WATER AUTHORITY OF WESTERN NASSAU COUNTY COMPREHENSIVE ANNUAL FINANCIAL REPORT FISCAL YEARS ENDED MAY 31, 2017 AND 2016 (WITH INDEPENDENT AUDITORS' REPORT THEREON)



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## SECTION A: INTRODUCTORY SECTION



# *Water Authority* of Western Nassau County

#### **LETTER OF TRANSMITTAL**

August 30, 2017

The Honorable Members of the Board of Directors and our Customers Water Authority of Western Nassau County 1580 Union Turnpike, New Hyde Park, NY 11040-1762

The Department of Accounting is pleased to transmit the Comprehensive Annual Financial Report ("CAFR") of the Water Authority of Western Nassau County, ("the Water Authority") for the fiscal year ended May 31, 2017. This letter of transmittal is designed to complement the Management's Discussion and Analysis ("MD&A") and should be read in conjunction with it. The Water Authority's MD&A can be found on pages 33-48, immediately following the report of the independent auditors.

INTRODUCTION

#### **Management Representation**

New York State Public Authorities Law requires that every public authority publish, within 90 days of the close of each fiscal year, a complete set of audited financial statements. This report is published to fulfil that requirement for the fiscal year ended May 31, 2017. This report was prepared by the Accounting Department of the Water Authority in conformance with the current accounting and financial reporting principles promulgated by the Governmental Accounting Standards Board ("GASB"), on a consistent basis. The presentation of data is designed to comply with the guidelines recommended by the Government Finance Officers Association of the United States and Canada ("GFOA").

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal controls that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. To the best of our knowledge and belief, the information provided in the comprehensive annual financial report (CAFR) is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the Water Authority. All disclosures necessary to enable the reader to gain an understanding of the Water Authority's financial and operational activities have been included.

Tabriztchi & Company, CPA, P.C., Independent Certified Public Accountants, have issued an unmodified ("clean") opinion on the financial statements of the Water Authority of Western Nassau County, for the year ended May 31, 2017. The independent auditors' report is located at the front of the financial section of this report, pages 29 to 31.

#### **Organization of Report**

The CAFR is presented in four sections as follows:

- 1. The *Introductory Section (Section A)* includes this transmittal letter, excerpts from the charter, organization chart, and the list of principal officials, and is intended to familiarize the reader with the organizational structure of the Water Authority and the nature and scope of the services provided. This letter is designed to complement the MD&A and should be read in conjunction with it. The Introductory Section can be found on pages 1 through 27.
- 2. The Financial Section B (Section B) includes the independent auditors' report on the basic financial statements, the management's discussion and analysis (MD&A) of the Water Authority's overall financial position and results of operations, the audited financial statements, including the accompanying note disclosures and the required supplemental schedules. The Water Authority's MD&A, basic financial statements, including notes and the required supplemental schedules can be found on pages 29 through 87.
- 3. The *Statistical Section (Section C)* contains comprehensive statistical data on the Water Authority's financial trends, revenue capacity, debt capacity, demographic and economic environment and operating information for the past ten years. The Water Authority's Statistical Section can be found on pages 89 through 125.
- 4. The *Compliance Section (Section D)* contains the independent auditors' report on compliance and on internal control over financial reporting based on an audit of financial statements performed in accordance with government auditing standards. The report is presented on pages 127 and 128.

# **Organization's Profile**

The Water Authority was established on July 25, 1990, pursuant to the "Water Authority of Western Nassau County Act" of the State of New York, as amended on July 31, 1992 and codified under Title 8-C of Article 5 of the Public Authorities Law. On May 28, 1996, the Water Authority, by exercise of the power of eminent domain, acquired the water supply and distribution system situated in the District previously owned by the Jamaica Water Supply Company. The Water Authority serves a population of approximately 120,000 within the Town of Hempstead and the Town of North Hempstead.

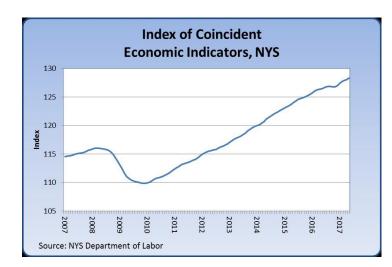
The Water Authority is neither required to pay taxes, special ad valorem levies or special assessments upon the real property owned by it, nor is required to pay any filing, recording or transfer fees or taxes in relation to instruments filed, recorded or transferred by or on its behalf. The Water Authority may pay, or enter into agreements with any municipality to pay annual amounts for the real property located in that municipality that constitutes a part of the District. The drilling of wells and acquisition of water are subject to the Jurisdiction of the State of New York, Department of Environmental Conservation ("DEC"). The powers of DEC in this respect are statewide and extend on all water service providers.

The mission of the Water Authority is as follows: *To satisfy customer expectations for high quality, reliable water service provided in a responsive and efficient manner at the lowest reasonable price.* 

#### LOCAL ECONOMIC CONDITIONS AND OUTLOOK

#### **Current Economic Conditions**

The New York State Department of Labor's Division of Research and Statistics calculates and publishes a monthly composite index of business cycle indicators. More formally known as the Index of Coincident Economic Indicators (ICEI), the index is designed to provide reliable and timely information about current economic conditions in New York State. The ICEI model combines and weights four key indicators of statewide economic activity, which have historically moved in conjunction with the state's business cycles: (1) private sector employment, (2) unemployment rate, (3) average weekly hours of manufacturing workers and (4) sales tax collections. The ICEI base value was set at 100, for July 1992.



The ICEI increased by 1.95 points (1.54%) from 126.48, in May 2016 to 128.43, in May 2017.

Since 1970, there have been seven distinct recessions in the U.S. and New York State. Recessions in New York have tended to be significantly longer than their national counterparts. This trend has become more pronounced over the past 30 years. The last four recessions in New York State (dating back to 1981) have averaged just under 2½ years in length, while the last four national recessions have averaged just over one year in duration.

U.S. Department of Housing and Urban Development Office of Policy Development and Research, *Comprehensive Housing Market Analysis Nassau-Suffolk (Long Island), New York*, April 1, 2017, indicates that the economy of Long Island grew at a moderate pace from 2003 through 2007, but job growth lagged the nation. During the 5-year period, nonfarm payrolls increased by an average of 9,200 jobs, or 0.7 percent, compared with nationwide growth that averaged 1.1 percent annually. In Long Island, gains were largest in the education and health services and the professional and business services sectors. Partially offsetting these gains were losses in the manufacturing, information, and financial activities sectors.

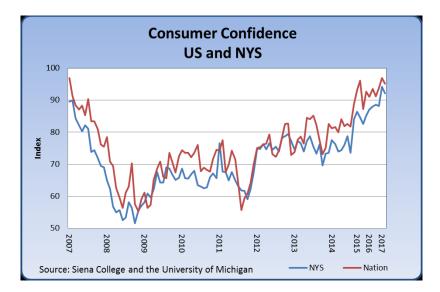
During 2008 and 2009, the national recession impacted economic conditions in Long Island, but the effect was not as serious relative to other parts of the nation, in part, because of the relative stability of New York City. During this period, nonfarm payrolls in Long Island decreased by an

average of 19,000 jobs, or 1.5 percent, annually. The rate of decline was higher than the 0.7percent annual rate in New York City, but lower than the nationwide rate of 2.5 percent annually. Within Long Island losses were largest in the wholesale and retail trade and the professional and business services sectors, largely in response to a decline in demand for consumer products because of elevated unemployment numbers. During the five-year period from 2009 to 2013, more than 20 percent of all working residents in Long Island held a job in one of the five boroughs of New York City.

Economic conditions in Long Island improved at a moderate pace from 2010 through 2016, but job growth was slower than the nation. During the 7-year period, nonfarm payrolls increased by an average of 14,200 jobs, or 1.1 percent, annually, compared with nationwide payroll growth of 1.4 percent annually. Job gains were largest in the education and health services, the leisure and hospitality, and the professional and business services sectors.

