



TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT
ISSUE No. 13 — JULY 2013

2012 Annual Drinking Water Quality Report –

The Templeton Municipal Light & Water Plant is pleased to present the 2012 Water Quality Report to our customers.

We are proud to report that the Templeton water Department meets or exceeds all federal (EPA) drinking water requirements.

In accordance with the Safe Drinking Water Act, all water utilities are required to issue an Annual Consumer Confidence Report (CCR) to promote customer awareness of the quality of their drinking water. To ensure that we maintain high standards, the Templeton Water Department takes many steps to provide you with high quality tap water including water quality monitoring, water treatment and distribution system upgrades.

During FY12 our customers purchased a total of 123,895,730 gallons of water compared to 136,109,510 gallons in FY11. This 12,213,780 decrease in water usage could be attributed to both the several non-occupied residences and businesses in town which were formerly consuming water on a quarterly basis. The local economic growth was still basically stagnant in FY12 like in FY11 and it will 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 3 new water services in FY12 and did collect \$1,103,313 in sales revenue.

Additions and Improvements

The Water Plant maintained a constant presence when necessary in the Back Bay area for the construction associated with Phase IV of

the Community Development Block Grant (CDBG) Project. A total of \$63,500 in cash contribution and in-kind services was given by the Water Plant towards this worthwhile project. In exchange for the funds donated, Templeton Water received \$140,625 in new water mains, hydrants, gate boxes and other associated equipment. The water customers on Cherry Street, Columbus Avenue, Mason Street and Summer Street got the benefit of a new 8" water main with increased flow capability.

In FY12 the Water Plant transferred its telephone service on its existing 13 lines utilized for communications for the Water SCADA System from Verizon to Earthlink. These lines all go from the office at 86 Bridge Street in Baldwinville to the Water Plant's multiple water booster stations, water storage tanks and well pumping sites. The Water Plant realized an annual savings of \$2,490 due to this change in its telephone service provider.

The Templeton Water Department collected more than 300 samples and tested for over 100 potential contaminants. We are proud to report that other than a minor occurrence of a non-quality data for July, 2012, your water consistently meets all State (DEP) and Federal (EPA) drinking water requirements. We are committed to providing you with information because informed customers are our best allies.

Capital Expenses

The Water Plant acquired 36 new revenue meters in FY12 at a cost of \$7,770 to continue its water meter calibration and replacement program begun in 2000. At the Otter River Plant the Finished water pump was overhauled at a cost of \$4,450.

A new 6' barbed-wire perimeter fence was installed at the South Road Booster Station & Water Storage Tank at a cost of \$9,539. The

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ROYALSTON

BALDWINVILLE

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

WORCROSS HILL ROAD

FERNALD SCHOOL

LOW SERVICE AREA
HIGH SERVICE AREA

OTTER RIVER WELL
340 GPM

BALDWINVILLE ROAD BOOSTER STATION

HIGH SCHOOL

GARDNER

FILTRATION PLANT

SAWYER STREET WELL
450 GPM

MAIN STREET BOOSTER STATION

EAST TEMPLETON

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

2008 DUDLEY ROAD PRV STATION

TEMPLETON

3 PHASE I 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

Tata & Howard, Inc.
Westborough, Massachusetts
Date: February 2001 Scale: None

2012 WATER QUALITY TESTING RESULTS

The water quality information presented in the tables below are from the most recent round of testing done in accordance with the Safe Drinking Water Act regulations. All data shown was collected during the last calendar year unless otherwise noted in the tables.

	Date Collected	90th Percentile	Action Level	MCLG	# of sites sampled	# of sites above AL	Violation (Y/N)	Possible Sources
Lead (ppb)	7/7/10	0.006	15	0	20	0	NO	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm)	9/22/10	0.42	1.3	1.3	20	0	NO	Corrosion of household plumbing systems; erosion of natural deposits.

* Lead and copper compliance is based on the 90th percentile value, which is the highest level found in 9 out of every 10 homes sampled.

