster stations at Baldwinville Road, Depot Road and South Road.

The Water Plant made improvements to its water distribution mains amounting to \$40,833 for FY13. Unfortunately, approximately \$30,000 of the \$40,833 was due to a single water main break in Baldwinville and a loss of treated water of approximately 1,000,000 gallons. Templeton Water greatly appreciates the assistance that the Templeton Highway, Templeton Sewer, Templeton Police, Templeton Light, and the Community Emergency Response Team gave in this effort.

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## What is a Cross-Connection?

A cross connection occurs whenever a drinking water source comes in contact with dangerous contaminants. The outside water spigot and garden hose is one of the most common sources of cross connections at homes. Garden hoses are often left lying on the ground and may come in contact with contaminants such as fertilizers, cesspools, or garden chemicals. Under certain conditions, these contaminants can be drawn back into the drinking water line. A hose bibb vacuum breaker is a device that can be attached to sill cocks and in turn connected to a hose. It consists of a spring-loaded check valve that seals against an atmospheric outlet when the water supply pressure is turned on. When the water pressure is turned off, the device vents to the atmosphere, protecting the drinking water from being contaminated. We urge customers to consider using one of these devices on their garden hoses. For more information on how to purchase a hose bibb vacuum breaker, call our office at 978-939-5323, ext. 3.

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## Contaminants in Bottled Water and Tap Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 (1-800-426-4791) or MWRA. In order to ensure that tap water is safe to drink, the Massachusetts DEP and EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



### 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>.

## 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 particu-

larly 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.

## Templeton Water Department

86 Bridge Street

P.O. Box 20

Baldwinville, MA 01436-0020

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



### 2012

#### 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

#### 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



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Telephone 978-939-5323  
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Nights, Weekends, Holidays  
Emergency Call: 978-939-5638



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[rdavan@templetonlight.com](mailto:rdavan@templetonlight.com)



Website  
[www.templetonlight.com](http://www.templetonlight.com)



Public Water Supply ID:  
# 2294000