

Mount Laurel Township Municipal Utilities Authority

Management's Discussion and Analysis (MD&A)



FINANCIAL HIGHLIGHTS

Management believes the financial position of the Authority is strong. According to its bond covenants, the Authority is required to generate revenues that are at least equal to 110% of its annual debt service, after deducting operating expenses. This is referred to as cover. For fiscal year 2017 (FY17, July 2016 – June 2017), the Authority generated a 187% cover. Key financial highlights for FY17 include:

- Total assets of \$136.81 million remained relatively the same when compared to FY16, with a slight increase of \$54,300 (0.04%). Total liabilities increased significantly, driven by the recognition of additional long term pension liabilities (as described later in this MD&A).
- Service charges rose marginally, increasing slightly over \$105,000 compared to those of FY16. Connection fees decreased substantially, finishing \$1.9 million lower than FY16. In total, operating and non-operating expenses outpaced operating and non-operating revenues by \$1.6 million in FY17. When offset by \$400,000 of infrastructure installed by developers then turned over to the Authority for lifetime operating and maintenance, the Authority's Net Position decreased by \$1.2 million in FY17.

OVERVIEW OF THE FINANCIAL STATEMENTS

The financial section of the annual report consists of four parts – Independent Auditor's Report, required supplementary information, (which includes the management's discussion and analysis (this section), the schedule of the Authority's proportionate share of the net pension liability, and the schedule of Authority's contributions), the basic financial statements, and supplemental information.

OVERVIEW OF THE FINANCIAL STATEMENTS (CONT'D)

The basic financial statements report information about the Authority as a whole using accounting methods similar to those used by private-sector companies. The comparative statements of net position include all of the Authority's assets, deferred outflows of resources, liabilities and deferred inflows of resources. As the Authority follows the accrual method of accounting, the current year's revenues and expenses are accounted for in the statements of revenues, expenses and changes in net position regardless of when cash is received or paid. Net position - the difference between the Authority's assets, deferred outflows of resources, liabilities and deferred inflows of resources – is a measure of the Authority's financial health or position.

The comparative statements of revenues, expenses and changes in net position provide a breakdown of the various areas of revenues and expenses encountered during the current year.

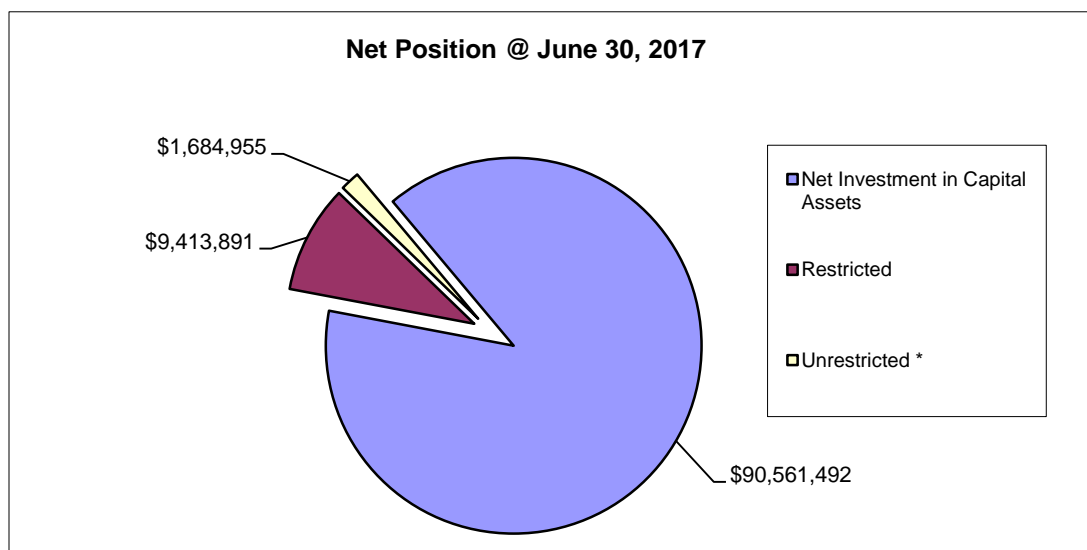
The comparative statements of cash flows provide a breakdown of the various sources of cash flow, categorized into four areas: Cash flows from operating activities, noncapital financing activities, capital and related financing activities and investing activities.

FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE

The Authority's total assets as of June 30, 2017 were \$136,812,784.90. Total assets, total deferred outflows of resources, total liabilities, total deferred inflows of resources and total net position are detailed below.

Mount Laurel MUA Net Position As of June 30,			
	<u>2017</u>	<u>2016</u>	<u>2015</u>
Current Assets	\$ 28,004,244.48	\$ 27,064,836.44	\$ 26,974,714.83
Capital Assets	<u>108,808,540.42</u>	<u>109,693,640.21</u>	<u>109,710,007.93</u>
Total Assets	136,812,784.90	136,758,476.65	136,684,722.76
Total Deferred Inflows of Resources	5,349,251.33	2,307,030.50	797,113.66
Current Liabilities	5,217,044.80	4,946,044.30	4,595,893.37
Long-Term Liabilities	<u>31,785,668.75</u>	<u>29,167,523.84</u>	<u>28,971,358.24</u>
Total Liabilities	37,002,713.55	34,113,568.14	33,567,251.61
Total Deferred Inflows of Resources	3,498,984.49	2,101,363.20	4,337,518.33
Net Position			
Net Investment in Capital Assets	90,561,491.62	89,463,918.30	87,699,945.38
Restricted	9,413,891.31	11,197,698.77	9,279,271.07
Unrestricted	<u>1,684,955.26</u>	<u>2,188,958.74</u>	<u>2,597,850.03</u>
Total Net Position	<u>\$ 101,660,338.19</u>	<u>\$ 102,850,575.81</u>	<u>\$ 99,577,066.48</u>

FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE (CONT'D)



* Unrestricted Net Position is primarily used to pay for the Authority's capital program not funded by debt issuance. More information concerning the use of these funds can be found later in this MD&A, under the "Operating Income compared to Paid Additions to Assets" graph within the Asset Management, Capital Asset, and Long-Term Debt Activity section.

The Authority realized an operating loss of \$1,181,708.97 for the current year. When offset by a loss from non-operating activities, the Authority's loss before capital contributions was \$1,591,265.12. During FY17, the Authority received capital contributions in the amount of \$401,027.50. These contributions come in the form of infrastructure installed by developers during construction. Once the developer finalizes the project and it is accepted by the Authority, the developer transfers ownership of the new infrastructure to the Authority. It then becomes the Authority's asset and responsibility to operate and maintain in perpetuity. The combined effect from these components of fiscal activity resulted in the Authority's net position decreasing by \$1,190,237.62. Major components of this activity follow.

Service charges increased modestly in FY17 when compared to the previous year. The 0.5% increase in revenues was due to an additional 59 million gallons of water delivered to service. Overall, the mix of the Authority's billing base remains well diversified with residential users comprising the vast majority of its customers. There remains a stable and growing segment of the billing base made up of residential, commercial and public customers, along with a very small industrial presence. The rate structure is stable and includes rate increases that were implemented with each year's February billings from 2008 through 2013.

FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE (CONT'D)

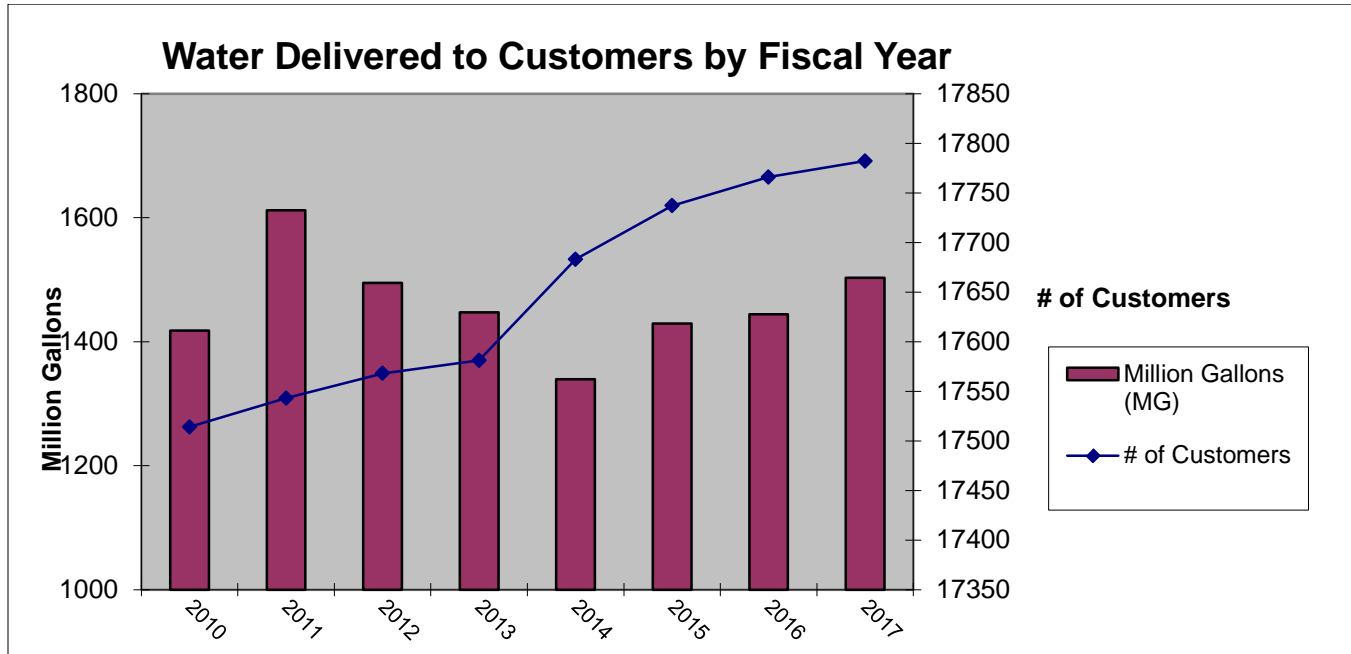
**Mount Laurel MUA
Revenues, Expenses and Net Position
for the Fiscal Years Ended June 30,**

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Utility Service Charges	\$ 19,230,637.31	\$ 19,125,618.43	\$ 18,771,411.62
Connection Fees	291,794.54	2,235,022.01	832,265.76
Other Operating Revenues	<u>637,853.28</u>	<u>674,135.88</u>	<u>653,704.38</u>
Total operating revenues	20,160,285.13	22,034,776.32	20,257,381.76
Operating Expenses	15,414,949.96	13,675,086.08	12,813,251.64
Depreciation expense	<u>5,927,044.14</u>	<u>5,989,599.12</u>	<u>5,896,500.36</u>
Operating Income	(1,181,708.97)	2,370,091.12	1,547,629.76
Non-operating Revenues (Expenses)			
Investment Income	105,600.44	132,447.14	37,342.67
Interest on debt	(332,309.85)	(373,233.49)	(411,253.73)
Loss on disposal of capital assets	9,256.19	(5,229.24)	(4,828.22)
Insurance Proceeds	181,967.07		
Contribution to Mount Laurel Township	<u>(374,070.00)</u>	<u>(447,716.00)</u>	<u>(498,892.00)</u>
Income before contributions	(1,591,265.12)	1,676,359.53	669,998.48
Capital contributions	401,027.50	1,597,149.80	104,776.50
Increase in Net Position	<u>(1,190,237.62)</u>	<u>3,273,509.33</u>	<u>774,774.98</u>
Net Position - July 1	102,850,575.81	99,577,066.48	98,802,291.50
Change in Net Position	<u>(1,190,237.62)</u>	<u>3,273,509.33</u>	<u>774,774.98</u>
Net Position - June 30	<u>\$ 101,660,338.19</u>	<u>\$ 102,850,575.81</u>	<u>\$ 99,577,066.48</u>

Investment income decreased by approximately \$27,000. During FY17, the Authority increased its holdings in money market accounts and is ready to purchase more attractive, higher yielding investments when opportunities present themselves. This has a negative impact on investment income as money market accounts yield less than other investments. Also, a negative market value adjustment was recorded at June 30, 2017 on some investments. It should be noted that market value adjustments, whether positive or negative, tend to ultimately have negligible impact on the Authority. This is because their true impact has more significance when investment instruments are sold before maturity, when market value influences the selling price. Since the Authority tends to hold investments until they mature, rather than sell them prior to maturity, fluctuations in market values ultimately have no meaningful impact on the Authority.

FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE (CONT'D)

Connection fee revenues saw a substantial decrease when compared to the previous fiscal year. This was the result of fewer (or smaller) projects connecting to the Authority's infrastructure in FY17 when compared to FY16, thereby decreasing that component of revenue. Connection fee revenue is an indicator of the overall economy, as property developers typically slow down or accelerate their activities based on how the economy is trending in general. Developers pay connection fees upon submittal of plans to construct and connect residential developments, commercial properties, retail shops, etc. into the Authority's water and / or sewer systems. The Authority treats these payments as deferred inflows of resources until tie in is completed. When this occurs, the Authority releases a notice to Mount Laurel township that a certificate of occupancy can be issued. The Authority then establishes a new billing account, reduces the deferred resource and recognizes connection fee revenue. Because the township of Mount Laurel is approaching build out as less land is available for development, this type of revenue will generally decline in the coming years. In recognition of that inevitability, the Authority has had a long term fiscal planning model in place for many years that systematically reduces its dependency on connection fee revenues when projecting total annual revenue needs. This approach has served the Authority well.



Mount Laurel continues to be a desirable location for residential and commercial development. The composition of the ratepayer base is well diversified. The residential and public sectors, the most stable when considering the volatility of a billing base, comprise approximately 95% of the Authority's customers. There are dozens of hotels within the township, providing the third highest number of rooms in New Jersey, behind only Atlantic City and Newark. There is no particular emphasis or imbalance in the type of business enterprises within the commercial sector. Industrial users comprise a minuscule portion of the Authority's billing base.

FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE (CONT'D)

The Authority's fiscal activity yielded negative results for the year. Operating revenues generated an aggregate of \$20.16 million, down \$1.87 million (approximately 8.5%) from FY16. Connection fee revenues accounted for virtually all of this downturn, falling off by over \$1.9 million. FY16 saw large projects like the Laurel Green residential development, Lifetime Fitness, The Falls Group (FunPlex), the NJ State Police barracks at the Turnpike, the WaWa at Route 38 and Marter Avenue and the Roger's Walk residential development contribute heavily to this revenue source. FY17 revenues were modest in comparison, as there were very few large projects tied in. As noted earlier, service charges increased by a mere 0.5%, contributing an additional \$105,000 when compared to FY16. The Authority's operating expense (including depreciation) increased by approximately \$1.68 million (8.5%) compared to FY16. The more significant changes in revenues and expenses are described in more detail below.

As the original budget for FY17 was formulated prior to April 2016, certain actual events during the year necessitated amending the budget. The Authority approved this budget amendment in June 2017. Following is a narrative addressing the more significant amendments, and how those amendments compare to actual operating results for the current year.

OPERATING REVENUES & EXPENSES

Service charges (user fees) were originally budgeted at \$17.45 million but were amended to \$18.13 million. This increase was due to an upturn in water delivered to service during FY17. The Authority's water usage, resulting in higher overall user fees than anticipated, finished strongly at the end of the fiscal year, resulting in actual service charges of \$19.23 million.

Connection fee revenue was amended significantly downward, from \$1.42 million to \$289,000. This \$1.1 million reduction was due to originally budgeted projects that either tied in prior to the start of FY17, partially tied in or ultimately did not tie in at all during FY17. For example, \$293,000 was anticipated for Roger's Walk properties in FY17, but the buildings associated with those fees tied in before FY17 began. The same is true for Laurel Green Phase II and its \$97,000 of anticipated revenue. Other budgeted projects only partially tied in, including 7000 Midlantic Drive (\$318,000 remaining), Hampton Inn (\$236,600 remaining) and Bread of Life Cemetery (\$38,100 remaining). Finally, Walmart (\$139,100) was under construction at the end of FY17, so this connection fee revenue will not be realized until FY18. In the end, actual connection fee revenue realized for FY17 was \$291,800.