## **Consumer Confidence**

New York consumer confidence is measured in a monthly survey by the Siena Research Institute by random telephone calls to 805 New York State residents over the age of 18. This index allows a direct comparison to the University of Michigan's Consumer Sentiment index for the nation.



In the second quarter of 2017, Consumer Confidence Indices for NY and the US were 92.1 and 95.1, respectively, as compared to 88.0 and 93.5, respectively, in the second quarter of 2016. The annual increase in consumer confidence index for New York was 5% and for the US was 2%.

#### Wages and Salaries in Nassau County

According to US Bureau of Labor Statistics, in March 2017, the number of persons employed in Nassau County was 619,400. The number of employed persons has increase by 1.3% from March 2016. In first quarter of 2017, Nassau County had average weekly wages of \$1,175, which placed it as the 69<sup>th</sup> highest, among the 347 largest counties nationwide.

The preliminary estimates of Nassau County annual averAge employment and wage information, for 2016, are shown in the following table:

#### NASSAU COUNTY ANNUAL REPORTING UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES AND AVERAGE WAGES-BY INDUSTRY SECTORS

	2016			
	Reporting	Average		Average
Industry	Units	Employment	<b>Total Wages</b>	Wages
Total, All Industries	53,128	622,054	\$37,284,095,703	\$59,937
Total, All Private	52,400	544,081	31,381,340,335	57,678
Total, All Government	730	77,973	5,902,755,368	75,703
Health Care and Social Assistance	5,939	125,346	7,675,099,192	61,231
Professional and Technical Services	7,004	38,578	3,073,460,512	79,669
Retail Trade	5,904	80,141	2,718,447,145	33,921
Finance and Insurance	2,721	29,912	2,589,719,636	86,578
Wholesale Trade	3,243	26,802	2,287,730,431	85,357
Construction	4,355	30,058	2,263,217,815	75,295
Information	540	10,367	1,626,827,365	156,924
Administrative and Waste Services	3,437	32,329	1,482,496,779	45,857
Manufacturing	1,077	17,334	1,168,069,921	67,386
Accommodation and Food Services	3,367	48,781	1,127,579,873	23,115
Other Services, Ex. Public Admin	5,930	29,925	989,916,673	33,080
Educational Services	710	20,802	925,087,599	44,471
Transportation and Warehousing	1,142	15,537	824,816,489	53 <i>,</i> 087
Management of Companies and Enterprises	248	7,343	786,868,395	107,159
Real Estate and Rental and Leasing	2,577	10,644	701,956,634	65,949
Arts, Entertainment, and Recreation	847	11,701	475,980,261	40,679
Utilities	38	3,882	452,545,993	116,575
Unclassified	3,281	4,400	203,179,652	46,177
Agriculture, Forestry, Fishing and Hunting	36	190	7,455,943	39,242
Mining	4	12	884,027	73,669

Source, New York State, Department of Labor, Quarterly Census of Employment and Wages

In 2016, the annual average employment for all industries was 622,054 as compared to 612,870, in 2015. In 2016, 544,081 (87.5%) of employees worked in private sector and 77,973 (12.5%) in government. The private sector accounted for \$31,381 million (84.2%) and government for \$5,849 (15.8%) of the \$37,284 million total wages paid. The average salaries for the private sector employees was \$57,678 as compared to \$75,703 for governmental workers. The healthcare and professional and technical services formed the largest private sectors with 20.6% and 8.2% of wages and 20.2% and 6.2% of employment, respectively.

From 2015 to 2016, the changes in average annual employment and wages for various industries are presented in the following Table:

#### NASSAU COUNTY CHANGE IN AVERAGE EMPLOYMENT AND WAGES- BY INDUSTRY SECTORS 2015 TO 2016

	Average Emp Chang	-	Average Wag	ges Change	
	<b>2015</b> to 2	2016	2015 to 2016		
	Number	Percent	Amount	Percent	
Total, All Industries	9,239	1.5%	\$1,363	2.3%	
Total, All Private	9,289	1.7%	1,514	2.7%	
Total, All Government	(50)	(0.1) %	608	0.8%	
Agriculture, fising and hunting	17	9.8%	138	0.4%	
Utilities	125	3.3%	4,719	4.2%	
Construction	783	2.7%	2,223	3.0%	
Manufacturing	(234)	(1.3) %	(7,899)	(10.5) %	
Wholesale Trade	(887)	(3.2) %	3,158	3.8%	
Retail Trade	139	0.2%	(722)	(2.1) %	
Transportation and Warehousing	273	1.8%	(263)	(0.5) %	
Information	(622)	(5.7) %	51,639	49.0%	
Finance and Insurance	(1,215)	(3.9) %	(745)	(0.9) %	
Real Estate and Rental and Leasing	254	2.4%	1,971	3.1%	
Professional and Technical Services	130	0.3%	2,337	3.0%	
Management of Companies and Enterprises	627	9.3%	(318)	(0.3) %	
Administrative and Waste Services	1,820	6.0%	357	0.8%	
Educational Services	497	2.4%	736	1.7%	
Health Care and Social Assistance	5,098	4.2%	1,727	2.9%	
Arts, Entertainment, and Recreation	(209)	(1.8) %	1,273	3.2%	
Accommodation and Food Services	560	1.2%	1,414	6.5%	
Other Services, Ex. Public Admin	723	2.5%	345	1.1%	
Unclassified	1,410	47.0%	(2,777)	(5.7) %	

Source, New York State, Department of Labor, Quarterly Census of Employment and Wages

In 2016, the net increase in average employment in all industries was 9,239 (1.5%) and the average rise in wages was \$1,363 (2.3%). The increased employment in private sector was 9,289 (1.7%). The increase in employment for healthcare and social assistance was 5,098 (4.2%) and for administrative and waste services was 1,820 (6%). Finance and insurance, wholesale trade, Information and manufacturing experienced largest decrease in employment of 1,215 (3.9%), 887 (3.2%), 622 (5.7%) and 234 (1.3%), respectively.

#### Personal and Household Income in Nassau County

According to the 2011-2015 survey of the US Census Bureau, the Nassau County median household income was \$99,465 as compared to the State of New York median income of \$59,269 and national median income of \$58,482. The per capita income in the Nassau County was \$43,206, or 130.0%, of the New York State per capita income of \$33,236 and 149.3% of the national per capita income of \$28,930.

The percentage of persons in poverty in the Nassau County was 6.10%, as compared to 14.7% in New York State and 12.7% nationally.

Personal income statistics provide a framework for analyzing current economic conditions. They are used in estimating the demand for the Water Authority services and to determine whether the service area has sufficient income to enable the Water Authority to undertake and support major capital improvement projects.

Personal income is the sum of wages and salaries, supplements to wages and salaries, proprietors' income, personal interest income, and personal current transfer receipts, less contributions for government social insurance, plus the adjustment for residence. Personal income is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars.

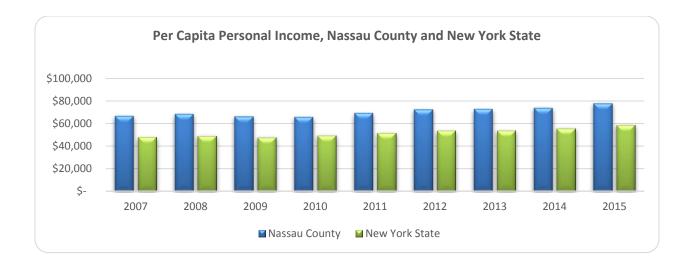
According to the 2015 estimates of the Bureau of Economic Analysis (BEA), Nassau County had a total personal income of \$105,860,697 thousand dollars, which ranked it the third in New York State and accounted for 9.1% of the State total personal income.

