

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 2016 (FY16, July 2015 – June 2016), the Authority generated a 337% cover. Key financial highlights for FY16 include:

- Total assets and total liabilities remained fairly static in FY16 when compared to Fiscal Year 2015 (FY15, July 2014 – June 2015). Current assets rose by roughly \$90,000, which represents a miniscule increase to total assets of about \$27 million. Total liabilities rose by \$546,300, which still represents an increase of only 1.6%.
- Service charges rose marginally, increasing slightly over \$343,000 compared to those of FY15. Connection fees increased substantially, finishing \$1.4 million higher than FY15. In total, operating and non-operating revenues outpaced operating and non-operating expenses by almost \$1.7 million in FY16. When added to the \$1.6 million of infrastructure installed by developers then turned over to the Authority for lifetime operating and maintenance, the Authority's Net Position increased by \$3.3 million in FY16.

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.

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 comparative 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.

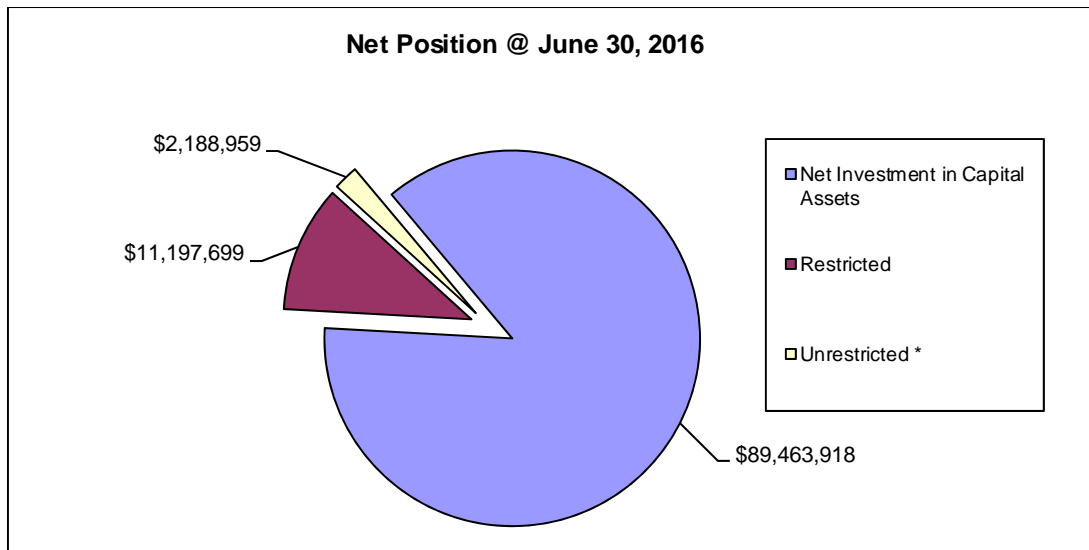
The comparative statements of cash flows provide a breakdown of the various sources of cash flow, categorized into four areas: Cash flows from operating activities, noncapital financing activities, capital and related financing activities and investing activities.

FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE

The Authority's total assets as of June 30, 2016 were \$136,758,476.65. 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>2016</u>	<u>2015</u>	<u>2014</u>
Current Assets	\$ 27,064,836.44	\$ 26,974,714.83	\$ 27,112,165.97
Capital Assets	109,693,640.21	109,710,007.93	110,942,833.59
Total Assets	136,758,476.65	136,684,722.76	138,054,999.56
Total Deferred Inflows of Resources	2,307,030.50	797,113.66	60,732.83
Current Liabilities	4,946,044.30	4,595,893.37	4,725,234.98
Long-Term Liabilities	29,167,523.84	28,971,358.24	21,852,073.57
Total Liabilities	34,113,568.14	33,567,251.61	26,577,308.55
Total Deferred Inflows of Resources	2,101,363.20	4,337,518.33	3,499,503.34
Net Position			
Net Investment in Capital Assets	89,463,918.30	87,699,945.38	85,939,152.89
Restricted	11,197,698.77	9,279,271.07	8,518,592.58
Unrestricted	2,188,958.74	2,597,850.03	13,581,175.03
Total Net Position	<u>\$ 102,850,575.81</u>	<u>\$ 99,577,066.48</u>	<u>\$ 108,038,920.50</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 Additions to Capital Assets" graph within the Asset Management, Capital Asset, and Long-Term Debt Activity section.

The Authority realized operating income of \$2,370,091.12 for the current year. When offset by a loss from non-operating activities, the Authority's income before capital contributions was \$1,676,359.53. During FY16, the Authority received capital contributions in the amount of \$1,597,149.80. 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, ownership of the new infrastructure is transferred by the developer 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 increasing by \$3,273,509.33. Major components of this activity follow.

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

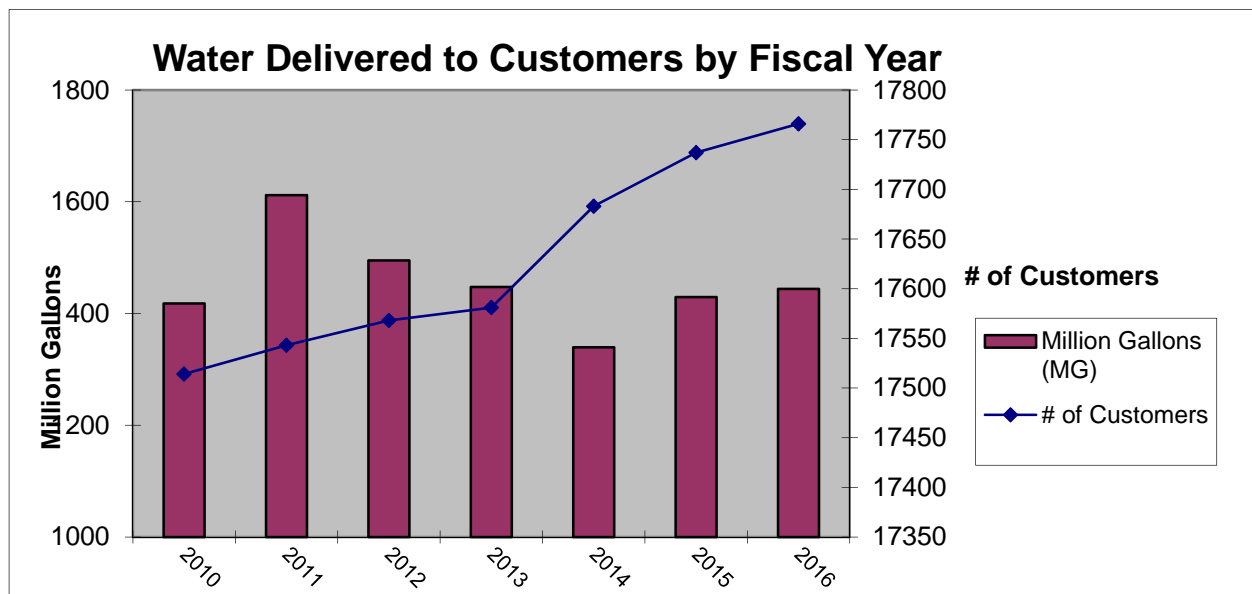
Mount Laurel MUA Revenues, Expenses and Net Position for the Fiscal Years Ended June 30,