Sunrise Over the Ramblewood Parkway Solar Array

OPERATING REVENUES & EXPENSES (CONT'D)

Other Operating Revenues decreased by \$36,200 compared to FY16 levels. The single largest factor for this was decreased market rate prices for the Solar Renewable Energy Credits (SREC) generated at the Authority's Ramblewood Parkway solar farm. At the beginning of FY17, the market price for a single SREC was approximately \$275. At the end of FY17, it was approximately \$225. Although market prices move up and down continually, this difference of \$50 per unit, applied to the approximately 700 SREC generated during a typical year, resulted in about \$35,000 less revenue being recorded.

The Authority's operating expenses of \$15.41 million (excluding depreciation) in FY17 were \$1.74 million higher than in FY16. This was largely due to a few significant operational events during the year, which are described more fully below.

Salaries and Wages expense increased by \$188,900 in FY17. More than half of this amount (approximately \$103,000) was due to hourly rate increases established in the Collective Bargaining Agreement and normal, annual wage adjustments for the non-union staff. Additionally, the Authority's sewer department experienced staffing shortages throughout most of FY17, resulting in more overtime pay while the normal duties and functions of straight time employees were performed. Finally, operational matters such as sewer force main breaks, around the clock monitoring of station alarms due to equipment failure (on a few occasions), and fabrication of equipment and plant components by the Authority's staff mechanics all resulted in an increase in overtime wages. Expense for all salaries and wages totaled \$4.40 million, compared with last year's \$4.211 million. The budget for this expense was originally set at \$4.394 million but was amended to \$4.466 million in response to actual costs such as those described above.

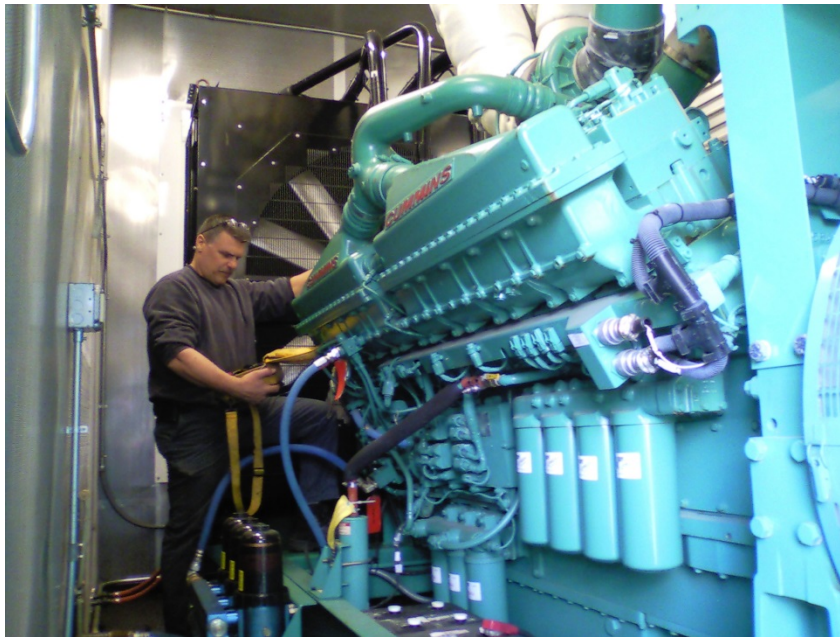


Repairs of Primary Force Main on Elbo Lane

OPERATING REVENUES & EXPENSES (CONT'D)

Fringe Benefits exceeded the prior year by \$913,700; an increase of slightly over 36%. The overwhelming majority of this significant increase was an adjustment to the Authority's Public Employees Retirement System (PERS) pension expense. This adjustment, required by a Government Accounting Standards Board statement (GASB68), requires that the Authority recognize its proportionate liability for long term PERS benefits. To satisfy that requirement, the Authority was obligated to record its FY17 PERS expense at \$1.66 million, more than double the \$826,100 expense for FY16. This accounts for over 90% of the increase in fringe benefits. The remaining increase is due to factors such as an increase in FICA expense (\$12,800) mainly associated with the salaries and wages line item (discussed previously), an increase of \$11,800 in unemployment expense, along with very modest increases in group health insurance and Workers Compensation. It should be noted that the combined costs for group health insurance and Workers Compensation exceeded FY16 costs by only \$26,200, or less than 2%.

Electricity costs remained stable in the current year, increasing a minuscule \$2,600 (0.25%). The Authority renewed its 3rd party electric supply contract in October 2015 as recommended by its energy consultants; the contract ends in October 2019 and continues to work in the Authority's favor. Control of this operating expense continues to be a priority of the Authority and is being achieved in a number of ways. The MUA's participation in an energy curtailment program has allowed it to generate income by agreeing to shed electric usage if called upon by the power grid. In FY17, participation in this program produced \$48,500 in payments back to the Authority. Sophisticated process control computers have been installed to regulate energy consumption at its plant facilities, variable frequency drives and more efficient pumps are being used, and dozens of emergency generators are exercised on a regular basis. A well run preventive maintenance schedule keeps generators in excellent, efficient condition. Load banking equipment is also used, which identifies problems early.



Routine Standby/Emergency Generator Maintenance

OPERATING REVENUES & EXPENSES (CONT'D)

The total volume of water delivered to customers in FY17 was 4% higher than FY16, which is considered negligible. The New Jersey Department of Environmental Protection has restricted the quantity of water that the Authority can withdraw from its wells drilled in the Potomac-Raritan-Magothy Aquifer (Critical Area #2). The amount of water that the Authority can produce annually equals the volume utilized for the township in 1980. However, because the township has experienced explosive growth subsequent to 1980, it is forced to purchase more and more of its water from other water purveyors.

The total cost of purchased water from these outside purveyors increased by nearly \$290,039 (13%) in FY 17. This change was due to the regulatory requirement to secure additional contracted volumes in order to accommodate mandated affordable housing units. In addition, both water supply providers increased water rates.

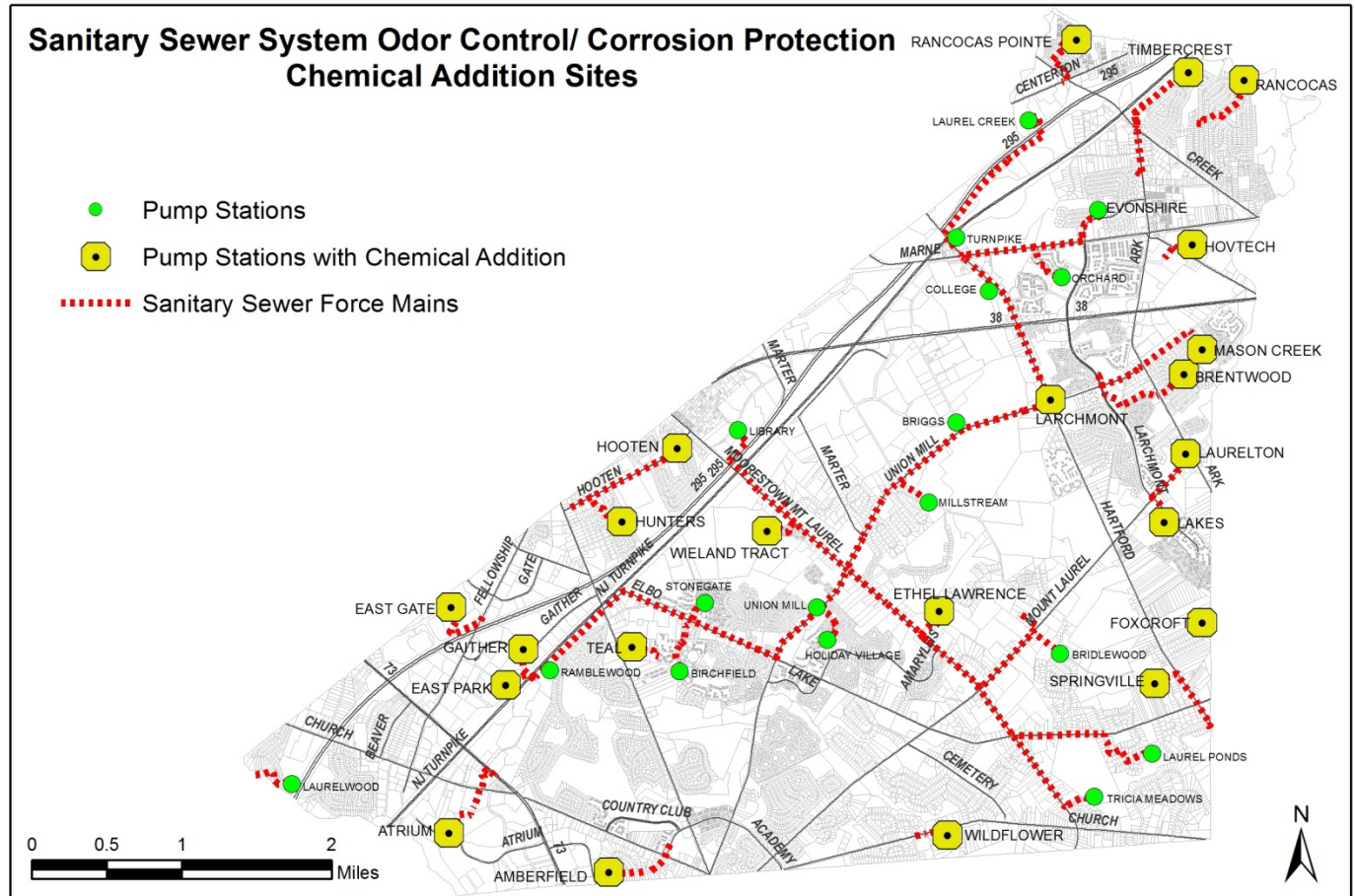
The cost related to the disposal of bio-solids (sludge) at the Hartford Rd Wastewater Treatment Facility decreased by \$123,000 (16%) during FY17. This spending was reduced in FY17 as the renewal work that occurred in FY16 on one of our two secondary clarifiers was completed. During this fiscal year the facility operations returned to more normal levels.