Per capita personal income is calculated as the total personal income of the residents of a given area divided by the resident population of the area. In 2015, Nassau had a per capita personal income (PCPI) of \$77,762. This PCPI ranked third in the state and was 133% of the New York State average, \$58,670, and 162% of the national average, \$48,112. The 2015 PCPI reflected an increase of 5.6% from 2014. The 2014-2015 state change was 5.5%.

For the period 2007 to 2015, the Nassau County per capita and total personal income are shown in the following table:

	Nassau	I County		
		Total	Per Ca	apita
		Personal	Personal	Income
		Income	Nassau	New York
Year	Population	(In millions)	County	State
2015	1,361,350	\$105,861	\$77,762	\$58,670
2014	1,358,627	100,019	73,618	55,611
2013	1,352,146	98,096	72,549	53,606
2012	1,348,283	97,697	72,460	53,571
2011	1,345,260	92,795	68,979	51,598
2010	1,341,048	88,189	65,761	49,283
2009	1,332,088	88,198	66,210	47,655
2008	1,325,129	90,510	68,303	49,032
2007	1,322,048	88,027	66,584	47,780
Courses		Commence Durage	of Cooperatio Am	

Source: US Department of Commerce, Bureau of Economic Analysis



#### **Employment Conditions in Nassau County**

During the year ended June 30, 2017, the size of Nassau labor force increased by 6,500 (0.9%) and the number of employed by 2,900 (0.4%). Although, all Nassau County's Villages and Towns experienced increases in the number of labor force and emloyment, the largest increases were in the Towns of Hempstead and Oyster Bay. For the period from June 2017 to June 2016, the levels of labor force and employment and the unemployment rate for Nassau, Suffolk, New York City and New York State are presented in the following table:

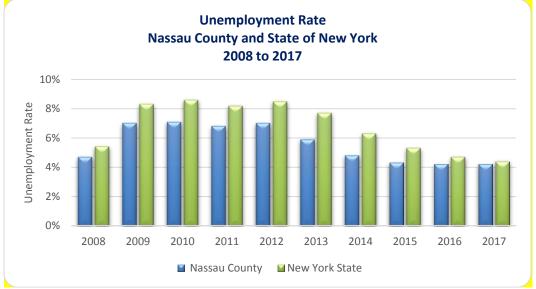
## NASSAU COUNTY, SUFFOLK COUNTY, NEW YORK CITY AND NEW YORK STATE LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT RATE JUNE 2017 AND JUNE 2016

		JUNE 2017			JUNE 2016	
			UNEMPLOYMENT			UNEMPLOYMENT
	LABOR FORCE	EMPLOYED	<b>RATE (%)</b>	LABOR FORCE	EMPLOYED	<b>RATE (%)</b>
Nassau-Suffolk	1,511,900	1,448,500	4.2	1,501,500	1,444,800	3.8
Nassau County	716,800	687,300	4.1	710,300	684,400	3.6
Freeport Village	23,200	22,100	5.0	23,000	22,000	4.3
Glen Cove City	14,300	13,800	3.8	14,200	13,700	3.4
Hempstead Town	408,700	391,100	4.3	405,100	389,800	3.8
Hempstead Village	28,200	26,700	5.2	27,900	26,600	4.7
Long Beach City	20,000	19,300	3.8	20,000	19,300	3.3
North Hempstead Town	115,500	111,100	3.8	114,300	110,400	3.4
Oyster Bay Town	158,200	152,000	3.9	156,700	151,300	3.5
Rockville Centre Village	12,400	11,900	3.9	12,300	11,900	3.7
Valley Stream Village	20,200	19,300	4.4	19,900	19,100	3.9
Suffolk County	795,100	761,200	4.3	791,200	760,300	3.9
New York City	4,220,700	4,034,900	4.4	4,137,800	3,928,500	5.1
New York State	9,739,700	9,298,700	4.5	9,684,600	9,245,500	4.5
<u>Source</u> , New York Stat	te, Departmen	t of Labor, Qu	arterly Census of	Employment a	nd Wages	

The unemployment rates in Nassau County compared favorably with Suffolk County, New York City and State of New York. For the period December 2008 to 2017, the unemployment rates for Nassau County and the State of New York were as follows:

NASSAU COUNTY							
	<b>UNEMPLOYMENT RATES</b>						
	Nassau						
Year	County	<b>New York State</b>					
2017	4.2%	4.4%					
2016	4.2%	4.7%					
2015	4.3%	5.3%					
2014	4.8%	6.3%					
2013	5.9%	7.7%					
2012	7.0%	8.5%					
2011	6.8%	8.2%					
2010	7.1%	8.6%					
2009	7.0%	8.3%					
2008	4.7%	5.4%					

Source: The United States Department of Labor, Bureau of Labor Statistic



Source: The United States Department of Labor, Bureau of Labor Statistic

The impact of 2008-2009 recession on increased unemployment in the State of New York and Nassau County continued until 2012, at which time the unemployment rate was at 8.5 and 7.0%, respectively. Since then, the rate of unemployment has substantially decreased to 4.2% in 2017.

#### **Consumer Prices in the New York Region**

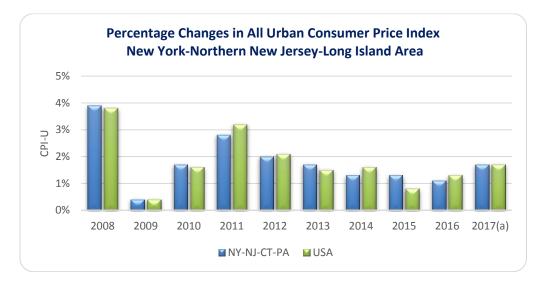
Consumer price rises in the New York Region have historically been somewhat different from the national inflation rates, principally because of the region's disproportionate dependence on imported oil. The rates of increase in average Annual All Urban Consumer Price Index (CPI-U), in New York-Northern New Jersey-Long Island Area, for the period 2008 to 2017 are presented in the following table:

Annual Percentage Change					
		NY-NJ-CT	2		
Year	•	ΡΑ	USA		
2017(	a)	1.7%	1.7%		
2016	5	1.1%	1.3%		
2015	5	1.3%	0.8%		
2014	ŀ	1.3%	1.6%		
2013	3	1.7%	1.5%		
2012	)	2.0%	2.1%		
2011	L	2.8%	3.2%		
2010	)	1.7%	1.6%		
2009	)	0.4%	0.4%		
2008	3	3.9%	3.8%		
			1 24 204		

# CPI-All Urban Consumers

(a) Seven months ended July 31, 2017

Source: The United States Department of Labor, Bureau of Labor statistics



From July 2016 to July 2017, the CPI-U rose 1.6 percent. The food index increased 1.7%; prices for food away from home rose 2.2%; and prices for food at home advanced 1.3%. Energy prices rose 5.5%, led by a 7.5% increase in gasoline prices. Household energy prices rose 4.3%, with increases of 9.6% for natural gas and 1.7% for electricity. The index for all items less food and energy rose 1.4%. Shelter prices increased 2.3%. Prices for recreation advanced 3.9%, and prices for medical care and for other goods and services each rose 1.7%. Conversely, prices decreased for household furnishings and operations (0.9%) and for education and communication (0.5%).

#### **Real Estate and Housing in Nassau County**

U.S. Department of Housing and Urban Development Office of Policy Development and Research, *Comprehensive Housing Market Analysis Nassau-Suffolk (Long Island)*, New York, April 1, 2017, indicates that the housing sales market in the Nassau-Suffolk is currently balanced. The current sales vacancy rate

is estimated at 1.2 percent, down from 1.4 percent in 2010. Sales market conditions in the Nassau-Suffolk were slightly tight from 2000 through 2002 but transitioned to slightly soft from 2003 through 2007, because of strong net out-migration and elevated levels of single-family and condominium construction activity. Conditions remained slightly soft from 2008 through 2012, because elevated levels of unemployment and stricter borrowing requirements reduced the demand for housing. Since 2013, conditions have transitioned to balanced, because of low levels of construction activity and improved economic conditions enabling more residents to purchase homes.