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Utility Service Charges	\$ 19,267,645.00	\$ 18,924,464.65	\$ 17,726,907.56
Connection Fees	2,235,022.01	832,265.76	1,031,044.23
Other Operating Revenues	532,109.31	500,651.35	437,225.03
Total operating revenues	22,034,776.32	20,257,381.76	19,195,176.82
Operating Expenses	13,675,086.08	12,813,251.64	12,363,585.51
Depreciation expense	5,989,599.12	5,896,500.36	5,698,830.01
Operating Income	2,370,091.12	1,547,629.76	1,132,761.30
Non-operating Revenues (Expenses)			
Investment Income	132,447.14	37,342.67	148,854.91
Interest on debt	(373,233.49)	(411,253.73)	(543,236.41)
Loss on disposal of capital assets	(5,229.24)	(4,828.22)	(22,935.25)
Contribution to Mount Laurel Township	(447,716.00)	(498,892.00)	(578,390.00)
Income before contributions	1,676,359.53	669,998.48	137,054.55
Capital contributions	1,597,149.80	104,776.50	973,880.07
Increase in Net Position	3,273,509.33	774,774.98	1,110,934.62
Net Position - July 1	99,577,066.48	98,802,291.50	106,927,985.88
Change in Net Position	3,273,509.33	774,774.98	1,110,934.62
Net Position - June 30, Prior to Restatement	102,850,575.81	99,577,066.48	108,038,920.50
Restatement to Record the Net Pension Liability & Pension Related Deferred Outflows of Resources per GASB 68	-	-	(9,236,629.00)
	\$ 102,850,575.81	\$ 99,577,066.48	\$ 98,802,291.50

Service charges increased modestly in FY16 when compared to the previous year. The 1.8% increase in revenues was due to an additional 15 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)

Connection fee revenues saw a substantial increase when compared to the previous fiscal year. This was the result of several large projects connecting to the Authority's infrastructure in FY16 (increasing that 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. At this point, the Authority 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 has served the Authority well.



Investment income increased nicely, primarily due to several high interest rate investments purchased during FY16. A total of \$3.9 million was spent on investments having nominal interest rates ranging from 1.15% to 5.50%. Because the quality and interest rates on these new investments are so strong, the Authority also benefitted from a \$31,000 positive market value adjustment at fiscal year-end. The Authority's older investments are still performing well and will be evaluated at maturity to determine whether reinvestment or maintaining a cash position is the best option.

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 positive results for the year. Operating revenues generated an aggregate of \$22.035 million, up \$1.78 million (approximately 8.1%) from FY15. Connection fee revenues accounted for over \$1.4 million of this increase, as 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 contributed heavily to this revenue source. As mentioned earlier, service charges increased by a modest 1.8%, contributing an additional \$340,000 when compared to FY15. The Authority's operating expense, excluding depreciation, increased by approximately \$862,000 (6.3%) compared to FY15. The more significant changes in revenues and expenses are described in more detail below.

As the original budget for FY16 was formulated prior to April 2015, certain actual events during the year necessitated amending the budget. The Authority approved this budget amendment in June 2016. 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 \$17.17 million but were amended to \$17.88 million. This increase was due to an upturn in water delivered to service during FY16. 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 \$18.01 million.

Connection fee revenue was amended, from \$2.53 million to \$1.60 million. One significant project that was originally budgeted, but ultimately did not tie in during FY16, was the Hampton Inn Suites on Briggs Road. Its \$236,500 connection fee was a large factor when amending the budget. After the budget was amended, connection fees amounting to \$432,700 for Roger's Walk properties and \$78,500 for Brandywine Realty Trust were received. Several unanticipated projects throughout the year accounted for over \$200,000 in additional revenues. In the end, actual connection fee revenue realized for FY16 was \$2.24 million.

Other Operating Revenues increased by over \$30,000 compared to FY15 levels. The single largest factor for this overall improvement was steadily increasing market rate prices for the Solar Renewable Energy Credits (SREC) generated at the Authority's Ramblewood Parkway solar farm. At the beginning of FY16, the market price for a single SREC was approximately \$220. At the end of FY16, it was approximately \$250. Because the Authority generated nearly 700 SREC during the year, this resulted in about \$11,000 more revenue being recorded when compared to FY15.

The Authority's operating expenses of \$13.68 million for FY16 (not including depreciation) were \$860,000 higher than in FY15. 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 \$109,300 in FY16. This was the result of expense associated with hourly rate increases established in the current Collective Bargaining Agreement and normal, annual wage adjustments for the non-union staff. These additional expenses were offset somewhat by the savings associated with departures of a few long term employees throughout the year and their subsequent replacement with, generally, personnel receiving lower compensation. The current year's expense for all salaries and wages totaled \$4.211 million, compared with last year's \$4.102 million. The budget for this expense was originally set at \$4.267 million but was amended to \$4.186 million in response to actual costs such as those described above.

OPERATING REVENUES & EXPENSES (CONT'D)

Fringe Benefits exceeded the prior year by \$383,500; a 17.95% increase. The vast majority of this increase was the result of a GASB 68 related adjustment to the Authority's expense associated with the New Jersey Public Employees Retirement System (PERS). GASB 68, a Government Accounting Standards Board pronouncement, requires that long term liability for the Authority's proportionate share associated with PERS pension obligation be recognized. In light of that, the Authority was obligated to increase its PERS expense in FY16 by an additional \$373,100. This accounts for nearly all of the \$383,500 year over year increase in fringe benefits. The remaining increase is due to factors such as is increased FICA expense associated with an increase in the salaries and wages line items (discussed previously), personnel leaving and starting at the Authority and the corresponding timing of the health insurance coverage they chose.

