

TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT ISSUE No. 12 — JULY 2012

2011 Annual Drinking Water Quality Report-

The Templeton Municipal Light & Water Plant is pleased to present the 2011 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 FY11 our customers purchased a total of 136,109,510 gallons of water compared to 131,122,810 gallons in FY10. This 4,986,700 increase in water usage could be attributed to the re-occupation of several of the residences in town which were formerly bank-owned and consequently vacant. The local economy was still basically stagnant in growth like the previous fiscal year 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 5 new water services in FY11 and did collect \$1,201,733 in sales revenue.

Progress—Phase 4

The FY11 Back Bay Phase IV Project was awarded to Boucher Construction. The Grant was \$899,562 for work to be done on Cherry St., Colombus Ave., Mason St. and Summer St. Ext. The work will consist of new water lines, new drainage, new sidewalks and new asphalt. The budget also includes \$104,690 to be used for rehabilitation work on 5 housing units.

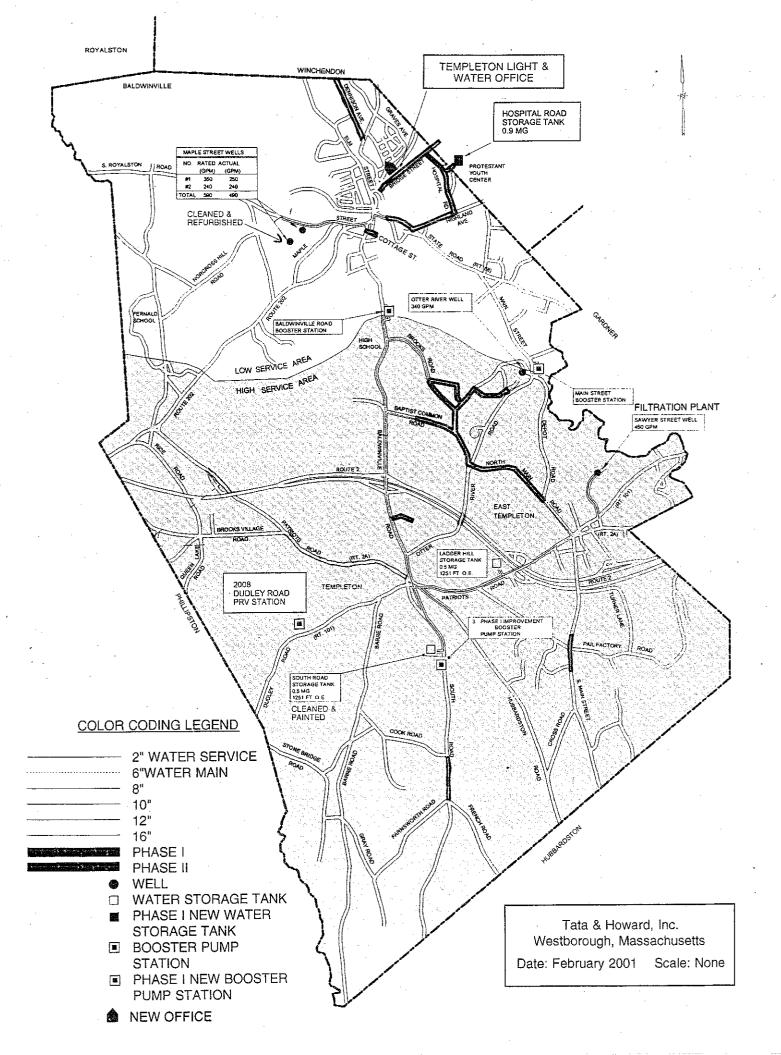
Since the FY06 Grant Award we estimate rehabilitation of 35 housing units of moderate-to-low income in Baldwinville & Templeton with \$580,000 in grant funding and approximately \$65,000 in owner contributions.

In FY12 the State recently awarded Templeton \$958,000 to go towards the Back Bay Phase V Project. This will consist only of work to be performed on Fisher St. for new water lines, new drainage, new asphalt and a new sidewalk on the first block. Construction shall commence in either late fall or early spring. Templeton Water and Templeton Highway shall also contribute cash and Chapter 90 funds respectively as they have in the past.

Templeton shall receive approximately 70% of the grant funds.

Additions and Improvements

The Water Plant installed a 2,640-watt heat storage unit at the Maple Street Control Hut for the purpose of reducing the electrical costs to heat the building in the winter months. This work was done for a cost of \$3,254. To date Templeton Water has enjoyed a savings in electrical costs of \$2,582 and the installation costs have already been covered by the savings.



2011 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)	4/12/11	1.23	0.26 - 1.6	1.2	10	10	NO	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Barium (ppm)	4/12/11	0.019	0 - 0.032		2	2	NO ·	Erosion of natural deposits.
Fluoride (ppm)	12/26/11	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		<u> </u>						
Tetrachioroethylene/PCE (ppb)	4/12/11		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)	4/12/11	13 - 64	14.0	250		Natural Sources	
Sodium (ppm)*	4/12/11	14 - 23	25		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 Disintection)	FLUORIDATION (Tooth Decay Protection)	POTASSIUM HYDROXIDE (pH Adjustment for Corrosion Control)	POTASSIUM PERMANGANATE (for Manganese Remoyal)
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. Crossconnection 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 crossconnection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical 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.

Water Facts



Do you know how much water a family of four uses every day in the United States? Not 50 gallons, not 100 gallons, but 400 gallons! You could take up to 10 baths with that much water — but who would want to do that? Fortunately, there are many things we can do to save. Taking a shower uses much less water than filling a bathtub. A shower only uses 10 to 25 gallons, while a bath takes up to 70 gallons! If you do take a bath, be sure to plug the drain right away and adjust the temperature as you fill the tub. To save even more water, keep your shower under 5 minutes long — try timing yourself with a clock next time!

Fluoridation Facts

U.S. Healthy People 2020 Objectives

✓ Eighty percent (80%) of the population on public water will receive optimally fluoridated water.

-In 2012, 70% of Massachusetts residents receive the health and economic benefits of community water fluoridation.

-140 Massachusetts communities, serving more than 4 million people, are fluoridating their public water supplies.

-276,607,387 people in the U.S. are receiving fluoridated water.

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:

- <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 storm-

water 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.

•<u>Radioactive</u> 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.

2011

Board of Commissioners

Dana Blais, Chairman Gregg Edwards, Secretary Julie Farrell, 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



Templeton 250.com



The Town of Templeton celebrates its 250th this year. Join the celebration!



Templeton Water Department

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