In March 2017, 6.5% of home loans in Long Island were seriously delinquent or had transitioned into real estate owned by the lender (REO) status, down from 7.8% in March 2016 and a peak of 11.0% in January 2013. The current rate in Long Island is higher than the state of New York and nationwide rates of 4.9% and 2.4%, respectively.

According to the US Census Bureau, the number of housing units in Nassau County slightly decreased from 468,346 units, on April 1, 2010, to 466,904 units, on July 1, 2016. Over the period 2011-2015, 80.30% of the Nassau County housing units were owner-occupied and the median value of their homes was \$446,400. The median selected monthly costs of the home owners, including mortgage, was \$3,069 and without a mortgage was \$1,286.

The number of sales and median sales prices of houses in Nassau County are presented in the following Table:

NASSAU COUNTY							
THE NUMBER OF SALES AND MEDIAN SALES PRICES							
	Sales	Median					
	Sales	Price					
2016	2,237	\$477,500					
2015	4,509	445,000					
2014	10,876	435,000					
2013	11,196	422,500					
2012	8,905	415,000					
2011	7,597	430,000					

#### Source: State of New York Office of Real Property Tax Services

The median sale price of homes in Nassau County increased by \$32,500 (7.3%) in 2016 as compared to \$10,000 (2.3%) increase in the previous year. The number of sales declined by 2,272 (50.4%) in 2016 and 6,367 (57.0%) in 2015.

Fair market monthly rentals in Long Island for 2017, estimated by the U.S. Department of Housing and Urban Development ("HUD"), were \$1,221 for a studio apartment, \$1,527 for one bedroom, \$1,878 for two-bedrooms, \$2,428 for three-bedrooms and \$2,726 for a four-bedroom apartment. The fair market rentals increased by \$218 (21.7%), \$203(5.3%), \$270 (16.85%), \$339 (16.2%) and \$376 (16.0%), for the studio, one, two, three and four bedroom-apartments, respectively, from 2016 to 2017.

The housing permits issued in the Nassau County, over the last ten calendar years are presented in the following table:

	ESTIMATE WITH IMPUTATION (a)									
	Sing	le	Two	0	Three an	d Four	Five or N	/lore		
	Fam	ily	Fam	ily	Fam	ily	Fami	ly	Total	
Year	Buildings	Units	Buildings	Units	Buildings	Units	Buildings	Units	Buildings I	Units
2016	609	609	3	6	2	8	10	118	624	741
2015	608	608	2	4	-	-	20	474	630	1,086
2014	640	640	2	4	1	4	10	257	653	905
2013	630	630	5	10	-	-	2	154	637	794
2012	343	343	2	-	-	-	-	274	358	619
2011	311	311	1	2	-	-	20	540	332	853
2010	400	400	14	28	21	63	2	32	437	523
2009	367	367	4	8	-	-	1	5	372	380
2008	815	815	4	8	-	-	38	992	857 3	1,815
2007	734	734	9	18	1	4	6	68	750	824

# NASSAU COUNTY HOUSING STARTS – PERMITS ISSUED – LAST 10 YEARS

(a) Estimates with Imputation - includes reported data for monthly and annual respondents and imputed data for monthly and annual nonrespondents.

Source: U.S. Census Bureau

The preceding table provides building permit statistics on new privately-owned residential construction.

According to the US Census Bureau, the value of the new construction, related to the permits, was \$321,252 million in 2016 as compared to \$393,115, in 2015, showing a decrease of \$71,863 million. The construction expenditures in Nassau County has been mostly for the single-family homes. The estimated construction expenditures for the single family houses was \$292,908 million (91.2% of total), in 2016.

# SYSTEM FACILITIES AND WATER SUPPLY

The Water Authority operations are conducted from its headquarters building at 1580 Union Turnpike, New Hyde Park. Operations staff maintains 24-hour coverage of the Water System facilities through a Supervisory Control and Data Acquisition (SCADA) system that is connected to all of the Water Authority's year-round well stations and other facilities. The SCADA system monitors system pressures, well flow rates, storage tank levels and plant alarms, and controls well and booster pumps and motor operated valves. The ability to monitor and automatically control well and booster pumps throughout the distribution system allows for greater operational flexibility.

#### **Description of Existing Facilities**

The Water System is comprised of the following existing types of facilities: supply, storage, treatment, pumping, transmission and distribution, and interconnection. Each System element has been designed and equipped for redundancy to assure reliable operations under a wide variety of contingency events.

**Water Supply.** The Water Authority draws groundwater for treatment and distribution from the Lloyd, Magothy and Upper Glacial aquifers. Access to multiple aquifers allows the Authority to modify its water sources.

The Authority operates 15 well stations, with 24 individual wells (seven of which are currently out of service), located throughout the Service Area. Nine of the stations are automated and can be monitored and controlled through the SCADA system located at the Authority's offices in New Hyde Park, New York. Five of the well stations have strategically placed emergency power supplies.

**Treatment Facilities.** The Water Authority treats water at well stations to comply with applicable drinking water standards prior to distribution. Chlorination and pH adjustment are provided at all wells. Zinc metaphosphate is added for iron removal at two wells and zinc orthophosphate is added to the remaining wells to control corrosion. Air stripping towers and a Granular Activated Carbon ("GAC") unit are used to remove volatile organic compounds ("VOCs") from some wells. Iron treatment facilities are in service at two stations to remove high levels of iron and manganese. Wells are tested daily for chlorine residual, pH, and orthophosphate. Biweekly testing is taken for lead and copper water quality parameters. Monthly testing is done for VOCs and bacteria at locations with VOC facilities. Quarterly testing is performed for principal organic compounds and bacteria at stations without VOC facilities. All wells are tested annually for nitrates, perchlorate and inorganic compounds. Quarterly testing is performed for the disinfection by-products rule. Every eighteen months, tests are taken for synthetic organic compounds and pesticides.

A number of Water Authority wells experience low levels of VOCs, including industrial solvents trichloroethene ("TCE") and tetrachloroethene ("PCE"). Levels remain below minimum contaminant levels established by the New York State Department of Health. Where these compounds have been detected, the Authority analyzes samples on a monthly basis. Eleven of the Authority's wells located at five various stations are equipped with air stripping towers to remove VOCs. One well is currently being equipped with a GAC unit to remove VOCs. The Authority continues to monitor and evaluate the feasibility of VOC treatment at other well stations.

All of the Water Authority's wells currently comply with all applicable drinking water standards.

**Storage Facilities**. Storage tanks help satisfy peak demands beyond pump capacity and to assure an adequate supply of water during emergencies. At seven well stations, the Authority maintains steel or concrete water storage tanks of varying capacities. The tanks are located in both high and low-pressure zones for system redundancy. Total storage capacity is 11.9 million gallons.

**Transmission and Distribution Facilities**. The existing water distribution system is comprised of approximately 1,238,000 linear feet of 2 to 16-inch diameter water mains and piping, valves and appurtenances. The majority (90%) of the water mains are of unlined cast iron, with the remainder being mostly cement lined ductile iron pipe. The mains are located below public streets or under private property pursuant to easements.

Portions of the original distribution system are unlined cast iron pipe over 90 years old. In addition, approximately 800 linear feet is comprised of 4-inch or smaller diameter cast and wrought iron pipe. The Authority's practice is to remove and replace, when identified, those mains that do not comply with current best practices, including unlined cast iron pipe and 4-inch or smaller diameter pipe.

There are 2,432 fire hydrants in the Authority's service area.