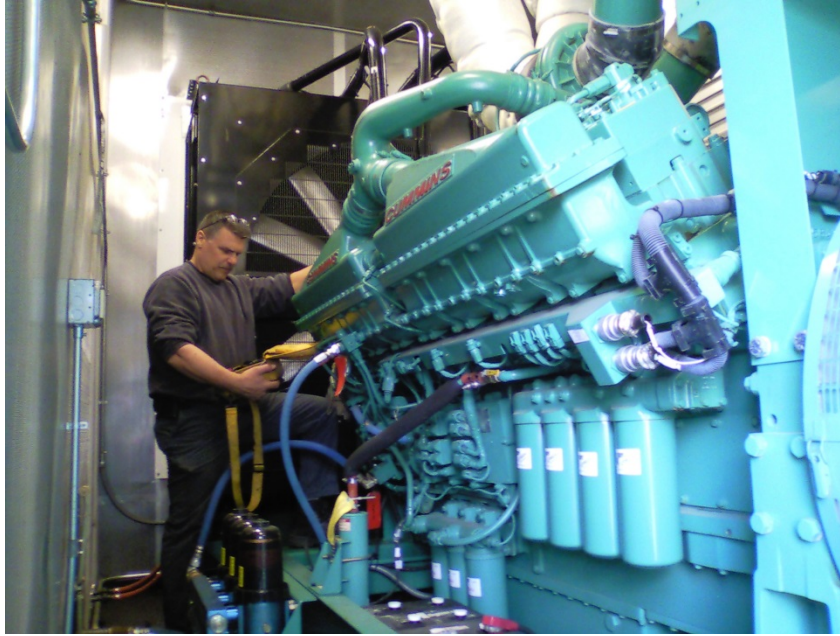


Working on the Hartford Rd WPCF UV Disinfection Tank Gate

Electricity costs decreased in the current year by \$145,618 (12.5%). The Authority renewed our 3rd party electric supply contract as recommended by our energy consultants in an attempt to stabilize electrical costs. At our Wastewater Treatment Facility, the replacement of our existing Ultraviolet Disinfection system with a more efficient system provided a decrease in consumption. In addition, the impact of a milder winter from past years allowed a reduction in overall consumption at many of our remote sites that utilize electric for heating purposes.

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. 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.

OPERATING REVENUES & EXPENSES (CONT'D)



Routine Standby/Emergency Generator Maintenance

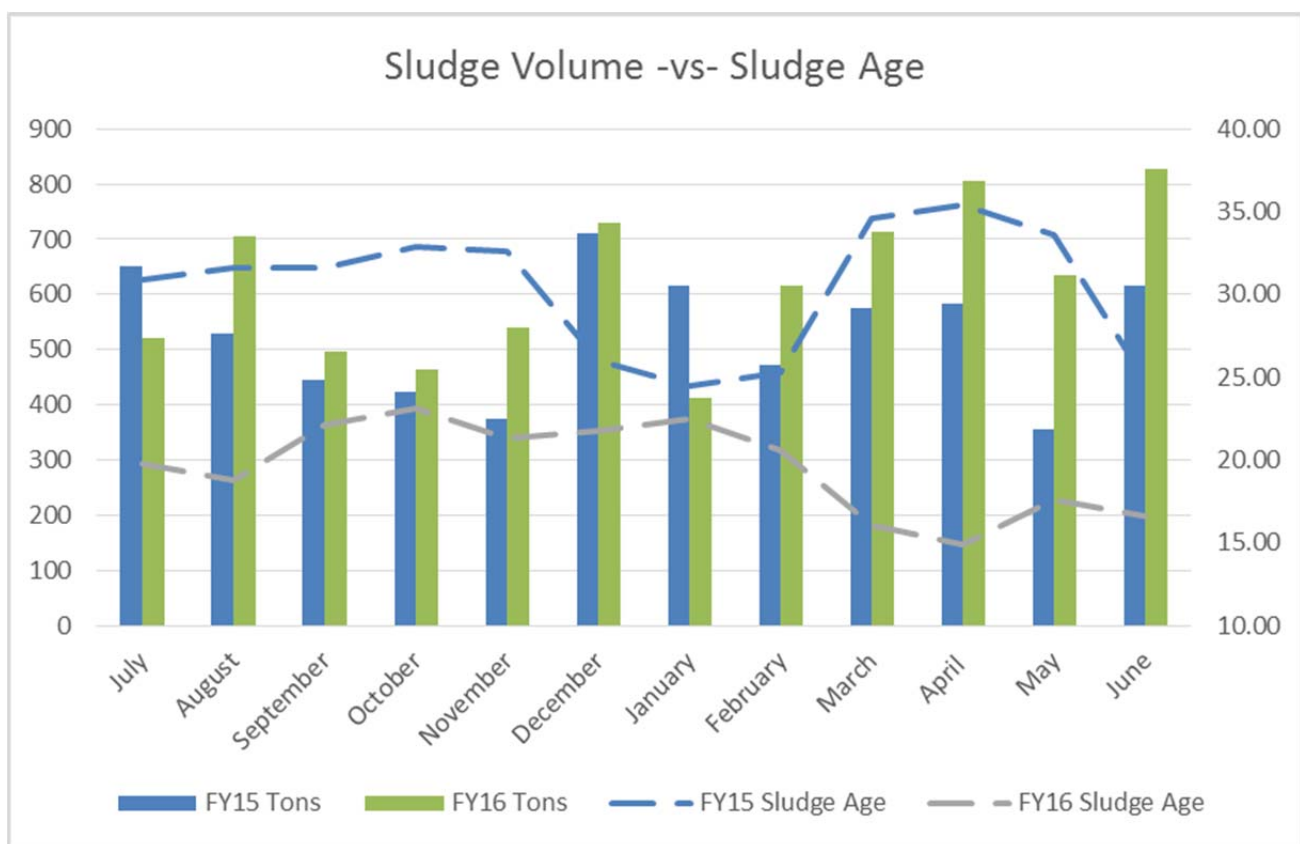
The New Jersey Department of Environmental Protection has restricted the Authority to a withdrawal of water from the Potomac-Raritan-Magothy Aquifer equal to the demand of the Township in 1980. However, because the Authority serves a township that has experienced explosive growth subsequent to 1980, it is forced to purchase more and more of its water from other water purveyors. During the current fiscal year, approximately 59% (about 858 million gallons) of Mount Laurel's water demand was purchased from these purveyors. In FY15, these purveyors provided 50% (about 716 million gallons) of Mount Laurel's water supply. The Authority continues to seek alternative, less expensive ways to provide water to its service area.

