TEMPLETON WATER REPORT

A NEWSLETTER FROM THE TEMPLETON WATER DEPARTMENT
ISSUE No. 17 — JUNE 2017

2016 Water Quality Report

Each year at this time our customers are mailed a Water Quality Report. Summarizing information about your drinking water, which includes information on source water, the distribution system, drinking water contaminants and our compliance with drinking water regulations. These components all play a critical role in protecting public health.

FY16 Templeton Municipal Water Plant Report

Herein submitted for inclusion in the Templeton Annual Report for FY16 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 FY16 our customers purchased a total of 114,200,590 gallons of water compared to 115,811,630 gallons in FY15. This 1,611,040 decrease in water usage can be attributed to a net negative value in homes occupied for FY16 versus FY15. The local economic growth was still basically stagnant in FY16 like in FY15 and it will likely some time before Templeton Water recovers back to the level of 147,953,220 gallons of water usage in FY08.

Templeton Water connected 4 new water services in FY16 and collected $1,413,579 in water sales revenue and $66,732 in miscellaneous revenue.

Additions and Improvements

The Water Plant made improvements to its water distribution stations in FY16 amounting to $6,681 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 FY16 amounting to $46,720.

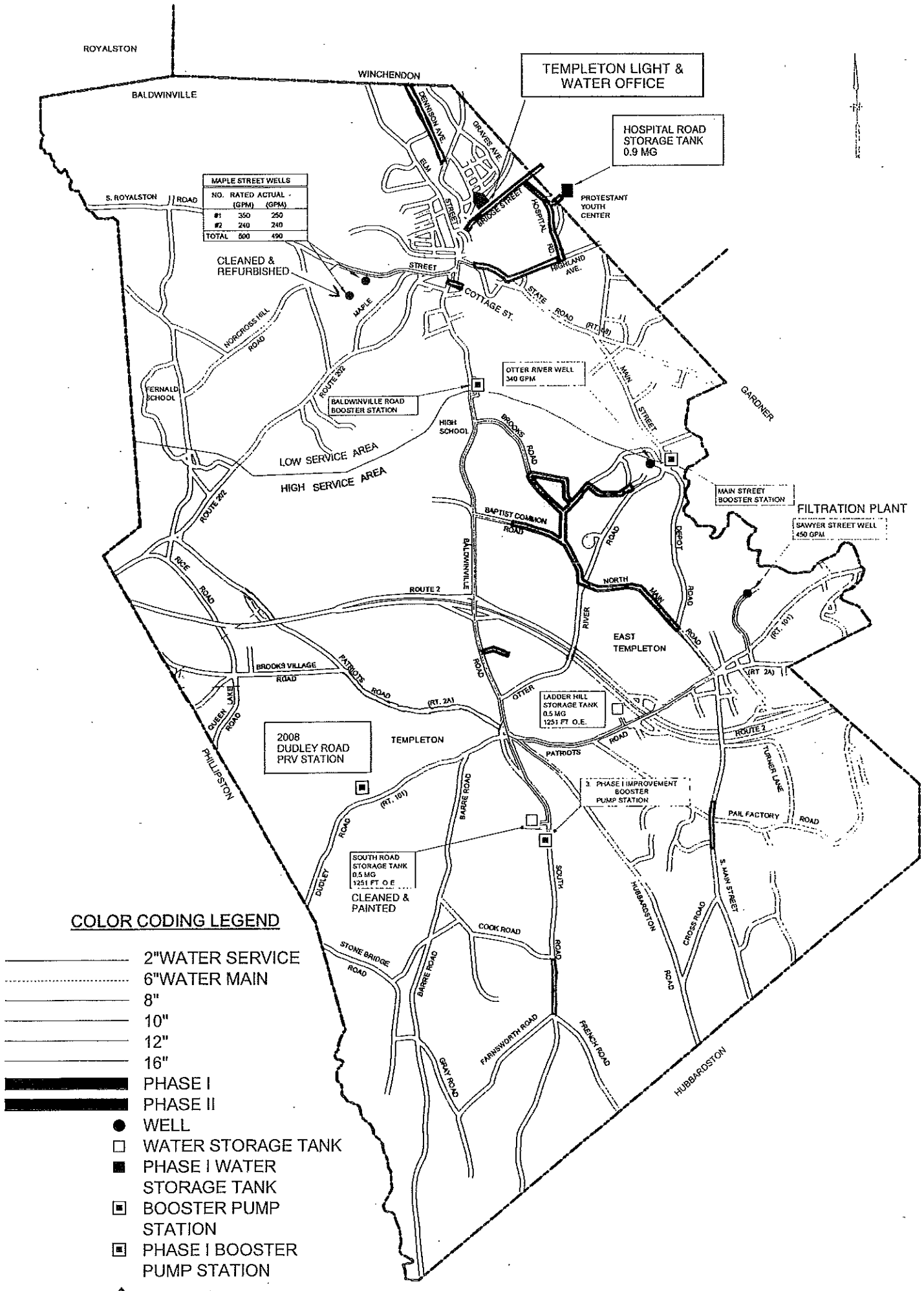
The Water Plant made improvements to its water treatment plant on Sawyer Street in FY16 amounting to $44,877.

Capital Expenses

In July 2015 the Water Plant installed a new SCADA System at the TMWP Operations facility on Bridge Street at a cost of $14,728. The existing system was 13 years old and was beginning to run into license renewal and software upgrade issues.