Biosolids Thickener Tank

OPERATING REVENUES & EXPENSES (CONT'D)

Chemical expense increased considerably when compared to FY16. Actual costs were \$743,000 in FY17 compared to \$665,000; an increase of \$78,000. The Authority's chemical usage in its sewer utility accounted for \$70,000 of this increase, mainly for odor control chemicals. Although we were able to slightly decrease chemical use within the collection system, a more direct control of dosage based on wastewater treatment plant operating conditions resulted in a significant increase in the use of plant pretreatment odor control chemicals at Larchmont PS. We continue to develop procedures to gain better control of this process to reduce cost while meeting operational needs.

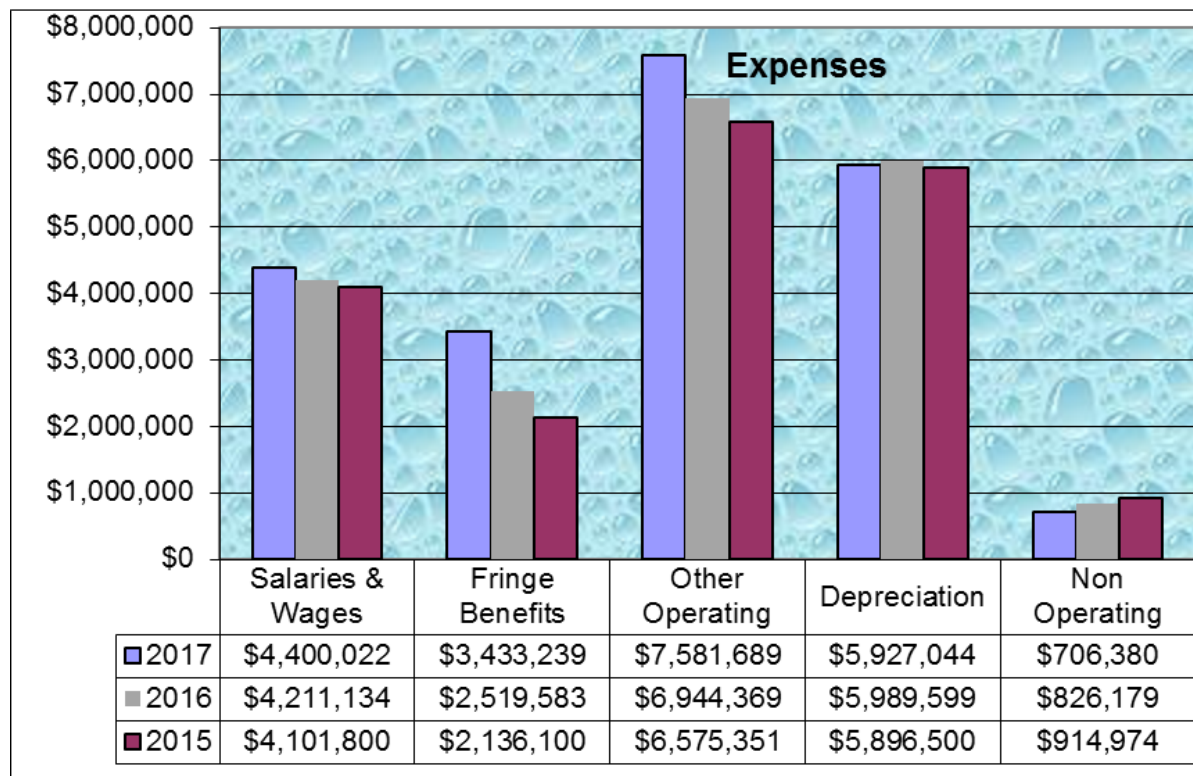
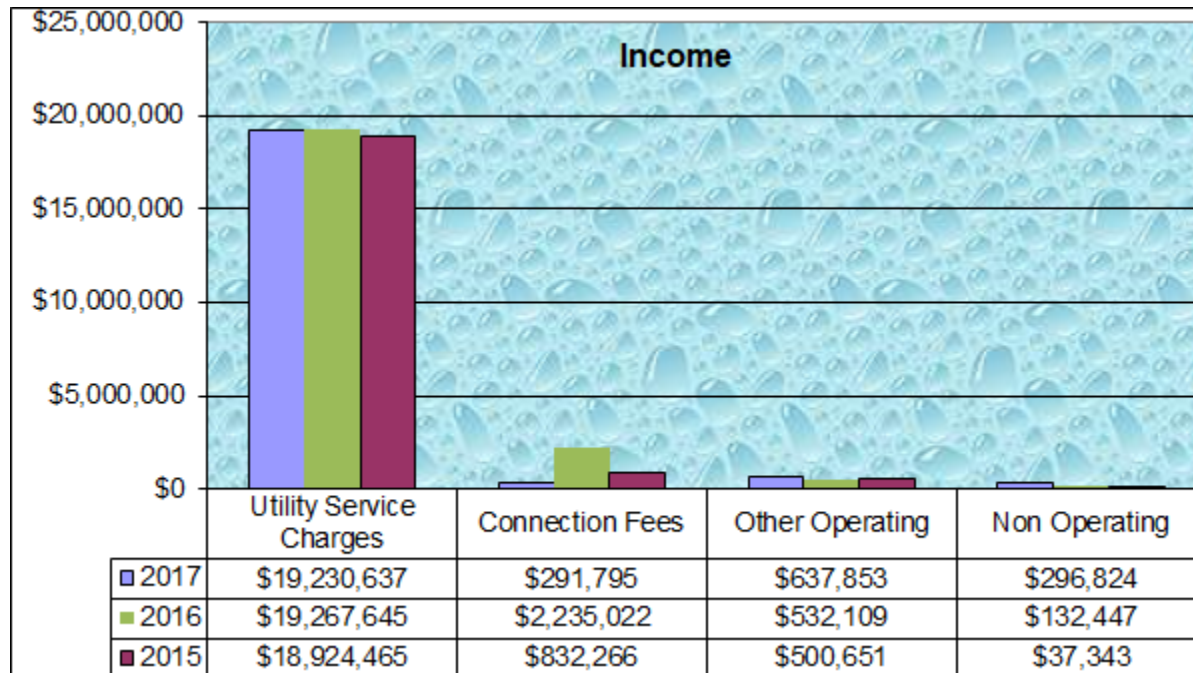


Interest expense in FY17 dropped by \$40,900. As outstanding principal balances get paid down and bond issues approach expiration, a greater portion of each debt service payment goes toward remaining principal balances. Inversely, a lesser portion of each debt service payment goes toward interest expense. Early in FY17, the Authority made the final debt service payments on a 1996 bond issue and did not take on any new debt during the year.