The purchase of water from outside purveyors increased by nearly \$89,318 (4.3%) in FY16 due to slightly higher customer demand for water this year. Although the Authority's water supply contract with New Jersey American Water Company (NJAWC) requires purchasing all water volume designated by the Authority, we were able to reduce this year's purchase from NJAWC by 50 million gallons compared to last year. This was possible because we were able to fully utilize our own supply sources including previously purchased water banked in our ASR well in conjunction with the flexibility of the Willingboro MUA contract to meet customer demands, thereby eliminating the more expensive use of NJAWC supply.

The ASR, which allows the storage of large quantities of potable water for an extended time period, originally required the recovery of the stored water within a 12 month period. The successful completion of a pilot program has permitted the ability to "bank" purchased water until demand requires its use. This ability will be extremely useful managing purchase contracts including the utilization of less expensive sources described above.

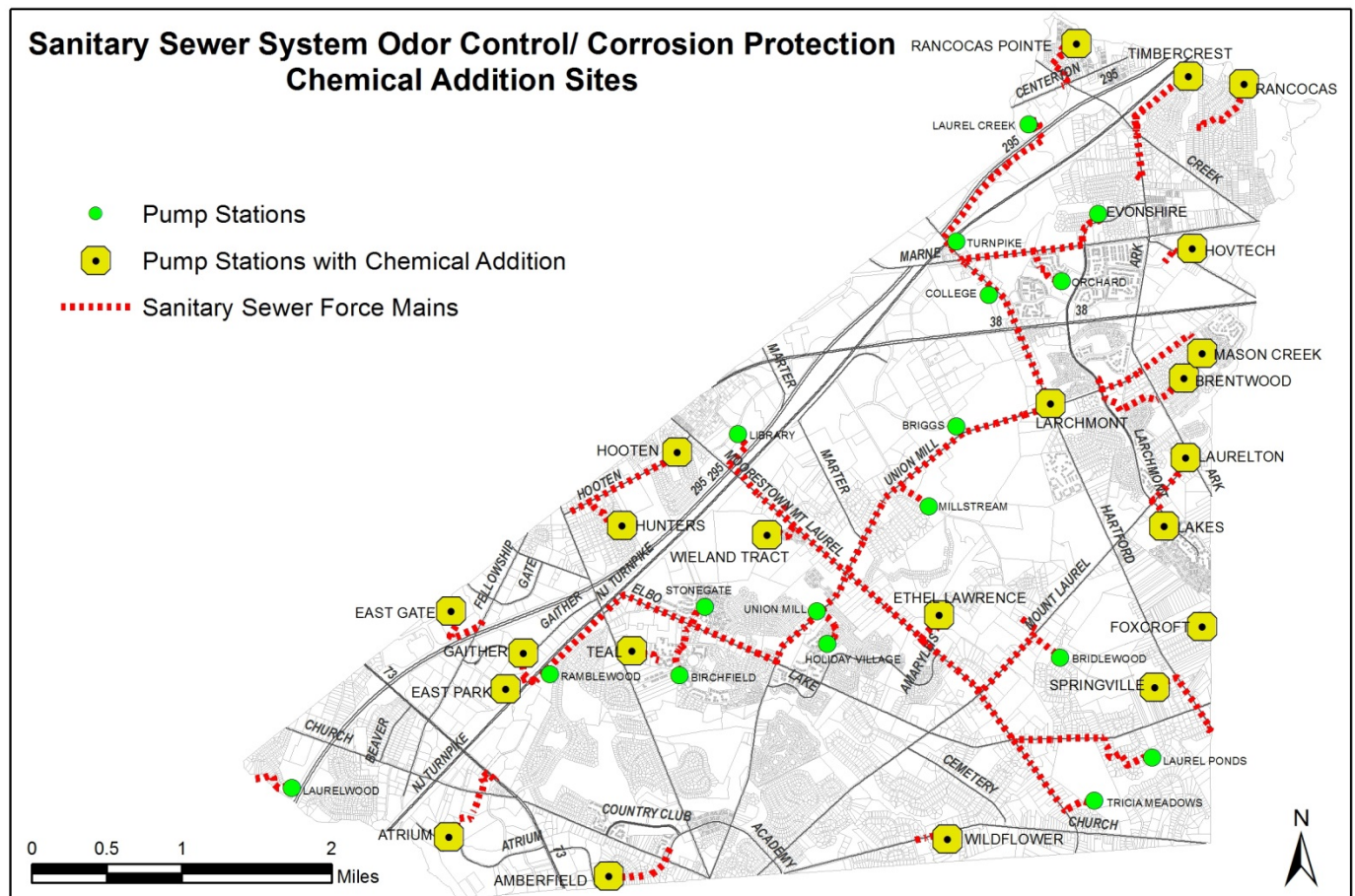
OPERATING REVENUES & EXPENSES (CONT'D)

The cost related to the disposal of bio-solids (sludge) at the Hartford Rd Wastewater Treatment Facility increased by \$204,817 (36.9%) in the fiscal period. This spending was impacted by the renewal work that began on one of our two secondary clarifiers. The project required the removal of sludge from one of the units after that unit experienced a premature catastrophic failure. That additional sludge removal accounted for almost 50% of the increased spending that occurred this fiscal year. The other factor impacting bio-solids spending was due to operational changes needed to ensure compliance with all regulatory parameters during the rehabilitation work. Since one of the two secondary clarifiers was out of service during rehabilitation, it was necessary to decrease the sludge age in the plant. There is a direct relationship of sludge age and the amount of bio-solids in a treatment facility. As the chart below shows the amount of sludge removed (tons) increases as the sludge age decreases. This operational change will need to remain in place until the renewal work on both secondary clarifiers is completed in FY18.



