

WATER COMMISSIONER'S AND SUPERINTENDENT'S  
REPORT

To the Residents of the Leicester Water Supply District:

The Commissioners and Superintendent respectfully submit the One Hundred and Twenty Seventh Annual Report for the year ending Dec. 31, 2014.

In October of 2014, Commissioner Frank W. Lyon resigned his seat on the Board of Water Commissioners. We would like to thank Mr. Lyon for his service.

*WATER DEPARTMENT*

Water quality coliform samples were taken each month according to the Department of Environmental Protection's Schedule at 5 locations, 124 Pine Street wastewater treatment building, 9 Water Street, 10 Market Street, 180 Paxton Street (the water tanks) and the Mount Pleasant (Route 9) Booster Station. In addition to the 5 routine distribution samples, each well (5) were sampled each month.

A 1 count of coliform bacteria, which is an indicator bacteria, was found in the 124 Pine Street WWTP (RS 001); a 2 count of coliform bacteria was found at Well #5 Finish (PT 06G); a 1 count of coliform bacteria was found at Well #2 RAW (RW 02G); a 2 count of coliform bacteria was found at Well #5 RAW (RW 06G) sample in November 2014. Required follow-up testing came back clean. Repeat samples were taken along with additional samples above and below the sample sites resulted in a zero presence and no E coli bacteria. No notification or Public Notice was required.

Due to these repeated coliform samples, the District has continued to chlorinate the complete system year round. We maintain a residual at the far reaches of our distribution system between 0.10 and 0.20. DEP would like us to have a minimum residual of 2.0 in our system, however, taste and odor complaints begin to abound when we have disinfected to the 2.0 residual. Chlorine also creates Haloacetic Acids (HAA's) and Trihalomethanes (THMM's) within our distribution system. Balancing these two requirements is very challenging.

The District has been required to perform annual Perchlorate sampling on all of our wells in the District. Perchlorates are substances that have been found in the drinking water supplies that come from explosive powders such as fireworks, gun powders or blasting projects. All of our results were below the MCL's.

Volatile Organic Compound samples which are monitored yearly for petroleum produces which may be introduced to the ground water from leaking gas and oil tanks were taken at the #1, #2, #3, Jim Dandy and Rawson Street wells during the 2<sup>nd</sup> quarter. All the samples taken during this period were found to have no detections of VOC's.

Nitrates sample were also taken to insure there was no presence or indication of sewerage from septic systems in the area of the well fields. The wells currently have no issues and sampling will continue annually to monitor these water sources.

Wells #1 and Jim Dandy in Paxton have consistently not shown any Arsenic or Radionuclides during the quarterly sampling and have not had any accidents for the new DEP limits of 10 parts per billion.

Arsenic and Uranium is naturally occurring from the erosion of natural deposits in the rock structures of New England. Sampling at the #2 and #3 wells in Paxton and the #5 well in Leicester continues each quarter for arsenic. The treatment system that was built for #2 and #3 wells in Paxton went on line in October 2008 continues to meet the Arsenic MCL (Maximum Contaminant Limits) established by the EPA Safe Drink Water Standards.

Each of the wells has two vessels (Skid) which allows one of the vessels to be taken off line for cleaning, repair or regeneration of the treatment media without having to take the well off line while maintenance is being performed.

Arsenic removal is accomplished by passing water through an iron-oxide impregnated resin. This Arsenic attaches to this resin. To clean it, removal from the vessels is done by vacuuming the resin into large totes. These 35 cubic foot totes are transported to a facility in Philadelphia, PA that gives the resin an acid bath to re-generate it. Normally, we will lose approximately 10% of material in the re-generation process. The cost of replacement material is in excess of \$415 per cubic foot. Each vessel (2 in each train), hold approximately 30 cubic feet of material.

Future capital projects for the water system include the re-establishment of the Whittemore Street Well with an Arsenic and uranium treatment system; a centralized Water treatment facility at the Water towers; upgrading of the Pierce Spring cistern in Paxton; re-painting of the water tanks; completion of originally designed components at our existing water treatment plants that were not installed; and, replacement of old water lines.

The Hersey radio read meters have continued to perform poorly. Typical failure rates of meters is less than 1% per year. We have continually had failure rates of between 4 to 6 percent. We currently have a pilot program on-going with Badger E-Series, Ultrasonic Meters. These are read through a cellular connection. The software will allow us to have a customer portal that will allow customers to monitor their own usage. The Commissioners have also discussed going to monthly billing as well.

In July 2014, the Fifteenth Consumer Confidence reports were made available to the District which included information for the previous year 2012

Each year the Consumer Confidence reports are made available to the residents of the District by June 30 and include the information about water quality of each source, information about progress the District is making in protecting the sources and pertinent information about treatment along with general district business.