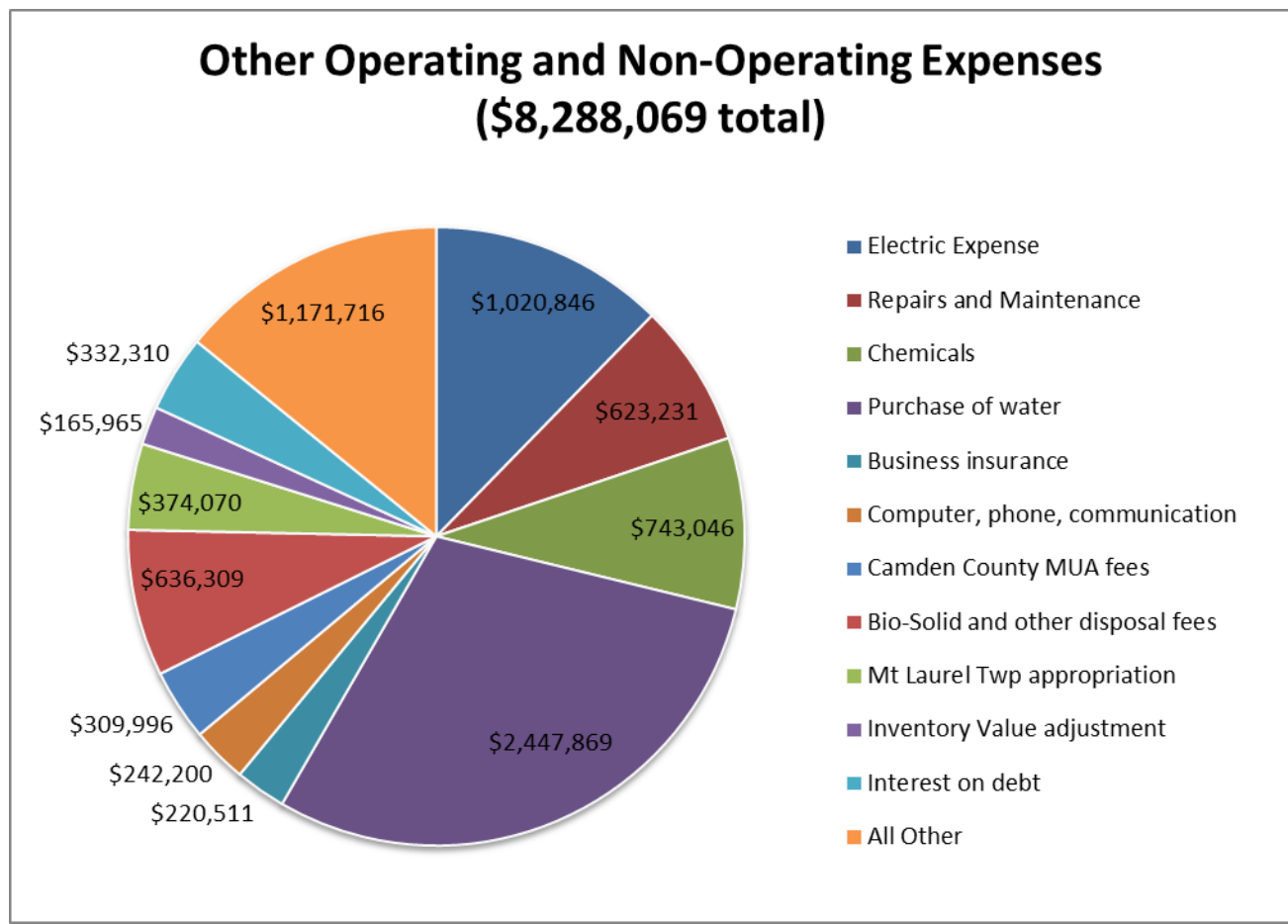
The Authority contributed \$374,070 to Mount Laurel Township, the eighth straight year a contribution has been made. This amount was determined in accordance with N.J.S.A. 40A:5A-12.1. With this contribution, the Authority has now given a total of \$3,871,068 to the township.

OPERATING REVENUES & EXPENSES (CONT'D)

Graphical representations showing revenues and expenses for the three fiscal years of 2015, 2016 and 2017 follow.



OPERATING REVENUES & EXPENSES (CONT'D)



ASSET MANAGEMENT, CAPITAL ASSET, AND LONG-TERM DEBT ACTIVITY

The United States Environmental Protection Agency (USEPA) has estimated that water systems in New Jersey require an investment of nearly \$8 billion within the next 20 years in order to continue providing safe water to the public. In addition, the 2016 American Society of Civil Engineers Infrastructure Report Card estimated that New Jersey's water and wastewater infrastructure needs billions of dollars of improvements in the next 20-30 years (for more information see <https://www.infrastructurereportcard.org/state-item/new-jersey/>). These are significant dollars by any measure, and point out the fact that water and wastewater infrastructure is extremely expensive to build and maintain. Particularly worth noting is the fact that many of the capital assets owned by an Authority are quite often underground or otherwise out of view from the vast majority of the public. Underground piping, pumping stations, valves, water and sewer mains, interconnections, control panels, computers, and many other appurtenances and components continue to do their jobs around the clock, without being seen. Above ground, many capital assets are placed in unobtrusive settings, such as fenced areas concealed with natural plantings, remote locations, business or industrial parks, etc.

ASSET MANAGEMENT, CAPITAL ASSET, AND LONG-TERM DEBT ACTIVITY (CONT'D)

USEPA offers this definition regarding asset management: "Asset Management is maintaining a desired level of service for what you want your assets to provide at the lowest life cycle cost." Some key features of an Asset Management Program (AMP) include identifying the assets critical to providing a desired level of service, estimating their life cycle and costs to maintain, replace or rehabilitate them, assessing the likelihood and consequence of their failure and considering redundant systems that are (or must be put) in place in the event an asset does fail.

Because the Authority has invested nearly \$223 million in its infrastructure, and keeping in mind the staggering estimated amounts mentioned above, the Authority has embraced asset management concepts into its operation and developed an AMP. Key employees of the Authority have participated on the American Water Works Association (AWWA) New Jersey section's Infrastructure Management Committee beginning in 2010 and on the New Jersey Department of Environmental Protection's (NJDEP) Asset Management Industry Working Group since 2014 in developing asset management procedures for use at water and wastewater facilities in New Jersey. Recently NJDEP issued its Asset Management Technical Guidance document which the Authority is positioned to follow.

The Authority first concentrated on creating an asset database for all underground assets. Using both our Geographic Information System (GIS) and our Computerized Maintenance Management System (CMMS) we began to apply individual identification numbers to each underground asset, identify approximate installation dates and note material of construction, type and size. Where appropriate we added elevation, depth of installation and slope. As the database became more detailed we added other assets and began to store Operation and Maintenance (O&M) information in the same database including estimated replacement values. In the last 5 years we have been concentrating on assigning life expectancy, current condition, consequence of failure, probability of failure and criticality of the asset to our database. This is now being used for our repair/replacement and maintenance scheduling and has also been incorporated into our budgeting and funding processes to anticipate the timing and scope of future capital projects.