**Interconnection Facilities**. The Water System is connected to adjacent public water supplies at eleven Nassau County locations. The Water System interconnects with the Garden City Park Water District at two metered locations, one of which permits two-way flow and one which flows only to the Garden City Park

system. There are four metered, two-way flow interconnections with the Franklin Square Water District, two metered two-way flow interconnections with the New York American Water Company, one unmetered two-way flow interconnection with the Manhasset/Lakeville Water District and two metered two-way flow interconnections with the Village of Garden City. There are also 6 interconnections between the Water System and the NYC Department of Environmental Protection system.

The Water System operates independently of adjacent systems. The Authority strives to provide a high level of service to its customers and to fully maintain Water System assets. Authority programs include a flushing program performed twice annually to clear sediment from older, undersized distribution mains; valve, hydrant and interconnection maintenance; a water conservation program; equipment preventive maintenance schedules; summer time grounds keeping and maintenance programs; cross training among Authority staff to improve emergency response; and hydrant painting. The Authority routinely evaluates the cost-effective use of outside service contractors for certain of these programs.

#### **FINANCIAL INFORMATION**

#### **Internal Control Environment**

Management of the Water Authority is responsible for establishing and maintaining an internal control structure designed to ensure that assets of the water utility are protected from loss, theft, or misuse, and to ensure that adequate accounting data are compiled to allow for the accurate presentation of financial statements in conformity with generally accepted accounting principles ("GAAP"). The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of controls should not outweigh their benefit.

#### **Budget Formulation and Control**

The Water Authority considers budget preparation and implementation as an important tool in planning operations and maintaining its fiscal responsibility and accountability. Annual operating and capital budgets are prepared by management and approved by the Board of Directors. The purpose of the budget process is to authorize and control expenditures, evaluate projected revenue to determine the Water Authority's ability to meet its obligations under various bond covenants and to provide analysis for planning purposes.

#### **Financial Reporting**

Financial statements, consisting of a statement of net position, a statement of revenues and expenses and changes in net position and a report of cash balances and investments are prepared monthly, usually within two weeks of the last day of the month. A monthly presentation is made to the Board of Directors, comparing actual results of operations with the approved budget as well as prior year results. If unforeseen circumstances arise which alter the projections used in the budget process, a revision may be prepared by the Director of Finance, Accounting and Customer Service at the request of the Water Authority Superintendent for consideration and approval by the Board of Directors.

The New York State Public Authorities Accountability Act (PAAA) of 2005 imposed increased reporting and auditing requirements on public authorities, called for board member training and the disclosure of executive compensation rates, required each public authority to adopt a code of ethics, directed them to

make their annual reports and required documentation available online, and restricted their power to dispose of real property for less than fair market value or without public bidding. The PAAA was followed in 2009 by enactment of the Public Authorities Reform Act, which gave the Authorities Budget Office the power to promulgate regulations, to initiate formal investigations, and to publicly warn and censure noncompliant authorities. Significantly, the act also clarified that board members operate as fiduciaries and are responsible for carrying out their duties with a reasonable degree of diligence, care, skill, and independence. The Water Authority has implemented the necessary changes to meet its obligations in a timely manner.

The Water Authority's procurement policy, disposition of property Policy and the code of ethics, adopted by the Board of Directors, are presented in its website.

#### **MAJOR ACCOMPLISHMENTS**

#### **Operational Efficiencies**

The Water Authority completed its twenty-first full year of operation on May 31, 2017. During this year, the Water Authority has continued its practice of searching for operational efficiencies to control operation and maintenance expenses, supplying clean and reliable water and providing excellent service to its customers.

The Water Authority has instituted an aggressive program to encourage customers' payments for past due accounts by placing a direct phone call to the customer with the delinquency just prior to sending crews out to shut off the service due to non payment. This policy helps the Water Athority avoid having to incur the cost of sending a crew out to shut off service and then upon remittance of the receivable to turn the service back on. Due to the efficiency of the collection department, accounts receivable writeoffs for the Water Authority have been as follows:

ACCOUNTS RECEIVABLE WRITE-OFFS						
FISCAL YEARS ENDED MAY 31, 2008 TO 2017						
Fiscal Year		Amount				
2017	\$	26,243				
2016		25,188				
2015		18,707				
2014		18,086				
2013		11,260				
2012		15,508				
2011		15,342				
2010		18,763				
2009		17,553				
2008		17,595				

The Water Authority has made available new methods of paying water bills, including recurring automatic payment via customer checking accounts and online via credit card or check.

#### **Water Conservation**

The Water Authority has submitted a water conservation program to New York State Department of Environmental Conservation ("the DEC") in accordance with the regulations of the DEC. This program includes universal metering, public education, outdoor water use restrictions, water conservation kits, residential and commercial water use audits, proactive bill audits and customer service line replacements. A program was established using seasonal employees who patrol the service territory during peak demand periods to assure water usage regulation compliance. According to the Board adopted terms, the first recorded violation is assigned a written warning; the second, third, fourth and fifth and any further violation is assessed a \$50, \$75, \$150 and \$300 service charge, respectively. This program has proven to be effective in raising the awareness of customers to the water usage restrictions at a low operating cost to the Water Authority

#### Water Quality Report

In accordance with New York State Public Health Law and Federal regulations, the Water Authority issued its 2016 Annual Water Quality Report. This report provides information about the quality of the drinking water, including a summary of the laboratory results for all testing performed by an independent laboratory, during 2016. The report informs that the Water Authority was in compliance with applicable State requirements regarding drinking water quality and operating, reporting and notification procedures. During the 2016 calendar year, the Water Authority conducted more than 30,800 tests for over 150 drinking water contaminants. In 2016, as in years past, the tap water met all United States Environmental Protection Agency ("EPA") and State of New York drinking water health standards.

#### **MAJOR INITIATIVES**

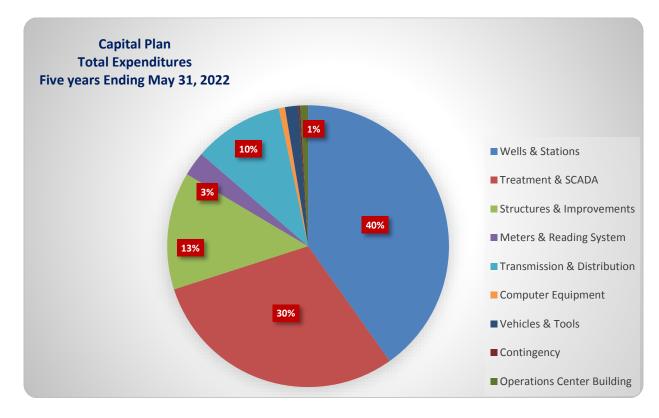
#### **Capital Program**

Capital projects have continued to require a large share of the Water Authority's budget, staff time and focus. The Water Authority has implemented a comprehensive capital improvement program with the goal of improving the water system's aging infrastructure through increased system capacity and dependability. Specifically, target areas include upgrading storage and delivery, enhancing water quality, identifying and complying with pending regulatory requirements, protecting the water source and its watershed, and reducing unaccounted-for water. Security improvements to protect its assets base are underway and will continue through subsequent years.

