

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 Thirty-first Annual Report for the year ending Dec. 31, 2018.

*WATER DEPARTMENT*

Water quality coliform samples were taken each month in accordance with the Department of Environmental Protection's schedule at 5 locations, 124 Pine Street wastewater treatment building, 15 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.

One (1) count of coliform bacteria, which is an indicator bacteria, was found at Well #2- RAW Water (RW 02G) in September 2018. This did not require follow-up testing. No notification or Public Notice was required.

The District has continued to chlorinate treated water on a year-round basis in accordance with MassDEP requirements. We maintain chlorine residuals at the ends of the distribution system between 0.10 mg/l and 0.20 mg/l. DEP requires a minimum chlorine residual of 0.30 mg/l for finished water being stored at the water tanks at Carey Hill. However, taste and odor complaints begin to abound when we have disinfected water with 1.0 mg/l residual chlorine. Chlorine also creates Haloacetic Acids (HAA's) and Trihalomethanes (THMM's) within our distribution system. Balancing these two requirements has continued to be challenging.

The District has been required to perform annual Perchlorate sampling on all of our wells. Perchlorates are substances that have been found in the drinking water supplies that have come in contact with explosive powders such as fireworks, gun powders or blasting products. All of our test results were below Mass DEP's MCL's (Maximum Contaminant Limits).

Water samples taken for analysis for Volatile Organic Compounds, which are monitored yearly for petroleum storage facilities, were taken at Wells #2, #3, Pierce Spring and Rawson Street during the 2<sup>nd</sup> quarter. All the samples taken during this period were found to have no detections of VOC's.

Nitrate samples 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.

Lead and copper samples were taken from 15 selected residence in the distribution system in September with the results meeting the current Lead and Copper requirements of the DEP. The District adds an ortho-poly phosphate product to the drinking water at the water tanks and at the #5 well to control the possibility of any lead or copper from leaching into the water in the plumbing residence.

Arsenic and Uranium is naturally occurring from the erosion of natural deposits in the bedrock of New England. Sampling at Wells #2 and #3 in Paxton and Well #5 in Leicester continues each quarter for arsenic. The water treatment Plant that was built in 2008 for Wells #2 and #3 in Paxton continues to meet the Arsenic MCL (Maximum Contaminant Limits) established by the EPA Safe Drinking Water Standards.

The treatment system for each of the wells has two vessels. This 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 is removed from the well water by passing the water through an iron-oxide impregnated resin. This Arsenic attaches to the resin. To clean the resin, the District removes and transports the resin to a regeneration facility in 35 cubic foot totes. The regeneration facility is located in Philadelphia, PA. Normal regeneration procedures require replacement of 10% of the media. The cost of replacement material is in excess of \$475 per cubic foot. Each treatment vessel at the Paxton wells holds approximately 36 cubic feet of resin.

Capital projects completed this year for the water system include the evaluation of the Paxton transmission main completed by (CEI) Comprehensive Environmental Inc. The north water tank at Carey Hill was inspected and a report produced per DEP requirements. Replacement of hydro tanks at the Mount Pleasant (Route 9) Booster Station. New gate valves with hydrant installed on Rawson Street. At Rawson Well #5 we refurbished the Lowey Bubble Aeration System for radon removal. The booster station at 180 Paxton Street and #5 wellhouse floors were sanded, the pumps and piping were painted and floors epoxied.

Future capital projects for the water system include repainting or replacing the north water tank at Carey Hill, roof replacement on Paxton Well houses #1, #2, #4. The District will be working with engineers on the design and replacement of Pierce Spring in the Paxton Well field along with replacement

of about one mile of transmission main. This project is part of our ongoing DEP Administrative Consent Order. The District is also working towards the Re-establishment of the Whittemore Street Well and design of an arsenic and uranium treatment system.

The Hersey radio read meters have continued to perform poorly with failure rates higher than 6 percent. We are currently replacing the Hersey meters with Badger E-Series, Ultrasonic Meters that 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 District might go to monthly billing when all the new meters are installed.

In July 2018, the Nineteenth Consumer Confidence reports were made available to the District which included information for the previous year 2017.

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 three 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.

The Commissioners hereby reminds our customers that conserving the use of water is a primary concern to the operation of our facilities. Use of water for lawn sprinklers is only permitted between the hours of 6 p.m. and 8 p.m. as stated in Article 12, Section 1 of the LWSD Rules and Regulations. Filling of swimming pools is only permitted after an application is completed and submitted to the District at 124 Pine Street also as stated in the LWSD Rules and Regulations. Use of water for all nonessential purposes should be avoided.