During FY17, the Authority recorded \$5.060 million for capital assets. By including retainage and other pre / post year adjustments, the capital additions due to renewal and replacement were as follows:

<u>Asset</u>	<u>Amount Disbursed in FY17</u>
Supervisor Control and Data Acquisition Systems:	
**Upgrade Water & Sewer SCADA Systems	\$92,689
Hartford Road Wastewater Treatment Facility:	
Rehab Dewatered Sludge Pump	\$53,589
Rehab UV3000-Ballast, Lamps, & Sleeves	\$33,082
Rehab Motors & Sharpen Cutters-Influent Comminutors	\$36,920
Clean Sludge Thickener Tank	\$33,456
Rehab UV4000-Ballast, Lamps, & Sleeves	\$21,174
Repair Grit Snail Unit	\$20,993
Replace Magnetic Flow Meter-RAS	\$15,346
Replace ATS Monitoring System-Generator Fuel Tank	\$13,990
Rehab Primary Sludge Pump #2	\$12,000
Replace Safety Disconnect-Orbal Aerator	\$11,902
Replace Alarm Receiver	\$10,955
Replace Drive Unit-Primary Clarifier #2	\$10,918
Repair Main Entrance Gate	\$10,148

ASSET MGMT, CAPITAL ASSET, AND LONG-TERM DEBT (CONT'D)

Asset

Hartford Road Wastewater Treatment Facility (cont'd):

Disbursed in FY17

Replace Comminutor-Sludge Transfer	\$9,325
Replace/Repair/Rehab Orbal Motors	\$9,090
Replace Swivel Joint-Belt Filter Press Dumpster Bay	\$8,300
Paving and Drainage Upgrades	\$7,714
Replace Hydrants-Utility Water/Wastewater Reuse System	\$7,188
Replace Valves	\$7,132
Replace Effluent Compositor	\$6,654
Replace Pump # 2-Site Pump Station	\$5,961
Replace Flow Meter-Utility Water/Wastewater Reuse System	\$5,921
Replace Life Rings and Fire Hose Cabinets	\$3,962
Replace Level Control Transducer-Sludge Thickener	\$3,744
Rehab Heater-Press Building	\$3,400
Rehab Sludge Transfer Pump	\$2,445
Replace Pump-Biosolids Polymer System	\$2,316
Pipe & Cable Locator	\$1,974
Replace Secondary Side Transformer-Primary Clarifier	\$1,525
Replace Control Room Furniture	\$1,427
**Replace Motor Gear Boxes-Orbal Aerators	\$121,705
**Rehab Slide Gates-UV4000 Disinfection System	\$108,289
** Rehab of Site Pump Station	\$100,683
**Convert Old Warehouse Building to Vehicle Storage	\$16,016
**Rehab-Secondary Clarifier #2 (PFC#2)(Design)	\$8,818
**Clarifier Fall Protection Study	\$5,243



A Belt Filter Press at Hartford WPCF (Biosolids Dewatering)

** Multi-Year Project Completed this Fiscal Year*

*** Project Continuing into Subsequent Year(s)*

ASSET MGMT, CAPITAL ASSET, AND LONG-TERM DEBT (CONT'D)

Asset

Disbursed in FY17

Sanitary Sewer Pump Stations:

Rebuild Motors, Pumps & Impeller Replacement Various PS	\$59,109
Electrical Upgrade & Replace Generator-East Park PS	\$34,900
Replace Pumps-Ramblewood PS	\$28,520



Pump Replacement at a Sanitary Sewer Pump Station

PS Evals (Bridlewood, East Gate II, Laurel Ponds & Turnpike)	\$16,198
Replace Transducers for Various PS	\$9,156
Site Improvement-Orchard PS	\$8,770
Replace Pump #2-Brentwood PS	\$8,534
Site Improvements/Landscaping PS (Hooten, Foxcroft, & Stonegate)	\$5,100
Replace Barscreen & Rail System Hunter PS	\$4,689
Replace Barscreen & Ladder-Holiday Village East PS	\$4,015
Replace Electric Winches on Various PS	\$3,700
Electrical Upgrade-Laurelwood PS	\$2,289
Replace Heat Pump-Gaither PS	\$1,655
**Paint PS (College, Amberfield, Holiday Village East & Stonegate)	\$90,896
** Electrical Upgrade & Level Controls-East Park PS	\$48,308
** Electrical Upgrade & Level Controls-Turnpike PS	\$48,308
** Upgrade Atrium PS (Design)	\$29,319
** Upgrade Devonshire PS (Design)	\$21,656
**Electrical Upgrade & Level Controls-Birchfield PS	\$11,902
**Electrical Upgrade & Level Controls-Timbercrest PS	\$11,902

Sanitary Sewer Force Main Repair and Replacement:

* Replace Hunters FM & Install Country Lane Water Main (Combo Project)	\$27,531
Primary Force Main-Elbo Lane Curve	\$198,500
Corrosion Protection Study of Primary & Secondary Force Mains	\$29,267
** Primary Force Main-Hartford Road (Rt. 38 to Union Mill)	\$451,700
** Connection Replacement Hartford Rd & Marne Hwy FM (design)	\$23,194

ASSET MGMT, CAPITAL ASSET, AND LONG-TERM DEBT (CONT'D)

Asset

Disbursed in FY17

Sanitary Sewage Collection System:

Replace/Line Various Gravity Sewer Mains	\$193,528
Grout Sanitary Sewer Main-Ramblewood Parkway	\$16,905
TV & Clean Sanitary Sewer Mains	\$12,269
I & I Control: Replace Manhole Sewer Castings & Lids	\$5,865

Elbo Lane Water Treatment Plant:

Replace Turbine Pump Seals	\$20,897
Replace Control Panels & Disconnects	\$10,540
Rehab Kitchen Area	\$8,512
Paint Interior Walls	\$6,900
Roof Restoration-Generator Building	\$5,156
Rehab Tile Flooring	\$2,404
Replace Kitchen Appliances	\$2,126
** Rehab HVAC	\$5,884

Water Main Replacements:

* Replace Hunters FM & Install Country Lane Water Main (Combo Project)	see above
* Lincoln Drive & Liberty Road	\$65,859
* Fleetwood Road	\$17,317
Replace Fire Hydrants	\$23,116
Fostertown Road	\$12,448
**South Saint Andrews Drive & Grant Road	\$539,787
**Saint David Drive	\$407,302
**Wharton Road	\$8,726



Water Main Replacement on Saint David Drive

** Multi-Year Project Completed this Fiscal Year*

*** Project Continuing into Subsequent Year(s)*

ASSET MGMT, CAPITAL ASSET, AND LONG-TERM DEBT (CONT'D)

Asset

Disbursed in FY17

Wells and Booster Stations:

Replace/Rehab/Repair-Well # 3	\$88,965
Replace Automatic Transfer Switch-Willingboro Booster Station	\$12,000
Replace VFD-Well # 4	\$9,235
Replace Motor-Church Street Booster Station	\$8,561
Replace 2 Valves-Willingboro Booster Station	\$8,257
Replace AC Unit Well # 6	\$2,143

Water Meter Reading:

Replace Meter Reading Hand Held Equipment	\$27,552
**Meter Change Out Program	\$207,665



New Jetter Truck – for Wastewater Collection System Maintenance/Cleaning

Vehicles:

Replace Jetter Truck-Vehicle 67	\$393,262
Replace CCTV Truck-Vehicle 43	\$304,516
Replace Parts, Hoses & Repairs-Vehicle 42	\$32,728
Replace Vehicle 60	\$31,812
Replace Vehicle 57	\$30,160
Replace Vehicle 72	\$14,959
Replace Vehicle 75	\$14,959
Replace Trailer-Load Banking Unit	\$3,779
Replace Crane Outrigger-Vehicle 55	\$1,154

** Multi-Year Project Completed this Fiscal Year*

*** Project Continuing into Subsequent Year(s)*

ASSET MGMT, CAPITAL ASSET, AND LONG-TERM DEBT (CONT'D)

Asset

Disbursed in FY17

Miscellaneous:

Replace UPS Units	\$16,124
Upgrade HVAC-Engineering Building	\$14,635
Zero Turn Lawn Mower	\$8,196
Automotive Scanner and Equipment	\$5,488
Upgrade HVAC-Admin Building	\$5,280
Records Retention Shelving	\$5,211
Replace Confined Space Entry Gas Detectors	\$5,065
Rigid Pipe Threader	\$4,492
AED Units	\$3,895
Diagnostic Equipment-Hydraulic Flow Tester	\$3,679
Combhammer Hilti Gun & Bits	\$1,886
True Chrome HD II Microscope Camera	\$1,614
Oil Lube System Pump Reel Kit	\$1,539
20-Ton Adjustable Vehicle Support Stands	\$1,448
**Analysis/Survey Clearing Water & Sewer Easements	\$10,305