The Water Authority prepares and updates annually its Capital Improvement Plan ("CIP"), which establishes programmatic goals for the Water System and reviews the present condition and forecasted needs of the Water System facilities over the next five fiscal years. Individual projects are researched and prioritized. The updated CIP with detailed assumptions and considerations is submitted to the Board of Directors for approval. For the fiscal years ending May 31, 2018 to 2022, the Capital Improvement Plan is summarized in the following table:

Five Year Capital Plan								
Construction	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	TOTAL		
Wells & Stations	\$1,408,540	\$3,827,100	\$9,492,440	\$6,512,830	\$3,381,130	\$24,622,040		
Treatment & SCADA	12,287,650	-	2,392,575	3,625,660	-	18,305,885		
Structures & Improvements	-	1,675,650	3,909,770	2,685,110	-	8,270,530		
Meters & Reading System	588,500	267,750	276,720	285,900	295,310	1,714,180		
Transmission & Distribution	1,207,990	1,241,325	1,433,930	1,394,515	1,061,700	6,339,460		
Computer Equipment	74,885	135,785	100,575	61,725	60,875	433,845		
Vehicles & Tools	236,700	266,750	132,600	167,000	134,300	937,350		
Contingency	25,000	25,000	25,000	25,000	25,000	125,000		
Subtotal Construction	15,829,265	7,439,360	17,763,610	14,757,740	4,958,315	60,748,290		
<b>Operations Center Building</b>	550,000	-	-	-	-	550,000		
Total	\$16,379,265	\$7,439,360	\$17,763,610	\$14,757,740	\$4,958,315	\$61,298,290		

#### WATER AUTHRITY WESTERN NASSAU COUNTY



The planned projects to be addressed over the ensuing five year period include water storage tank improvements, well pump screen and pump bowl replacements, booster pumps, motor control center replacements, water treatment equipment upgrades, telemetry upgrades, generator backup capacity, structures and improvements at various stations, radio read meter installations, distribution mains, services and hydrant replacements, upgrades in office technology, site security equipment, vehicle replacement and purchases of tools and work equipment.

#### System Improvements

The Water Authority's average annual completed capital projects was approximately \$5.3 million, over the most recent five-year period. Included in those costs were Headquarters Project, two iron removal facilities, radio read and meter replacement program, compliance with New York State Department of Health regulations, increased level of capital main, service and hydrant replacement programs, other projects for well screen replacements, station repair, technology improvements, security system at all sites, vehicle, tools and work equipment replacements, meter and booster upgrades. The major capital replacement program expenditures was funded from the Series 2010 A and Series 2010 B bond proceeds.

The Water Authority completed the construction of its new headquarters located at 1580 Union Turnpike, New Hyde Park, New York. This two-story facility was built on existing Water Authority owned property which also contains two active wells and a Volatile Organic Compound Treatment facility, as well as a separate garage and generator. The Water Authority saves approximately \$400,000 per year by eliminating the rental cost, property taxes and maintenance costs previously incurred at its prior headquarters in Floral Park.

Both Iron Removal Plant Projects have been completed and put into operation. Annually, over 675 million gallons of water is treated and supplied to the customers in those distribution areas.

The Water Authority completed the rehabilitation of its elevated water storage Tank No. 19, located in New Hyde Park. The tank has a capacity of approximately 1,265,000 gallons of water and serves the Water Authority's customers in New Hyde Park, Bellerose and the northern portion of Floral Park. The project included physical changes necessary to comply with current Department of Health standards, repairs to the tank and power washing and sandblasting to remove dirt and old coatings. After the repairs and cleaning were completed, the interior and exterior surfaces of the tank were painted. The paint that was used is approved for use on water storage tanks by the New York State Department of Health.

Also, completed was a comprehensive water rate study conducted by D&B Engineers and Architects, P.C., the company retained by the Water Authority to perform the study. The broad objective of the study was to develop a rate structure based on meter size and usage to adequately fund all water operations, capital and debt service costs while promoting water conservation. The study also included a review of miscellaneous rate charges including such items as frozen meters, no-access fees, turn-on/off charges, etc. The Water Authority plans on holding an open public session prior to taking action on the rate study findings.

The Water Authority's other ongoing projects are:

- Installation of approximately 2,600 feet of a new 12-inch transmission water main on Cellar Avenue from Station No. 40 on Soma Street to Hillside Avenue in New Hyde Park, including the installation of 3 fire hydrants;
- Construction of a new storage areas at Well Station No. 44 in Elmont;
- The design and construction of new VOC removal facilities for Well Nos. 15A, 15B, 15C, 15D and 15E in Elmont and construction;
- Design of a new Iron Removal Plant for Well No. 25A in North Valley Stream;

- Repairs of Well No. 28B.
- The Board of Directors of the Water Authority declared itself the lead agency under State Environmental Quality Review (SEQR) with respect to the construction of an upgraded wellhead treatment at the Water Authority's Station No. 57 for the purpose of removing Dioxide and other contaminants. The Board of Directors determined that the project will benefit the environment by protecting the quality and quantity of public water supply.
- Perform and construct overflow piping modifications at Station Nos. 35 and 44 and blow-off piping modifications at Station Nos. 9,16A and 57.
- Design of a new Iron Removal Plant for Well No. 25A in North Valley Stream;
- Well pump bowl and service, mains and hydrant replacements;
- Computer upgrades and replacements;
- Meter replacements;
- Vehicle and large equipment replacements.
- Purchase of property at 117 South 6<sup>th</sup> Street, New Hyde Park which is adjacent to the storage tank 19 at the Station No. 57 for the construction of water treatment system.

#### **Planned Improvements**

The Water Authority's capital improvements expenditures will substantially increase over the next five years. For the fiscal year ending May 31, 2018, the planned capital improvement cost is \$16.4 million, and the total planned expenditure for the next five years is \$60.3 million dollars, for the next five years.

The Water Authority's planned improvements for the year ending May 31, 2018 include:

- Complete construction and plumbing construction in connection with new VOC removal facilities for Well Nos. 15A, 15B, 15C, 15D and 15E in Elmont;
- Repair Well No. 28B and booster pump No. 44-3 and replace decant tank pump No. 30-2
- Modify air stripper tower at Station No. 57.
- Vehicle and large equipment replacements.
- Well pump replacements;
- Main installations;
- Service and hydrant replacements;
- Meter replacements;
- Well pump bowl replacements

Additional information on capital assets are provided in the Management's Discussion and Analysis pages 41 to 44, and the Note 4 to financial statements, pages 65 and 66.

#### **Financial Stability**

#### Water Rates

The Water Authority has the sole authority to fix the water rates and collect charges that are necessary for the payment of its operating expenses and principal and interest on its bonds. No governmental board, agency, corporation, or officer of the State has jurisdiction or control over the water rates or charges. Section 1198-d (9) of the Act expressly declares that neither the New York State Public Service Commission nor any other control board or commission of like character has jurisdiction over the Water Authority in the management and control of its properties and operations or any power over rates fixed or charges collected by the Water Authority. The Act requires that the rates or charges to be changed only following a public hearing session.

All customers are subject to basic service charge of \$44.38, which represents the minimum charge billed whether or not the customer uses any water. The basic service charge entitles a customer to use up to 9,000 gallons each 90 day (100 gallons per day). This charge includes the cost of maintaining and reading meters, along with certain other costs of services provided by the Water Authority.

Both residential and commercial customers are billed quarterly for the preceding three (3) month period. All bills are due upon receipt and become delinquent if payment is not received within 30 days of the bill date indicated on the front of the bill.

Customers are subject to an additional charge of 1% per month for any unpaid balance if payment is not received within 30 days of the bill date indicated on the front of the bill.

If the Water Authority fails to bill the customer for usage or service, it has six months from the time the error is discovered to issue a back bill. The back-billing period will be limited to a maximum of 24 months unless there is evidence that the customer caused or contributed to the error. If there is such evidence, the back-billing period will be limited to a maximum of six years.

ΜΛΤΕΡ ΛΙΙΤΗΟΡΙΤΥ ΜΕΣΤΕΡΝ ΝΑΣΣΛΙΙ COUNTY

The Water Authority's average annual bill charged to customers were as follows:

WATER AUTHORITY WESTERN NASSAU COUNTY					
AVERAGE ANNUAL WATER BILL					
Date	Residential	Commercial	Minimum	Per Hydrant	
5/31/2017	\$459	\$1,850	\$180	\$936	
5/31/2016	440	1,832	166	936	
5/31/2015	402	1,638	155	936	
5/31/2014	378	1,582	145	875	
5/31/2013	357	1,576	137	825	
5/31/2012	346	1,434	131	787	
5/31/2011	331	1,352	123	751	
5/31/2010	312	1,269	115	700	
5/31/2009	290	1,182	107	645	
5/31/2008	269	1,097	99	598	

The Water Authority has covenanted that it will not furnish any free service by the Water System to any person, firm or corporation, public or private. The Water Authority's rate schedules applicable to residential, commercial, industrial and certain public users are uniform for its service area.