### *SEWER DEPARTMENT*

In September 2010, the LWSD was issued a new, 5-year renewal of their National Pollution Discharge Elimination System (NPDES) permit. The major changes in the permit included a decrease in our discharge limit for Total Phosphorous, Total Recoverable Copper, Aluminum and Ammonia-Nitrogen. We continue to report quarterly for Total Kjeldahl Nitrogen, Total Nitrate and Total Nitrite. We continue to perform semi-annual testing for toxicity testing on our effluent.

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, semiannual sampling was conducted to determine Toxicity for Acute and Chronic species survival of the treated effluent from the WWTP. There were no exceptions during 2018.

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 2018, the District operations included 11 Waste Water Pump Stations, 5 Drinking Water Pump Stations and 3 Drinking Water Booster Stations in addition to the WWTP located at 124 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 in 2011 set aside funds to look at the overall health of the wastewater treatment plant. This study will be used to upgrade the plant in the future. Regulatory requirements, fatigue and breakdowns at the plant will mandate the order of future upgrades and maintenance at the facility.

This past year projects have included repair of the existing headworks facilities (mechanical bar screen). Rebuilding the hydraulic power pack for belt press. Install new belt press feed pump and VFD. Design and install manually operated stainless steel slide gates at Dutton Pond inlet and Dutton Pond Bypass inlet. Design and install two stainless steel mechanical slide gates on chlorine contact chamber. Town Beach, Waite Street and Homestead Lane Pump-Station floors were sanded, the pumps and piping were painted and floors epoxied. Root Cutting and CCTV of the 6-inch VC sewer in Easement between Pleasant Street & Wesley Drive. Remove and replace sand filter sand.

Future projects will include the replacement of the roof for the main ops building. Construction of a new headworks building or refurbishment of the existing building; installation of biological phosphorous removal tankage ahead of aeration tank 1; replacement of mechanical aeration equipment with more energy efficient fine bubble aeration; replacement and upgrading of obsolete electrical components; emergency power generation upgrades; and upgrading of sludge de-watering facilities. These upgrades will allow us to assist the Town of Leicester in economic development areas.

The District currently employs three fully licensed wastewater treatment plant operators.

The Commissioners once again cautions the residents 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.

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

**Minutes of the 131st Annual Meeting  
Leicester Water Supply District  
June 5, 2018**

In accordance with the warrant legally served and posted, the legal voters of the Leicester Water Supply District met in the Leicester Water Supply District Meeting Hall, 124 Pine Street, in the Town of Leicester on Tuesday June 5, 2018 at seven in the evening (7:00 pm), to act on the following Articles, viz:

Robert F. Wilson moved to appoint Harry Brooks to be the District Moderator for the meeting. J. Donald Lennerton, Jr. seconded. Voted unanimously.

The meeting was called to order at 7:00 p.m. by the Appointed District Moderator Harry Brooks after a quorum was declared with 11 signed in voting residence.

A Motion was made by the Clerk to dispense with the reading of the Articles as everyone present had a copy of the Warrant. Leonard G. Margadonna seconded. Voted unanimously.

**ARTICLE 1:** J. Donald Lennerton, Jr. made a motion to dispense with the reading of the Officers Reports as copies of the 130th Annual Report was present and that the reports of the District Officers be accepted with the exception of any typographical errors. A second was made. Voted unanimously.

**ARTICLE 2:** Leonard G. Margadonna nominated J. Donald Lennerton, Jr. for Water Commissioner for a term of three years. Motion was seconded by Robert F. Wilson seconded. Voted unanimously.

**ARTICLE 3:** Leonard G. Margadonna made a motion that the District vote to pay the District Officers as follows for the fiscal year beginning July 1, 2018.

Commissioner Chairman	\$	2,029.00
2 other Commissioners		3,520.00
Moderator		137.50
Clerk		302.50
TOTAL	\$	5,989.00

A second was made. Voted unanimously.

**ARTICLE 4:** Robert F. Wilson moves to see if the District will vote to raise and appropriate or transfer such sums of money as may be necessary to defray the expenses of the District for the fiscal year beginning July 1, 2018.

Water & Sewer Maintenance(R&A).....	\$1,265,024.67
TOTAL.....	\$1,265,024.67

To transfer from Free Cash.....\$100,000.00  
To the principal Loan Payment Line Item

TOTAL	\$100,000.00
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To transfer from the Waite Street, Massasoit, Rural, Chapel Sewer Lateral Account:

To Maturing Debt (Principal)..... \$ 30,834.00  
 To Interest on Debt (Interest).....\$ 18,961.89  
 TOTAL..... \$ 49,795.89

To transfer from the Route 9 West Sewer Lateral Account:

To Maturing Debt (Principal)..... \$ 84,678.00  
 To Interest on Debt (Interest).....\$ 52,394.06  
 TOTAL..... \$137,072.06

Grand Total.....\$1,551,892.62

Leonard G. Margadonna seconded. Voted unanimously.