The District employs four fully licensed water treatment and distribution personnel.

We continue to collaborate with the Town of Leicester on water issues as they relate to economic development opportunities.

#### *SEWER DEPARTMENT*

In September 2010, the LWSD was issued a new, 5-year renewal of their National Pollution Discharge Elimination System (NPDES) permit. Some of the major changes in this permit include a decrease in our discharge limits for Total Phosphorous, Total Recoverable Copper, Aluminum and Ammonia-Nitrogen. We must also report quarterly for Total Kjeldahl Nitrogen, Total Nitrate and Total Nitrite. In our previous permit we were required to perform quarterly toxicity testing on our effluent. This has been reduced to semi-annual testing.

The monthly test results of the daily laboratory analysis have been forwarded to the Department of Environmental Protection (DEP) and the Environmental Protection Agency (EPA) as required. In addition quarterly sampling was conducted to determine the Toxicological for Acute and Chronic species survival of the treated effluent from the WWTP. There were no exceptions during 2013.

The District currently operates eight (8) Wastewater Pump Stations (WWPS) for the LWSD and three (3) WWPS Pump Stations for the Hillcrest Sewer District. All together at the end of 2013 the District operations

include 11 Waste Water Pump Stations, 5 Drinking Water Pump Stations and 3 Drinking Water Booster Stations in addition to the WWTP located on Pine Street.

The District is required to report annually on Infiltration and Inflow (I/I) within our collection system. Areas have been identified for upgrades to include replacement of old clay pipes; lining of clay pipes; replacement of deficient manholes; composite lining of deficient manholes; and, installation of water-tight manhole covers.

The Board of Commissioners set aside funds to look at the overall health of the wastewater treatment plant. This study was completed in November 2011 and will be used to upgrade the plant going forward. Regulatory requirements, fatigue and breakdowns at the plant predicated this study and future upgrades and maintenance to the plant.

The District moved forward on the design of a new headworks facility. The design is approximately 75% complete. The design and construction have been placed on hold due to issues on the water side of our system.

The headworks screens out rags and paper through a smaller (3/8") screen. Currently the headworks have a (3/4") screen. A solids washer is proposed to wash the rags and paper materials to remove organic matter to be recycled back as food into the wastewater process. Everything else is compacted down to be placed into the solid waste container. A new grit removal system will remove inorganic matter. Currently, all of these materials are being passed through the whole plant. Construction of the new headworks will allow us to process wastewater more efficiently and slow down the wear and tear on downstream components.

Future projects include the installation of additional aeration tanks; replacement of mechanical aeration equipment with more energy efficient bubble aeration; replacement and upgrading of obsolete electrical components; sludge pump replacement; emergency generation upgrades; upgrading of sludge de-watering systems; and, upgrade of the chlorine contact chamber. These upgrades will allow us to assist the Town of Leicester in economic development areas.

The Commissioners once again caution the residence of the District about sump pumps, roof drains, removing cleanout covers to allow surface water to enter the sanitary sewer or any other means of allowing rain or surface water to be discharged to the sanitary sewer system.

District Rules and Regulations read as follows:

Article 4 Section 6 Specific Prohibitions:

The following discharges are specifically prohibited:

- A. Groundwater, storm water and surface waters, including but not limited to, roof and surface runoff, and subsurface drainage.
- B. No water from pools, reservoirs, or cellars shall be drained into any sanitary sewer either by gravity or pump.

Should your residence be found in violation through random inspections and smoke testing, the offender will be given 30 days to correct the violation and will be fined or service discontinued according to the penalty section of the Rules and Regulations.

Copies of the Rules and Regulations are available at the office or can be found on the Districts Web Site at LWSD.Net along with Notices, Applications and other District information.

The District employs three fully licensed wastewater operators. We have a fourth staff person that is pursuing their wastewater licensure.

We continue to collaborate with the Town of Leicester on wastewater issues as they relate to economic development opportunities.

**Minutes of the 127th Annual Meeting  
Leicester Water Supply District  
April 29, 2014**

In accordance with the warrant legally served and posted, the legal voters of the Leicester Water Supply District Meeting Hall, 124 Pine Street, in the Town of Leicester on Tuesday April 29, 2014 at seven (7:00 pm) in the evening, to act on the following Articles, viz::

Meeting has been postponed until May 27, 2014, due to lack of quorum.

Respectfully submitted  
Nancy Almeida  
District Clerk  
April 29, 2014

**Minutes of the 127th Annual Meeting  
Leicester Water Supply District  
May 27, 2014**

In accordance with the warrant legally served and posted, the legal voters of the Leicester Water Supply District Meeting Hall, 124 Pine Street, in the Town of Leicester on Tuesday May 27, 2014 at seven (7:00 pm) in the evening, to act on the following Articles, viz::

J. Donald Lennerton, Jr. advises Frank Lyon has elected not to moderate this annual meeting therefore Sandra Wilson will moderate the meeting.