OPERATING REVENUES & EXPENSES (CONT'D)

Chemical expense overall increased significantly when compared to FY15. Total actual costs were \$665,035 in FY16 compared to \$543,229; an increase of \$121,806 (22.4%). In the sewer utility, higher temperatures and a more direct control of dosage based treatment facility testing during FY16 resulted in a significant increase in the use of odor control chemicals. Temperatures impact on chemical use is normal, as corrosive gasses generated by sewage increase during periods of rising and higher temperatures. The improved communication of test results to allow adjustments of chemical additions at the Larchmont Pump Station provided greater control, but the cost of this control is being examined to determine the effectiveness of the dosage changes being made.

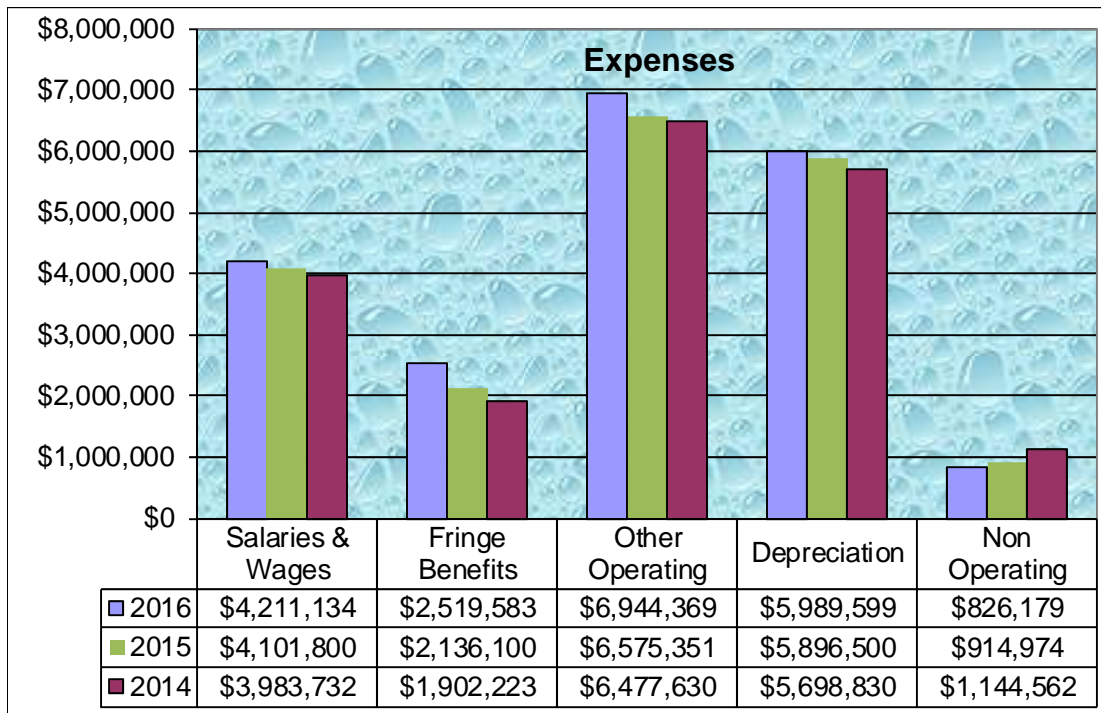
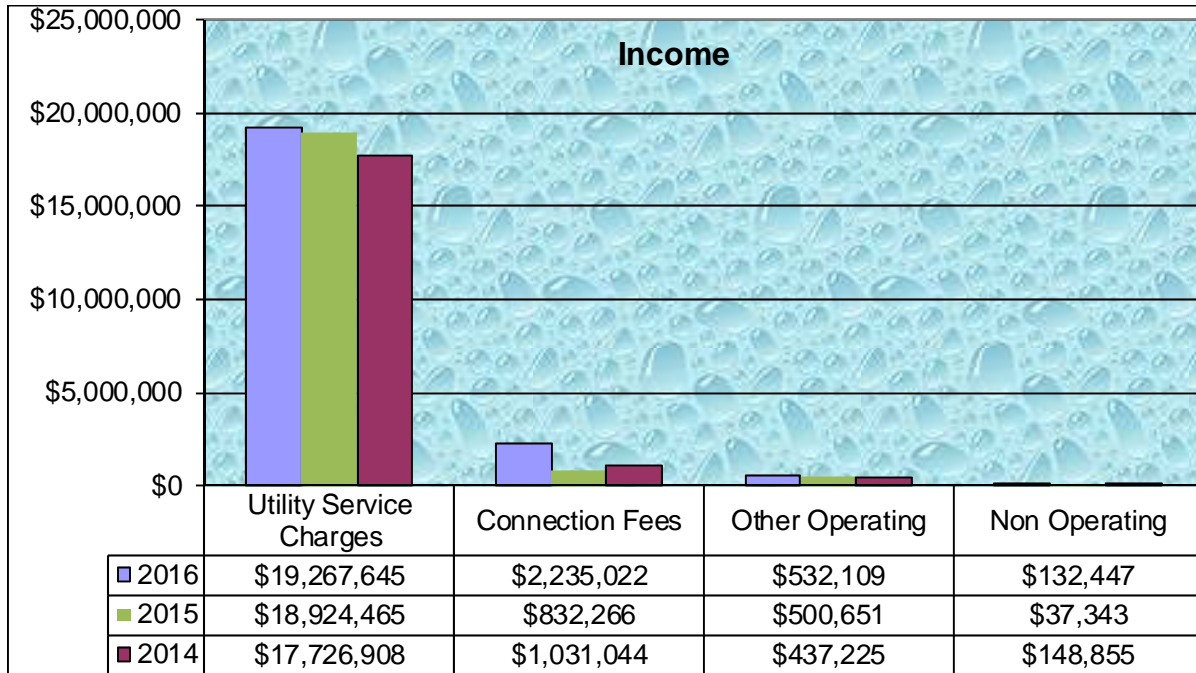


Interest expense in FY16 dropped by \$38,000. As outstanding principal balances get paid down and bond issues approach expiration, a greater portion of debt service payments are toward principal balances. Inversely, interest expense becomes less. The Authority did not take on any new debt in FY16.