In its May 23, 2016 public rate meeting, the Board of Directors of the Water Authority approved an overall 9.4% increase in water rates. Residential customers will receive a 4.1% increase, while commercial customers will receive an increase based on the size of their meter. Public fire hydrant rates will remain unchanged from the current annual charge of \$936.

The 9.4% increase in rates is a result of the Water Authority's increased costs related to debt service costs required to fund the Water Authority's capital plan which includes critical projects related to wellhead treatment or iron removal.

The Board of Directors and Water Authority staff completed its review of the comprehensive rate study conducted by D&B Engineers and Architects, P.C. (D&B). D&B was hired to independently assess and evaluate the Water Authority's existing water rate structure as distributed to its four customer classes while ensuring adequate funding of all water operations as well as all capital and debt service costs.

## Quarterly Rate Schedule

June 1, 2017

Residential	
Minimum charge up to 9,000 gal./quarter	\$44.38
Block 1 charge (9,000 – 96,000 gal./quarter)	\$4.060/1,000 gal.
Block 2 charge (greater than144,000 gal./quarter)	\$4.160/1,000 gal.
Public fire hydrants	\$936 per year
Fire Protection Service	
2" Meter	\$43.98
2 ½" Meter	\$51.47
3" Meter	\$76.37
4" Meter	\$138.08
6" Meter	\$282.13
8" Meter	\$564.14
Commercial	

	Minimum Usage Gallons	Minimum Charge	Block 1 Usage Up To Gallons	Block 2 Usage Above Gallons
5/8' Meter	9,000	\$44.38	144,000	144,000
3/4" Meter	13,500	66.57	144,000	144,000
1" Meter	22,500	110.95	144,000	144,000
1.5" Meter	45,000	221.90	144,000	144,000
2" Meter	72,000	355.03	144,000	144,000
3" Meter	144,000	710.06	225,000	225,000
4" Meter	225,000	1,109.48	450,000	450,000
6" Meter	450,000	2,218.95	720,000	720,000
8" Meter	720,000	3,550.32	1,035,000	1,035,000

The guarterly bill for the minimum use customer will increase from \$41.51 to \$44.38. Average annual residential charges (based on average usage of 104,600 gallons per year) will increase from \$440 to \$456. The average annual commercial charges (based on average usage of 482,300 gallons per year) will increase from \$1,878 to \$2,117.

The public water hydrant quarterly rate has remained unchanged at \$234.

#### **Debt Management**

At May 31, 2017 bonds totaling \$107.9 million were outstanding. The Bonds are limited obligations of the Water Authority and are not a debt of the State of New York or of Nassau County or of any municipality therein and none of the State of New York, Nassau County or any municipality therein is liable for the bonds. The Water Authority has no taxing power. The Bonds are payable as to both interest and principal solely from the net revenues of the Water System.

Fitch Ratings assigned an 'AA-' and Moody's Rating an A1 rate to the Water Authority's \$54.2 million water system revenue bonds, Series 2015A and \$19.4 million water system revenue refunding bonds, Series 2015B, issued in fiscal year ended May 31, 2016. In addition, Fitch had affirmed the AA- rating: for \$64.5 million in outstanding water system Series 2010A and 2010B Bonds, in the year ended May 31, 2015. The rating outlook was determined as stable based on several factors including: satisfactory financial profile, affordable water rates, manageable capital program, ample treatment capacity and stable service area.

The Water Authority's projected amounts of total funds available for coverage, total debt service payments and debt service coverage ratios, for the five-year ending May 31, 2022, presented in the following table:

and Debt Service Coverage Ratio					
	2018	2019	2020	2021	2022
Total available funds for coverage	10,199,060	10,657,100	10,660,400	10,656,300	10,658,100
Total debt service payments	7,334,900	7,349,700	7,352,000	7,349,200	7,350,400
Debt service coverage ratio	1.39	1.45	1.45	1.45	1.45

# Projected Available Funds for Coverage Debt service Payments

The projected debt coverage ratios show upward trend and exceeds the 1.20 required under the bond covenants.

Under requirements stipulated in the bond resolutions, a trustee has been assigned to hold proceeds from the related bond issues. In addition, the trustee is required to hold funds deposited from time to time to pay registered owners (bondholders). The trustee is required to invest and reinvest funds as instructed by an authorized representative of the Water Authority.

Additional information on long-term debt is included in Management Discussion and Analysis, pages 44 to 46, and note 5 to the financial statements, pages 66 to 71.

#### **Cash Management**

The New York State investment statutes govern the Water Authority's cash investment policies. The Water Authority is authorized to use demand deposits accounts, certificates of deposit, and the US Treasury Bills and Notes. The Water Authority investment policy is to match the maturity of the investment in the US Treasury obligations with its capital expenditure needs.

Under the Bond Covenants and policies of the Board, the Water Authority maintains Rate Stabilization and Bond reserve Funds to ensure the stability of revenues and debt service payments. At May 31, 2017, the balances of Rate Stabilization and Bond Reserve Funds were \$1.07 million and \$9.0 million, respectively.

#### **Risk Management**

The Water Authority maintains comprehensive liability and workers' compensation insurance in accordance with the levels required in our Bond Resolution. All insurance coverage is obtained through commercial insurance companies. In addition to its insurance coverage, the Water Authority is very proactive in safety training and follows all OSHA safety requirements to preserve a safe operating environment for its employees. The Water Authority has elected to self-insure itself for state unemployment insurance.

#### **Independent Audit**

The Water Authority is required to have an annual audit by independent auditors. Tabriztchi & Co., CPA, P.C.; Certified Public Accountants of Astoria, New York has conducted an annual audit of the Water Authority's financial statements for the year ended May 31, 2017. The independent auditor's report relating to the audit of the Water Authority's general-purpose financial statements is included in Section B of this report, pages 29 to 31. A report on compliance and on internal control over financial reporting based on an audit of financial statements performed in accordance with government auditing standards is also included in section D, pages 127 and 128.

#### SEC REQUIREMENT

Securities and Exchange Commission (SEC) Rule 15c2-12 requires dealers, when underwriting certain types of municipal securities, to ensure that the governmental unit issuing the bonds enters into an agreement to provide certain important information to the Municipal Securities Rulemaking Board ("MSRB") about the securities on an ongoing basis. This information generally reflects the financial health or operating condition of the state or local government as it changes over time, or the occurrence of specific events that can have an impact on key features of the bonds.

The continuing disclosure agreements for new issues, normally require providing Annual Financial Information and the Event Information. Annual Financial Information comprises of operating data and the audited financial statements. The Event Information includes items such as: principal and interest payment delinquencies, non-payment related defaults, unscheduled draws on debt service reserves reflecting financial difficulties, adverse tax opinions or events affecting the tax-exempt status of the security, bond calls and tender offers, defeasances, rating changes and bankruptcy, insolvency or receivership.

The events, listed in the rule, should be disclosed in a timely manner, not more than 10 business days after the event. Certain information is being provided by the Water Authority in order that participating underwriters may comply with Rule 12c2-12 promulgated by the Securities and Exchange Commission. These disclosures made by the Water Authority can be found on the financial and statistical sections of this Comprehensive Annual Financial Report for the year ended May 31, 2017.