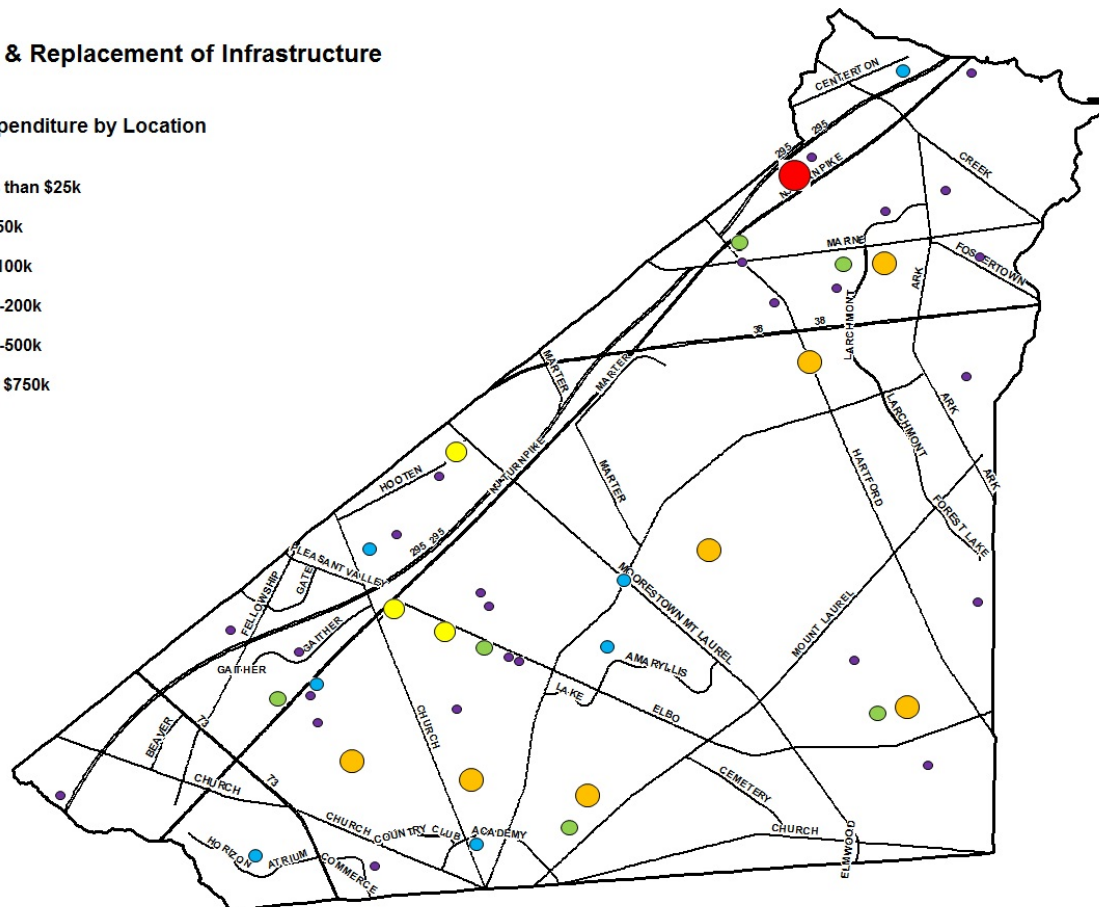
* *Multi-Year Project Completed this Fiscal Year*

** *Project Continuing into Subsequent Year(s)*

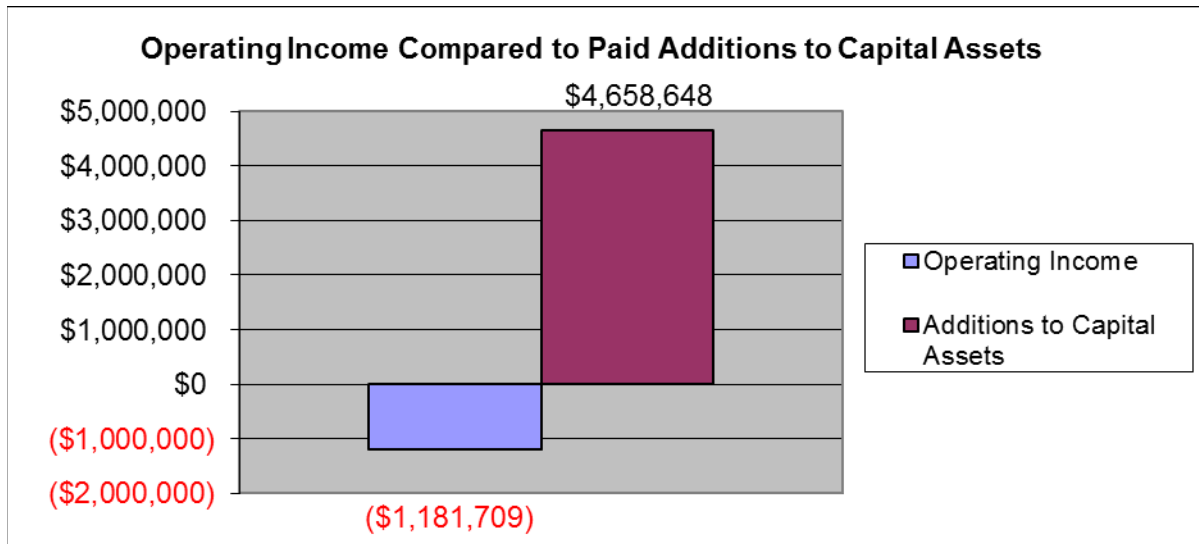
Renewal & Replacement of Infrastructure

Capital Expenditure by Location

- Less than \$25k
- \$25-50k
- \$50-100k
- \$100-200k
- \$200-500k
- Over \$750k



ASSET MANAGEMENT, CAPITAL ASSET, AND LONG-TERM DEBT ACTIVITY (CONT'D)



The above chart demonstrates the Authority's ongoing and unwavering commitment to keeping its systems and infrastructures current and well maintained. To provide a more expanded time frame, the Authority has made \$35.93 million of paid additions to its assets over the ten fiscal years of 2008 through 2017. \$27.83 million of these paid additions were provided by available cash reserves which were planned for and accumulated over many years for the specific purpose of paying for capital projects on a "pay as you go" basis. The source of these funds is the "Unrestricted" portion of the Authority's Net Position (see earlier chart). During the same ten year period of FY08 through FY17, the Authority's aggregate Operating Income has totaled \$10.29 million. This is a clear demonstration of the Authority's commitment to reinvest its operational results back into infrastructure and capital improvements. In addition, the Authority has issued \$8.7 million in debt over the past ten years, of which \$8.1 million was used for capital asset additions for certain capital projects. The Authority continually plans capital projects in both short and long range terms, including the assessment of whether to commit "Unrestricted" funds or to issue debt to finance those projects.



FY 2017 Water Main Replacement Project – Saint Andrews Court

ASSET MANAGEMENT, CAPITAL ASSET, AND LONG-TERM DEBT ACTIVITY (CONT'D)

Our five-year capital plan calls for the expenditure of \$38,120,500 with \$9,431,100 budgeted for the upcoming fiscal year. The Authority plans to fund these amounts in the following manner:

	Five year plan	Upcoming year
Projects funded from Unrestricted Net Position (including reserves for renewal and replacement)	\$ 19,578,500	\$ 4,691,100
Debt Authorization	\$ 18,542,000	\$ 4,740,000

The Authority has not experienced any change in its excellent credit rating, nor does it anticipate any. Although the Authority does not operate under any debt limitations, it is required to receive approval by Mount Laurel Township resolution prior to issuing any new debt.

In May 2003, the Authority refunded debt. In doing this, the Authority replaced the outstanding principal balances of its 1992 and 1994 bond issues with the 2003 bond issue. All bonds under the new issue will mature no later than the bonds on the refunded issues. By taking advantage of a very favorable interest rate market, the Authority was able to reduce its debt service by approximately \$1,070,000 over the life of the new bonds, while only increasing its outstanding bond debt by \$40,000.