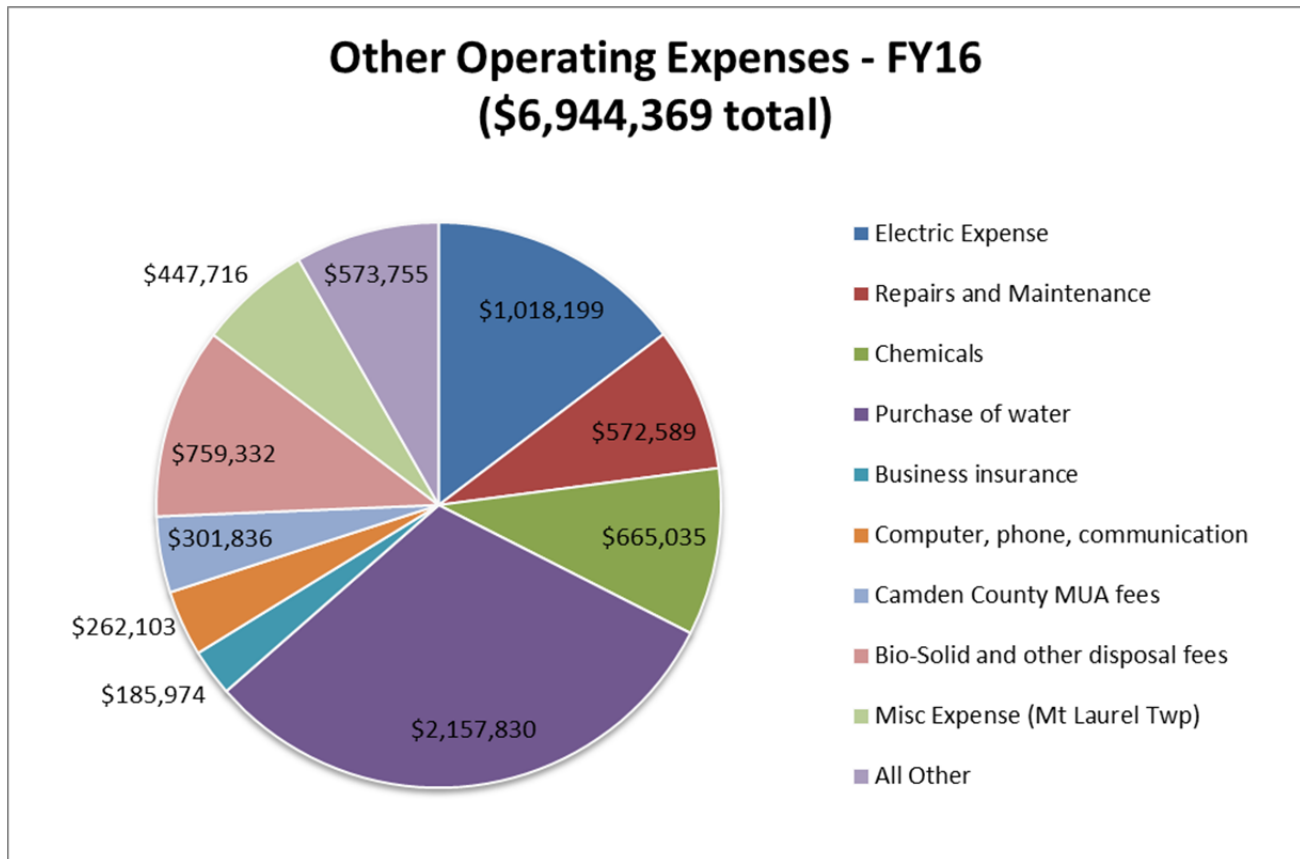
The Authority contributed \$447,716 to Mount Laurel Township, the seventh straight year a contribution has been made. This amount was determined in accordance with N.J.S.A. 40A:5A-12.1. With this contribution, the Authority has now given a total of \$3,496,998 to the Township.

OPERATING REVENUES & EXPENSES (CONT'D)

Graphical representations showing revenues and expenses for the three fiscal years of 2014, 2015 and 2016 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 dollars within the next 20 years in order to continue providing safe water to the public. In addition, the 2013 American Society of Civil Engineers Infrastructure Report Card estimated that New Jersey wastewater (and storm water) infrastructure needed \$32.5 billion dollars of improvements in the next 20-30 years. 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.

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.

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

Because the Authority has invested nearly \$219 million in its infrastructure, and keeping the staggering estimated state amounts mentioned above in mind, 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. 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 process to anticipate the timing and scope of future capital projects.

During FY16, the Authority expensed \$4.38 million for capital assets. By including retainage and other pre / post year adjustments, the more significant capital additions were as follows:

<u>Asset</u>	<u>Amount Disbursed in FY16</u>
**Upgrade Water & Sewer SCADA Systems	\$ 659,066
Hartford Rd Wastewater Treatment Facility (HRWPCF) Rehabilitation	
*Secondary Clarifier #1 Rehabilitation	\$ 452,935
*Rehabilitate Plant Administration and Control Building	\$ 11,090
Replace ICP Unit for Certified Laboratory	\$ 86,662
UV4000 Disinfection System Rehabilitation of Slides Gates	\$ 75,226
Orbal Aerator Motor Gear Boxes Replacement	\$ 28,395
Rebuild Sludge Comminutor (A) Motor	\$ 27,930
Replace Control Panel on Utility Water System	\$ 24,314
Sludge Transfer Pump Rehabilitation	\$ 21,612
Replace Primary Sludge Pump #1	\$ 18,168
Replace/Repair/Rehab Orbal Motors	\$ 12,855
Replace Plant Sanitary PS Pump # 2	\$ 11,276
Replace Safety Disconnect Aerator on Orbal Unit	\$ 10,951
Replace WAS Pump # 2	\$ 9,655
Replace Micro Logics & Operator Interface	\$ 9,040
Rehabilitate Slide Gate & Cell # 4 Weir Gate	\$ 8,996
Replace Level Sensors on Sludge Thickener Tank	\$ 8,793
Replace Gas Pump and Software Upgrade	\$ 8,395