The appointed Moderator called the meeting to order at 7:00 P.M.

Robert Wilson makes a motion that all voters have a copy of the warrant at hand prior to the reading. J. Donald Lennerton, Jr. seconded. All in favor.

**ARTICLE 1:** J. Donald Lennerton, Jr. moves that we dispense with the reading of the officers reports as copies of the 126<sup>th</sup> Annual Reports of the District Officers be accepted with the exception of any typographical errors. Robert Wilson seconded. All in favor.

**ARTICLE 2:** Margaret Wilson nominated Robert Wilson as water commissioner for a term of three years. J. Donald Lennerton, Jr. makes a motion to accept the nomination of Robert F. Wilson as Water Commissioner for a term of three years. All in favor.

**ARTICLE 3:** J. Donald Lennerton, Jr. makes a motion that the District vote to pay the District Officers for the fiscal year beginning July 1, 2014.

Commissioner Chairman.....	\$2,029.00
2 other Commissioners.....	\$3,520.00
Moderator.....	\$ 137.50
Clerk.....	\$ 302.50
<b>TOTAL</b>	<b>\$5,989.00</b>

A second was made by Frank Lyon seconded. All in favor.

**ARTICLE 4:** Robert Wilson moves that the District vote to raise and appropriate the following sums of money to defray the expenses of the District for the fiscal year July 1, 2014.

Water & Sewer maintenance..... \$795,547.90  
Transfer from Water & Sewer Rate Relief..... \$ 97,607.00  
TOTAL.....\$893,154.90

To transfer from the  
Waite Street, Massasoit, Rural, Chapel Sewer Lateral Account  
To Maturing Debt (Principal)..... \$ 30,834.00  
To Interest on Debt (Interest)..... \$ 25,282.86  
TOTAL..... \$ 56,116.86

To transfer from the  
Route 9 West Sewer Lateral Account  
To Maturing Debt (Principal)..... \$ 84,678.00  
To Interest on Debt (Interest)..... \$ 66,365.93  
TOTAL..... \$151,043.93

The motion was seconded and voted. None opposed.

**ARTICLE 5:** J. Donald Lennerton, Jr. moves that the District vote to authorize the Treasurer with the approval of the Commissioners to borrow in anticipation of the revenue for the fiscal year beginning July 1, 2015, in accordance with Mass. General Laws, Chapter 44, Section 4 and Acts in amendment thereon, and including in additional thereto, Chapter 849 of the Acts of 1969, as amended, by issuing a note or notes payable within one year and renew any note or notes as may be given for a period of less than one year.

The motion was seconded and voted unanimously.

**ARTICLE 6:** Frank Lyon moves to transfer \$41,623.01 from Sewer Stabilization to 2014 operating budget to defray the expenses of the District for the fiscal year beginning July 1, 2014 in order to payoff the Rawson Street note.

The motion was seconded and voted unanimously.

**ARTICLE 7:** Frank Lyon moves that the District transfer \$55,000.00 from Water Development Account to fund the completion of the engineering of a water treatment facility at the water towers.

The motion was seconded by Robert Wilson and voted unanimously.

**ARTICLE 8:** J. Donald Lennerton, Jr. moves that the District vote to amend the General By-laws of the District (Adopted March 27, 1956; Amendment November 26, 1990; Amendment March 29, 1994; Amendment April 29, 1997; Amendment June 21, 2006) to remove Article 6, **ANNUAL REPORTS SECTION 1** and replace with the following: "The Annual Reports of the Officers of the District shall be made available to each water taker with the District upon request".

The motion was seconded by Robert Wilson and voted unanimously.

**ARTICLE 9:** Robert Wilson moves the District to vote to amend the General By-laws of the District (Adopted March 27, 1956; Amendment November 26, 1990; Amendment March 29, 1994; Amendment April 29, 1997; Amendment June 21, 2006) to remove Article 1, Section 4 "Fifteen, or more, voters shall constitute a quorum for action under any warrant; provided, that a number less than a quorum may vote and adjournment." And **REPLACE** with the following: "Ten, or more, voters shall constitute a quorum for action under any warrant; provided, that a number less than a quorum may vote and adjournment."

The motion was seconded and voted unanimously.

Robert Wilson moves to adjourn the Annual District meeting.  
J. Donald Lennerton, Jr. seconded. 16 legal voters attended the meeting.

Meeting Adjourned at: 7:30 P.M.