**ARTICLE 5:** J. Donald Lennerton, Jr made the motion 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, 2017, in accordance with Mass. Gen. Laws, c. 44, sec 4 and Acts in amendment thereon, and including in addition 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. Leonard G. Margadonna seconded. Voted unanimously.

**ARTICLE 6:** Robert F. Wilson made the motion to transfer a sum of \$18,000.00 from free cash to fund the Rehabilitation of Well #5. J. Donald Lennerton, Jr. seconded. Voted unanimously.

**ARTICLE 7:** Leonard G. Margadonna made the motion to transfer the sum of \$35,000.00 from Sewer Development Account to fund the infiltration and inflow account. Robert F. Wilson seconded. Voted unanimously.

Robert F. Wilson made a motion to adjourn. Leonard G. Margadonna seconded. Voted unanimously.

The meeting was adjourned at 7:15 p.m. after a motion and a second was made. 11 legal votes attended the meeting.

Respectfully submitted,  
 Nancy L. Almeida  
 District Clerk  
 June 5, 2018

TREASURER'S REPORT  
 JULY 1, 2017 TO JUNE 30, 2018

<b>RECEIPTS</b>	2018
WATER REVENUE	\$589,916.17
SEWER REVENUE	\$511,911.79
INTEREST INCOME BANK ACCOUNTS	\$3,442.18
INTEREST WAITE LATERAL	\$561.78
INTEREST RT 9 LATERAL	\$2,462.10
OTHER CHARGES	\$135,506.24
WATER CONNECTION FEES	\$11,500.00
SEWER CONNECTION FEES	\$21,000.00
WATER ASSESSMENTS	\$16,163.44
SEWER ASSESSMENTS	\$37,492.80
BETTERMENT COLLECTIONS	\$76,930.91
BETTERMENT INTEREST	\$39,572.31
NATIONAL GRID RENTAL	\$7,678.00
HILLCREST SEWER INSPECTION FEES	\$30.00
 TOTAL RECEIPTS	 \$1,454,167.72

<b>DISBURSEMENTS</b>	
WATER MAINTENANCE	\$520,967.49
SEWER MAINTENANCE	\$590,310.20
MATURING DEBT	\$235,709.00
INTEREST ON DEBT	\$87,351.40
WORCESTER COUNTY RETIREMENT	\$40,028.00
ART #7 5-26-14 COMPREHENSIVE STUDY	\$5,465.25
ART #6 6-7-16 WATER TREATMENT MEDIA	\$0.00
ART #6 6-6-17 WATER TREATMENT FACILITY STUDY	\$0.00
ART #6 6-5-18 REHABILITATION OF WELL #5	\$0.00
ART #7 6-5-18 INFLOW & INFILTRATION	\$0.00
 TOTAL DISBURSEMENTS	 \$1,479,831.34

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

*OFFICERS 2017*

*Board of Water Commissioner's  
Robert F. Wilson - 2017-2020  
J. Donald Lennerton, Jr. - 2018 -2021  
Leonard G. Margadonna – 2016-2019*

*District Treasurer  
Debra A. Wilson 2017-2020*

*District Clerk  
Nancy L. Almeida 2017-2020*

*District Moderator  
Vacant*

*Certified Public Accounting Auditors  
Borgatti Harrison & Co.*

*Superintendent  
Joseph H. Wood*

Annual Meetings – First Tuesday in June.

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

**ANALYSIS OF CASH**

WATER DEVELOPMENT	\$135,254.80
SEWER DEVELOPMENT	\$1,931,384.38
WATER & SEWER RATE RELIEF	\$242,841.85
SEWER STABILIZATION ACCOUNT	\$67,068.88
RT 9 W. SEWER LATERAL	\$849,547.52
WAITE/CHAPEL LATERAL	\$160,637.08
DEPOSIT IN TRANSIT	\$44,116.79
ART #7 5-26-14 COMPREHENSIVE STUDY	\$0.00
ART #6 6-7-16 WATER TREATMENT MEDIA	\$30,095.99
ART #6 6-6-17 WATER TREATMENT FACILITY STUDY	\$100,041.67
ART #6 6-5-18 REHABILITATION OF WELL #5	\$18,000.00
ART #7 6-5-18 INFLOW & INFILTRATION	\$35,000.00
TOTAL ANALYSIS OF CASH	\$3,613,988.96
SURPLUS REVENUE	\$1,182,341.00
TOTAL	\$2,431,647.96

**GENERAL DEBT**

WAITE SEWER LATERAL	\$339,154.00
RT 9 W. SEWER LATERAL	\$1,185,481.00
C.W.M.P SERIAL ISSUE	\$168,414.34
DEP WATER PROJECT LOAN	\$400,000.00
TOTAL GENERAL DEBT	\$2,093,049.34

RESPECTFULLY SUBMITTED  
DEBRA A. WILSON  
DISTRICT TREASURER  
JUNE 30, 2018