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

<u>Asset</u>	<u>Amount Disbursed in FY16</u>
Hartford Rd Wastewater Treatment Facility (HRWPCF) Rehabilitation (Cont'd)	
Inspections of Teacup Unit	\$ 7,600
Rehabilitate Utility Water Booster Pumps & Impellers	\$ 7,500
Replace Overhead Doors on Sludge Filter Press Building	\$ 6,620
Replace Weather Refrigerated Sampler for Hartford Rd Facility	\$ 5,943
Replace Utility Water Hydrant	\$ 5,480
Replace 6" Valve	\$ 3,286
Replace Hubs and Wood Couplings on Orbal Aeration Units	\$ 3,072
Replace AC Unit for Sludge Press Building	\$ 1,043
** Paving and Drainage Upgrades	\$ 10,998



A crane removes part of the Secondary Clarifier bridge as part of the \$ 506,025 rehabilitation project which began in FY15 and was completed in FY16

Sanitary Sewer Pump Station Rehabilitation

*Installation of New Controls for Orchard PS	\$ 16,478
*Replace Automatic Transfer Switch at Hovtech Pump Station	\$ 10,494
Orchard PS Site Work & 81 Elbo Lane Paving Rehab	\$ 171,803
Rebuild Motors, Pumps & Impeller Replacement Various PS	\$ 40,208
Replace Mason Creek PS Stand-By Generator, Trans Switch & Fuel Tank	\$ 29,900
PS Evals (Bridlewood, East Gate II, College & Laurel Ponds)	\$ 26,166
Replace Turnpike PS Stand-By Generator, Transfer Switch & Fuel Tank	\$ 25,500
Install Cathodic Protection at Hunters, Tricia Meadows, East Park, & College PS and HRWPCF Gas Piping	\$ 22,555

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

Asset

Amount Disbursed in FY16

Sanitary Sewer Pump Station Rehabilitation (Cont'd)

Replace Pump # 1 at Birchfield PS	\$ 20,280
Replace Drywell Hatch at Birchfield PS	\$ 11,904
Repair to Hoist at Larchmont Pumping Station	\$ 8,900
Replace Fences: Mason Creek, Larchmont, Ramblewood, Lakes, Tricia Meadows & Hovtech PS	\$ 7,475
Replace Check Valve at Ramblewood PS	\$ 6,791
Replace Volutes for Union Mill PS	\$ 5,457
Replace AC Unit at Ramblewood PS	\$ 5,427
Replace Transducers for Various PS	\$ 4,861
Replace Electric Winches on Various PS	\$ 4,144
**Level Control & Electrical Upgrade Timbercrest PS	\$ 140,756
**Level Control & Electrical Upgrade Birchfield PS	\$ 140,756
** Level Control & Electrical Upgrade Turnpike PS	\$ 77,366
** Level Control & Electrical Upgrade East Park PS	\$ 77,365
**Replace/Rebuild Hunters PS	\$ 12,966
**Corrosion Evaluation & Analysis of PS (College, Amberfield, Holiday Village East, & Stonegate)	\$ 6,569



Birchfield PS Rehabilitation Work

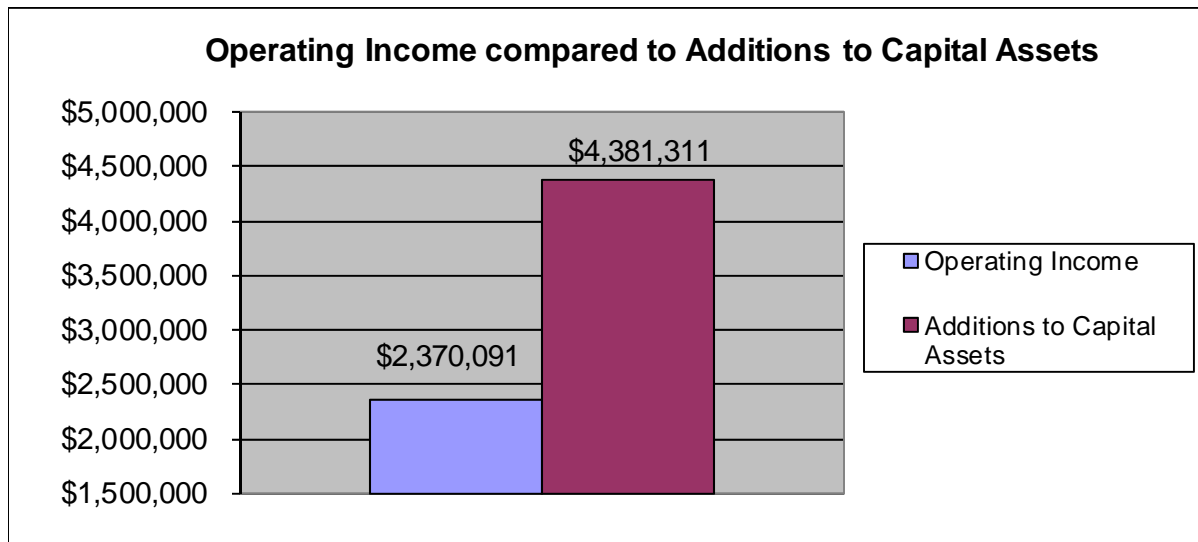
Sanitary Sewer Force Main Repairs and Replacements:

*Hunters Force Main Replacement & Install Country La. Water Main	\$ 29,325
Primary Force Main South Church Street & Elbo Lane	\$ 34,533
Primary Force Main Union Mill Road & Briggs Road	\$ 26,425
** Primary Force Main Hartford Road	\$ 430,271