Respectfully submitted:  
Nancy Almeida  
District Clerk  
May 27, 2014

TREASURER'S REPORT  
JULY 1, 2013 TO JUNE 30, 2014

<b>RECEIPTS</b>	2014
WATER REVENUE	\$323,717.51
SEWER REVENUE	\$382,001.98
INTEREST INCOME BANK ACCOUNTS	\$5,453.05
INTEREST WAITE LATERAL	\$657.01
INTEREST BREEZY/RAWSON LATERAL	\$29.27
INTEREST RT 9 LATERAL	\$1,839.56
OTHER CHARGES	\$46,165.64
WATER CONNECTION FEES	\$0.00
SEWER CONNECTION FEES	\$34,155.90
WATER ASSESSMENTS	\$4,437.88
SEWER ASSESSMENTS	\$19,674.50
BETTERMENT COLLECTIONS	\$122,752.52
BETTERMENT INTEREST	\$67,180.16
NATIONAL GRID RENTAL	\$6,480.00
TOTAL RECEIPTS	\$1,010,107.10

**DISBURSEMENTS**

WATER MAINTENANCE	\$339,831.36
SEWER MAINTENANCE	\$415,896.27
MATURING DEBT	\$192,103.03
INTEREST ON DEBT	\$102,733.45
WORCESTER COUNTY RETIREMENT	\$41,311.00
ART #9 4-27-10 TREATMT PLANT UPGRADES & ENG	\$0.00
ART #7 4-26-11 WATER TANK PAINTING	\$0.00
ART #7 4-26-11 WHITTEMORE ST WELL	\$1,310.00
ART #6 4-24-12 FRANKLIN STREET SEWER LINE	\$30,670.43
ART #7 4-24-12 MISC. ITEMS	\$6,160.00
ART #7 5-26-14 WATER TREATMENT FACILITIES	\$0.00
TOTAL DISBURSEMENTS	\$1,130,015.54

**ANALYSIS OF CASH**

WATER DEVELOPMENT	\$231,034.40
SEWER DEVELOPMENT	\$1,940,472.38
WATER & SEWER RATE RELIEF	\$385,977.15
SEWER STABILIZATION ACCOUNT	\$66,559.71
CAPITAL EQUIPMENT ACCOUNT	\$0.00
RAWSON ST. LATERAL	\$4,071.62
RT 9 W. SEWER LATERAL	\$990,067.18
WAITE/CHAPEL LATERAL	\$316,216.32
DEPOSIT IN TRANSIT	\$0.00
ART #9 4-27-10 TREATMT PLANT UPGRADES & ENG	\$57.81
ART #7 4-26-11 WATER TANK PAINTING	\$18,740.50
ART #7 4-26-11 WHITTEMORE ST WELL	\$13,728.50
ART #6 4-24-12 FRANKLIN STREET SEWER LINE	\$112,675.42
ART #7 4-24-12 MISC. ITEMS	\$136,665.26
ART #7 5-26-14 WATER TREATMENT FACILITIES	\$55,000.00
TOTAL	\$4,271,266.25
SURPLUS REVENUE	\$1,350,546.00
TOTAL	\$5,621,812.25

**GENERAL DEBT**

RAWSON/BREEZY LATERAL	\$0.00
WAITE SEWER LATERAL	\$462,490.00
RT 9 W. SEWER LATERAL	\$1,524,193.00
C.W.M.P. SERIAL ISSUE	\$249,732.38
TOTAL	\$2,236,415.38

RESPECTFULLY SUBMITTED  
DEBRA A. WILSON  
DISTRICT TREASURER

*Leicester Water Supply District  
Incorporated 1988  
Chapter 171 Acts 1888 Water  
An Act to supply the Centre Village of Leicester with Water*

*OFFICERS 2014  
Board of Water Commissioner's  
Robert F. Wilson Chairman – 2014-2017  
J. Donald Lennerton, Jr. 2012-2015  
Frank W. Lyon – 2013-2016*

*District Treasurer  
Debra Wilson 2013-2016*

*District Clerk  
Filling unexpired term  
Nancy L. Almeida 2013-2016*

*District Moderator  
Vacant*

*Certified Public Accounting Auditors  
Borgatti Harrison & Co.*

*Superintendent  
Roger A. Hammond*

Annual Meetings - Last Tuesday in April.

Commissioners Meetings  
Third Thursday of the Month - 4:00 PM  
at the Office 124 Pine Street  
unless otherwise posted.

Billing Periods – Quarterly

Office Hours Monday through Thursday 9:30 AM to 2:00 PM  
Friday 9:30 AM to 1:00 PM – excluding Holidays

Office Telephone #:508 892-8484  
Emergencies 508 892-8484  
Police Dept. 508 892-7010

This Institution is an equal opportunity provider. To file a complaint of  
discrimination write USDA, Director, Office of Civil Rights,  
Washington, DC 20250-9410