In November 2005, the Authority finalized long term financing in the amount of \$23,772,200 on two major capital projects. The financing was arranged through the New Jersey Environmental Infrastructure Trust (NJEIT) loan program. This program has an advantageous structure which allows participants to borrow one portion of the funds at current market interest rates, and the other portion at a zero percent interest rate. The Authority's financing resulted in \$12,295,000 borrowed at rates between 4% and 5%, and \$11,477,200 borrowed interest free. The two capital projects associated with this borrowing were the Aquifer Storage and Recovery (ASR) project and the new Elbo Lane Water Treatment Plant.

In November 2007, the Authority completed a supplemental financing to the above November 2005 loan. This was primarily due to contractor bids being received for the new Elbo Lane Treatment Plant that were higher than anticipated after the 2005 loan amount was determined. This financing was in the amount of \$3,500,000. The financing was again arranged through the New Jersey Environmental Infrastructure Trust loan program. This program has an advantageous structure which allows participants to borrow one portion of the funds at current market interest rates, and the other portion at a zero percent interest rate. The Authority's financing resulted in \$2,635,000 borrowed at rates between 3.4% and 5%, and \$865,000 borrowed interest free. Additional supplemental loans were authorized that, when combined with the 2007 supplemental loan, created loans of roughly equal size, one bearing market interest rates and the other being interest free.

In December 2008, the Authority closed on the supplemental loans referenced immediately above. The two loans included one bearing market rate interest, in the amount of \$33,544. This loan was paid off immediately. The second, in the amount of \$1,677,183, is an interest free loan. Principal payments will cease in 2028.

In December 2009, the Authority closed on two loans from the New Jersey Environmental Infrastructure Trust totaling \$2,244,600 for the completion of a solar energy array that generates power for a sewer pumping station and a groundwater well. \$1,109,600 of this loan is at a zero percent interest rate. The remaining \$1,135,000 was borrowed at interest rates ranging from 2% to 5%. This project also included

ASSET MANAGEMENT, CAPITAL ASSET, AND LONG-TERM DEBT ACTIVITY (CONT'D)

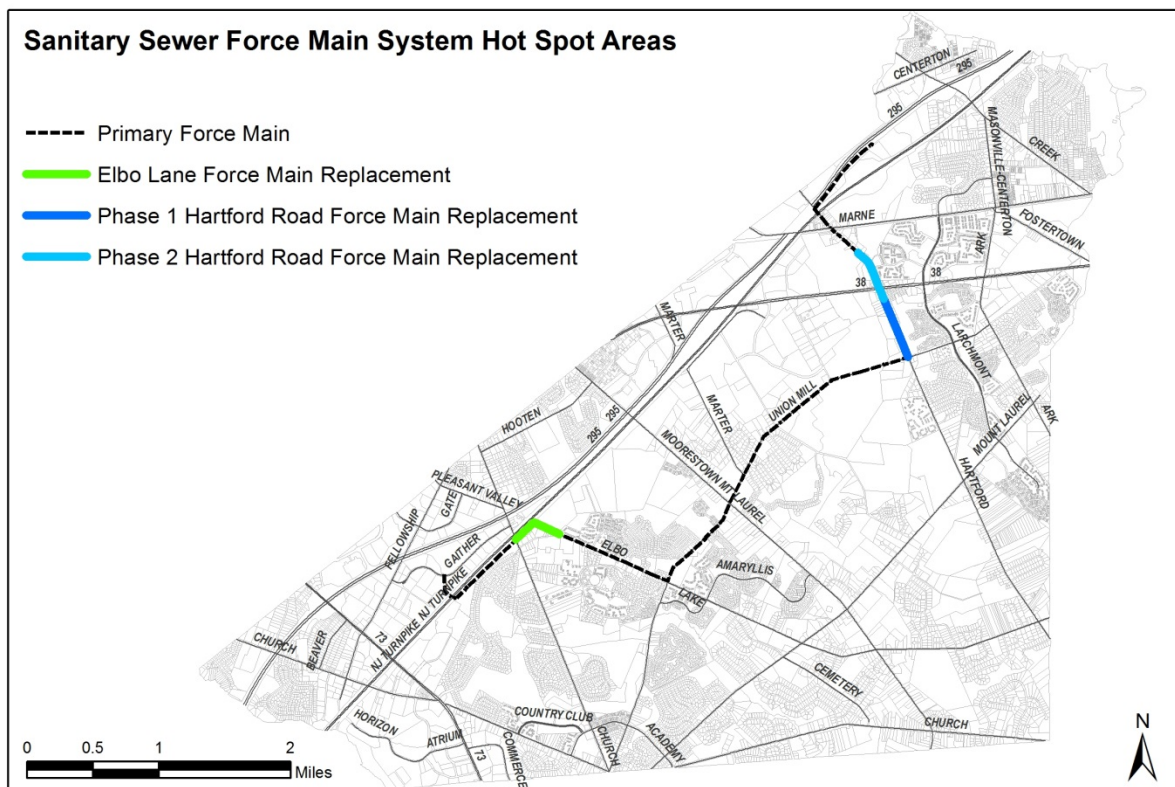
a Federal American Recovery and Reinvestment Act (ARRA) grant of \$2,219,200. The ARRA grant does not require repayment and was forgiven at closing. Principal payments will cease in 2029.

In March 2010, the Authority closed on two loans from the New Jersey Environmental Infrastructure Trust totaling \$1,282,000 for pipe lining and manhole rehabilitation. \$962,000 of this loan is at a zero percent interest rate. The remaining \$320,000 was borrowed at interest rates ranging from 3% to 5%. Principal payments will cease in 2029.

LOOKING FORWARD

The Authority continues to pursue and investigate alternative sources of water to meet user demand. Currently, the Authority must purchase from outside water purveyors in order to make up the difference between its user demand and its permitted withdrawal from its supply wells. The Authority believes the development of less expensive alternatives is possible. Several have been identified. If the Authority receives approval from the appropriate regulatory agencies and develops these alternatives, particularly the building of a surface water treatment plant, the operating expense for the purchase of water from outside purveyors can be significantly reduced. Capital expenditures for a new plant would be significant.

As part of the Authority's Asset Management Program, we have continually rehabilitated parts of our sanitary force main system. We have been analyzing and implementing options to replace or rehabilitate sections of this approximately 45 year old main due to sections of it prematurely reaching the end of their useful life. During this process we have been able to identify "hot spots" in the force main system and have attempted to prioritize these areas utilizing probability and consequence of failure. Currently two hot spots have been identified: Hartford Road near 38 and Elbo Lane near Church Street (see map).



LOOKING FORWARD (CONT'D)

The Hartford Road section is a critical length of pipe, with over 3 million gallons of sewage flowing through it daily. This represents almost 80% of the town's daily flow. Even with 20 tankers working non-stop, this is simply too much volume to haul away by truck in the event of a break. The Elbo Lane section is less critical due to its location near the beginning of the force main system, but the frequency of breaks has required its rehabilitation to be addressed.

The Authority included replacement of phases 1 & 2 of the Hartford Road force main in our FY18 budget after the board approved \$7 million for the replacement project. Results from additional corrosion control studies indicate that Phase 1 of the Hartford Road project remains a top priority; a \$2,561,111.00 contract was awarded on May 18, 2017 for construction. Phase 1 of the Hartford Road project is moving along very quickly and will be bid in the upcoming fiscal year as planned. It will be followed by the Elbo Lane replacement project. Although this work is moving forward we cannot rule out the fact that additional leaks are likely to occur on these sections of pipe before they are replaced.

The Authority intended to use NJEIT's emergency financing program for Hartford Road Phase 1; however NJEIT program requirements, such as requiring installation of the replacement pipe in the same trench as the existing pipe, precluded participation. Therefore, Authority will use the "Unrestricted" portion of the Authority's Net Position for initial funding, with a private borrowing for the Hartford Road Phase 1 force main project. The Authority plans to issue debt via the NJEIT for the Elbo Lane and Hartford Road Phase 2 force main replacement projects.

This financial report is designed to provide Mount Laurel's citizens and our customers, clients, investors and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the public funds it receives. If you have any questions about this report or need additional financial information, contact the Finance Director, Mount Laurel Township Municipal Utilities Authority, 1201 South Church Street, Mount Laurel, NJ 08054 or visit our website at www.mltmua.com.