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

<u>Asset</u>	<u>Amount Disbursed in FY16</u>
Sanitary Sewer Force Main Repairs and Replacements (Cont'd):	
**Walt Whitman Avenue – Library Force Main	\$ 65,143
** Hartford Rd & Marne Hwy FM Connection Replacement (design)	\$ 12,530
** Hartford Road Force Main & Valve Vault Repair	\$ 3,512
Sanitary Sewage Collection System	
*Replace/Rehab Sewer Main on Ramblewood Pky & Devonshire Rd	\$ 26,396
TV, Cleaning and Assessment of Sanitary Sewer Mains	\$ 112,320
Replace/Line Various Gravity Sewer Mains	\$ 31,359
Elbo Lane Water Treatment Plant Rehabilitation	
*Clarifiers Repair/Rehab	\$ 15,314
Roof Repair	\$ 14,864
Swing & Pedestrian Gate Rehabilitation	\$ 14,160
Replace Sludge Meter on Clarifier # 2	\$ 8,782
Replace VFD on High Service Pump #1	\$ 6,775
Repair Sludge Pump	\$ 2,380
Replace Ice Machine	\$ 2,060
**Replace Fluoride Addition Systems	\$ 41,659
**HVAC Rehabilitation	\$ 11,777
Water Main Replacements:	
Fire Hydrant Replacements	\$ 21,090
Rancocas Woods Section	\$ 5,310
Replace Hydrant Rings	\$ 3,291
**Wharton Road	\$ 186,312
**Saint David's Drive	\$ 91,631
**South Saint Andrews Drive	\$ 27,951
**Amsterdam Road	\$ 22,609
Wells and Booster Stations	
Well # 7 ASR Repairs/Rehab/Replacement & Additions	\$ 89,231
Replace 155kw Portable Generator Ark Rd Booster Station	\$ 77,718
Water Storage Tanks Inspections	\$ 15,400
Replace VFD's Willingboro Booster Station	\$ 6,455
Replace Heaters for Well No 7 and Horizon Way Booster Station	\$ 2,630
Water Meter Reading	
**Meter Change Out Program	\$ 205,226
Replace Meter Reading Hand Held Equipment	\$ 14,776
Replacement Parts & Repairs for Vehicle 42 and Jetter Hose	\$ 12,434

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 \$30.87 million of paid additions to its assets over the nine fiscal years of 2008 through 2016. \$22.77 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 nine year period of FY08 through FY14, the Authority's aggregate Operating Income has totaled \$11.47 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 nine 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.



Routine Maintenance at the Hartford Rd WPCF Sludge Thickening Tank

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

Our five-year capital plan calls for the expenditure of \$38,668,410 with \$9,951,010 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)	\$ 22,433,410	\$ 4,726,010
Debt Authorization	\$ 16,235,000	\$ 5,225,000

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 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.

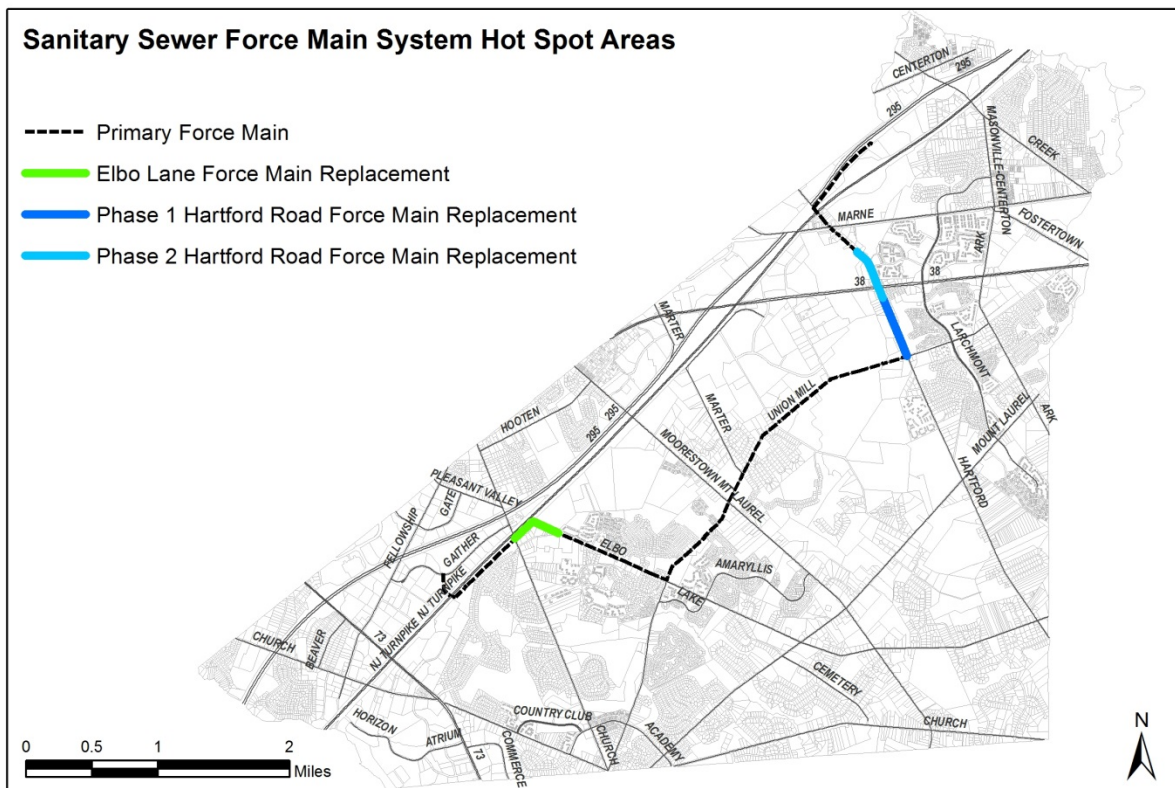
In December 2009, the Authority closed on two loans from the New Jersey Environmental Infrastructure Trust totaling \$2,244,600 for the completion of a solar energy array that generates power for a sewer pumping station and a groundwater well. \$1,109,600 of this loan is at a zero percent interest rate. The remaining \$1,135,000 was borrowed at interest rates ranging from 2% to 5%. This project also included 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 has been actively pursuing alternative sources of water to meet user demand. Currently, the Authority must purchase from outside water purveyors the difference between its system demand and its permitted withdrawal from the Potomac-Raritan-Magothy aquifer. 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 45 year old main due to sections of it prematurely reaching the end of its 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

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.

LOOKING FORWARD (CONT'D)

The Authority included replacement of phases 1 & 2 of the Hartford Road force main in our FY17 budget after the board approved \$7 million for the replacement project. We have retained a firm which specializes in corrosion control to help us utilize asset management principles and in designing and prioritizing the work needed in the hot spot areas. Design for 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 either by the Elbo Lane replacement or Phase 2 Hartford Road project. Although this work is moving forward we cannot rule out the fact that additional leaks are likely to occur on this section of pipe before it is replaced. The Authority plans to issue debt via the NJEIT for these projects.

The Authority was previously named as a defendant in a landfill lawsuit (known as BEMS). A settlement agreement has been reached which requires the Authority to make five annual installment payments of \$9,147.20. The fifth and final of these payments was made in June, 2016.

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.