In July 2015 the Water Plant purchased 111 new water meters for residential water customers at a cost of $24,947. The majority of the existing water meters had surpassed their industry-accepted life spans of 12-15 years of operation. These new water meters would increase the amount of metered gallons to be billed

Capital Expenses continued on pg. 3


ROYALSTON
WINCHENDON
BALDWINVILLE
TEMPLETON LIGHT & WATER OFFICE
HOSPITAL ROAD STORAGE TANK 0.9 MG
DENNISON AVE.
GRAVES AVE.
ELM STREET
BRIDGE STREET
HOSPITAL RD.
HIGHLAND AVE.
PROTESTANT YOUTH CENTER
MAPLE STREET WELLS
NO. RATED (GPM) ACTUAL (GPM)
#1 350 250
#2 240 240
TOTAL 590 490
S. ROYALSTON ROAD
CLEANED & REFURBISHED
MAPLE STREET
COTTAGE ST.
STATE ROAD (RT. 68)
NORCROSS HILL ROAD
FERNALD SCHOOL
ROUTE 202
OTTER RIVER WELL 340 GPM
BALDWINVILLE ROAD BOOSTER STATION
HIGH SCHOOL
MAIN STREET
GARDNER
BROOKS ROAD
LOW SERVICE AREA
HIGH SERVICE AREA
MAIN STREET BOOSTER STATION
FILTRATION PLANT
SAWYER STREET WELL 450 GPM
BAPTIST COMMON ROAD
DEPOT ROAD
BALDWINVILLE ROAD
RICE ROAD
ROUTE 2
NORTH MAIN ROAD
OTTER RIVER
EAST TEMPLETON
(RT. 101)
(RT. 2A)
BROOKS VILLAGE ROAD
PATRIOTS ROAD
QUEEN LAKE ROAD
LADDER HILL STORAGE TANK 0.5 MG 1251 FT O.E.
2008 DUDLEY ROAD PRV STATION
TEMPLETON
PHILLIPSTON
3. PHASE I IMPROVEMENT BOOSTER PUMP STATION
TURNER LANE
PAIL FACTORY ROAD
SOUTH ROAD STORAGE TANK 0.5 MG 1251 FT. O.E.
CLEANED & PAINTED
DUDLEY ROAD
BARRE ROAD
SOUTH ROAD
HUBBARDSTON ROAD
CROSS ROAD
S. MAIN STREET
COOK ROAD
STONE BRIDGE ROAD
FARNSWORTH ROAD
FRENCH ROAD
GRAY ROAD
HUBBARDSTON
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
2016 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)	2016	1.4	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)	2016	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)	2016	None Detected	--	50	50	N	Discharge from chemical factories
DISINFECTION CONTAMINANTS							
Haloacepic Acids (HAA5s) (ppb)	2016	3.1	--	60	--	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	2016	2.7	--	80	--	N	Byproduct of drinking water chlorination
Chlorine (ppm)	2016	0.3	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	90th 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 eperiencing 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 MCGLs as feasible using the best avaiable 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.

Capital Expenses (from page 1)

for by 1%-2%. The Water Department additionally purchased 21 new water meters for other water customers at a cost of $5,484 throughout the year to account for water meters that failed during FY16.

In October 2015 the Water Plant purchased 2 tablets from Nokia at a cost of $1,000 for the Commissioners and the General Manager. These units will allow for remote access to email and to the internet and in the future to the TMLWP Office restricted Wi-Fi so that the Commissioners and the General Manager can access documents relevant to monthly meetings. These tablets will greatly reduce the amount of paper preparation for the meetings and will make record-keeping easier for the General Manager.

In November 2015 the Water Plant purchased a new water pump at a cost of $2,068 designed specifically for pumping out large water-flooded holes due to a water break. This new pump had more HP than the existing one utilized by the water operations crews. The existing water pump came with the old water department before their operations were taken over by the light & water commissioners in 2001.

In January 2016 the Water Plant purchased a new road saw at a cost of $2,200 that will be used to cut away sections of town roads when repairs to a broken water service need to be made.

In February 2016 the Water Plant installed a new SCADA System at the TMWP Water Treatment Plant on Sawyer Street at a cost of $9,885. The existing was 10 years old and was beginning to run into license renewal and software upgrade issues.

Thank you!

The Water Commission and General Manager thanks all of the Water Plant's employees for their continued dedication and hard work in FY16.

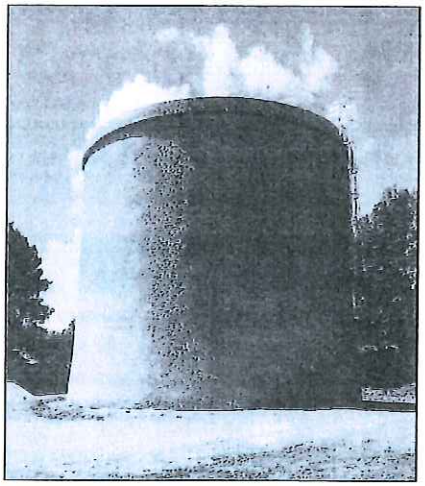
Violations

In 2016 our system failed to conduct an assessment of our facility during the month of August 2016.

As a result, we were required by The Revised Total Coliform Rule to conduct an assessment within 30 days. However, we failed to complete the assessment in the required time frame. Therefore, we have violated a requirement of The Revised Total Coliform Rule. The assessment was completed in October 2016.

One Haloacetic Acid sample was due to be collected in August, 2016.The sample was not collected in the required time frame. Therefore this resulted in a violation from the MassDEP. The sample was collected in October 2016. We are required to report such violations to you.

A New Tank at Ladder Hill



This new concrete water tank replaces an old steel tank that had served the town for 65 years.

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/safew ater/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 particularly 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 hhtp://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
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2016 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