Inorganic Contaminants	Date Collected	Highest Level Detected	Range Detected	Highest Source Average	MCL	MCLG	Violation (Y/N)	Possible Sources
Nitrate (ppm)	9/4/12	1.23	0.26 - 1.6	0.41	10	10	NO	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Barium (ppm)	4/18/12	0.019	0 - 0.032	----	2	2	NO	Erosion of natural deposits.
Fluoride (ppm)	12/17/12	1.2	0.7 - 1.2	1.0	4	4	NO	Water additive which promotes strong teeth. Fluoride was added in 1950 to prevent tooth decay/ cavities.
Volatile Organic Contaminants								
Tetrachloroethylene/PCE (ppb)	4/18/12	----	0 - 0.61	None Detected	5	0	NO	Discharge from factories and dry cleaners.

Unregulated Contaminants	Date Collected	Range Detected	Average Detected	SMCL	ORSG	Possible Source
Sulfate (ppm)	4/18/12	13 - 64	11.0	250	----	Natural Sources
Sodium (ppm)*	4/18/12	14 - 23	28	----	20	Runoff from road salt; natural sources

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.

Treatment for Templeton's Water

WELL LOCATION	TREATMENT	CHLORINATION (for Disinfection)	FLUORIDATION (Tooth Decay Protection)	POTASSIUM HYDROXIDE (pH Adjustment for Corrosion Control)	POTASSIUM PERMANGANATE (for Manganese Removal)
MAPLE STREET WELLS	NONE	NO	YES	YES	NO
OTTER RIVER WELL	AERATION (For VOC Removal)	YES	YES	YES	NO
SAWYER STREET WELL	GREEN SAND FILTER (Iron & Manganese Removal)	YES	YES	YES	YES

IMPORTANT DEFINITIONS

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

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

Unregulated Contaminants – Unregulated contaminants are those for which 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.

Office of Research and Standards Guideline (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 (MCLG) – 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 (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

90th Percentile – The concentration of a substance that falls at the top ninety percent of all values for that substance.

Contamination from Cross-Connections

Cross-connections that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkling systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chem-

ical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continually jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connection are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum prevention.

For more information, visit the Web site of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.

Capital Expenses

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Ladder Hill Tank also had a 6' barbed-wire perimeter fence installed at a cost of \$8,574. This was done in order to comply with the Massachusetts Department of Environmental Protection's regulations on security at designated public water supply areas.

Two new netbook computers were purchased at a cost of \$736 to be kept in each of the two Water Plant vehicles. All of the water distribution system's gate boxes and tie cards have been scanned electronically and saved onto these computers to increase operations efficiency for the Water Plant personnel. This new scanned system replaced the antiquated paper gate box cards and tie cards that used to occupy several small file boxes within the utility trucks.

The Water Commission and General Manager thanks all of the Water Plant's employees for their continued dedication and hard work in FY12.

How You Can Save Water



Water conservation saves you money and makes an important contribution to a better future. Here's how to get started:

- **Stop leaks.** Check appliances and outdoor systems such as sprinklers for leaks. Get to know your water meter—it provides important information about consumption and leaks. Common leaks waste 10% of the water used in many homes.
 - **Replace old toilets.** Toilet flushing is the top water user in the home. If you haven't replaced your toilets in 10 years or more, you'll benefit from the new high-efficiency models.
 - **Buy an efficient clothes washer.** Washers are the second-largest water user in the home. New "Energy Star" certified models may use 50% less water and energy per load.
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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 Water 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 of 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 (DEP) 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. DEP 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 are located in 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 DEP's Central Regional Office in Worcester. 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 01436-0020



Hours: Mon.-Fri. 7 AM - 4 PM

Telephone: 978-939-5323

Fax: 978-939-4309



Nights, Weekends, Holidays

Call: 978-939-5638



e-mail:

rdavan@templetonlight.com



Public Water Supply ID:

2294000