#### AWARD AND ACKNOWLEDGMENT

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for excellence in Financial Reporting to the Water Authority of Western Nassau County for its comprehensive annual financial report (CAFR) for the fiscal year ended May 31, 2016. This was the seventh consecutive year that the Water Authority has received this prestigious award. In order to be awarded a Certificate of Achievement, the government has to publish an easily readable and efficiently organized CAFR that satisfied both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

The preparation of this report would not have been possible without the effort and dedication of the staff of the Accounting department of the Water Authority. I wish to thank all of the Water Authority Departments for their assistance in providing the data necessary to prepare this report. I would also like to express my appreciation to our independent auditors, Tabriztchi & Co., CPA, P.C. for their assistance and dedication in the preparation of this report.

Respectfully submitted,

# Allan M. Kolakowski

Director of Finance, Accounting & Customer Service



**Government Finance Officers Association** 

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Water Authority of Western Nassau County, New York

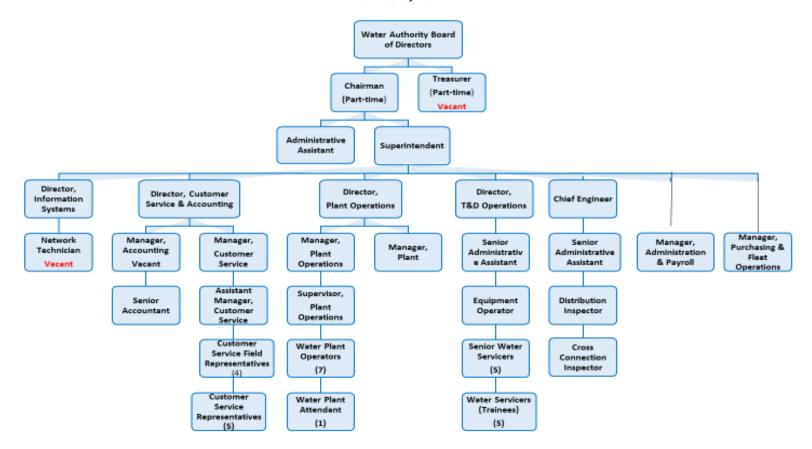
For its Comprehensive Annual Financial Report for the Fiscal Year Ended

May 31, 2016

fry R. Ener

Executive Director/CEO

# Water Authority of Western Nassau County Organization Chart June 1, 2017



# COMPREHENSIVE ANNUAL REPORT FISCAL YEAR ENDED MAY 31, 2017

#### **BOARD OF DIRECTORS/VOTES**

# John E. Ryan Chairman

		Voting
		Percentage
George Bakich	Town of Hempstead	26.2%
Cherie Zacker	Town of Hempstead	26.2%
Dominick Longobardi	Village of South Floral Park	17.7%
Marianna Wohlgemuth	Town of North Hempstead	12.3%
Curtis Axelson	Village of New Hyde Park	11.1%
Chris Gorman	Village of Stewart Manor	2.3%
Susan Powderly	Village of Bellerose	1.5%
Greg Ifill	Village of South Floral Park	1.4%
John Ardito	Village of Garden City	1.3%

Total

100.0%

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#### **SECTION B: FINANCIAL SECTION**





Members of AICPA

#### **INDEPENDENT AUDITORS' REPORT**

Board of Directors Water Authority of Western Nassau County New Hyde Park, New York

We have audited the accompanying financial statements of the of the Water Authority of Western Nassau County, State of New York, as of and for the years ended May 31, 2017 and 2016 and the related notes to the financial statements, which collectively comprise the Water Authority of Western Nassau County's basic financial statements as listed in the table of contents.

#### MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **AUDITOR'S RESPONSIBILITY**

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions

4102 31<sup>st</sup> Ave, Ste. A, Astoria NY 11103 • Tel: 516-746-4200 • Fax: 516-746-7900 Email: Info@Tabrizcpa.com • <u>www.Tabrizcpa.com</u>

### **O**PINIONS

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Water Authority of Western Nassau County, as of May 31, 2017 and 2016 and the respective changes in financial position and, cash flows thereof for the years then ended in conformity with U.S. generally accepted accounting principles.

#### **EMPHASIS OF A MATTER**

As discussed in Note 2 to the financial statements, in the year ended May 31, 2016, the Water Authority of Western Nassau County adopted Governmental Accounting Standards Board ("GASB") Statements No. 68, *Accounting and Financial Reporting for Pensions-an amendment of GASB Statement 27* and Statement 71, *pension Transition for Contributions made Subsequent to Measurement Date - an Amendment of GASB Statement No. 68*. As a result of adopting this standard, the Water Authority of Western Nassau County has elected to restate its May 31, 2015 financial statements to reflect the adoption of this standard. Our opinion is not modified with respect to this matter.

## **OTHER MATTERS**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 33 through 48, the Schedule of Funding Progress - Other Postemployment Benefit Plan on page 85, the schedule of the Water Authority of Western Nassau County's proportionate share of the net pension liability on page 86, and the schedule of the Water Authority of Western Nassau County's proportionate of the net pension contributions on page 87 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Water Authority of Nassau County's basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

#### **OTHER REPORTING REQUIRED BY GOVERNMENT AUDITING STANDARDS**

In accordance with *Government Auditing Standards*, we have also issued our report dated August 30, 2017, on our consideration of the Water Authority of Western Nassau County's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Water Authority of Western Nassau County's internal control over financial control over financial reporting and compliance and compliance.

TABRIZTCHI & CO., CPA, P.C.

Garden City, New York August 30, 2017

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WATER AUTHORITY OF WESTERN NASSAU COUNTY FINANCIAL STATEMENTS FISCAL YEARS ENDED MAY 31, 2017 AND 2016 (WITH INDEPENDENT AUDITORS' REPORT THEREON)



Prepared by: Allan M. Kolakowski Director of Finance, Accounting & Customer Service Water Authority of Western Nassau County, New York

## **SECTION B: FINANCIAL SECTION**



## MANAGEMENT'S DISCUSSION AND ANALYSIS



The Water Authority of Western Nassau County (the "Water Authority") was established to provide potable water to portions of western Nassau County that encompass the Incorporated Villages of Bellerose, Floral Park, New Hyde Park, South Floral Park, Stewart Manor and portions of Garden City and Valley Stream. The service area also includes the unincorporated areas of Bellerose Terrace, Elmont, Floral Park, Floral Park Centre, New Hyde Park and portions of Franklin Square and North Valley Stream.

## **OVERVIEW OF THE FINANCIAL STATEMENTS**

This financial report consists of four sections: (1) Management's Discussion and Analysis (this section); (2) the Financial Statements; (3) Notes to the Financial Statements that explain in more detail some of the information in the Financial Statements and (4) required supplementary information.

Management's Discussion and Analysis ("MD&A") serves as an introduction to the basic financial statements and provides supplementary information. The MD&A represents management's examination and analysis of the Water Authority's financial condition and performance. Summary financial statements data, key financial and operational indicators used in the Water Authority's strategic plan, operating plan, bond covenants and other management tools were used for this analysis. The information contained in this analysis should be used by the reader in conjunction with the information contained in the audited financial statements and the notes to those financial statements.

The financial statements report information about the Water Authority. The Water Authority applied full accrual accounting methods as used by similar business activities in the private sector. The statements offer short and long-term financial information. However, rate-regulated accounting principles applicable to private sector utilities are not used by government utilities.

The financial statements include the Statement of Net Position; Statement of Revenues, Expenses and Changes in Net Position; Statement of Cash Flows, and the Notes to the Financial Statements.

The *Statement of Net Position* of the Water Authority reports all assets, deferred outflows of resources, liabilities, deferred inflow of resources, and net position. The Statement of Net Position represents the difference between all other elements in a statement of financial position in three components: net investment in capital assets; restricted (distinguishing between major categories or restrictions) and unrestricted. The Statement of Net Position provides information about the nature and amount of investment in resources (assets) and obligations to the Water Authority's creditors (liabilities) at year-end. It also provides the basis for computing rate of return, evaluating the capital structure, and assessing the liquidity and financial flexibility of the Water Authority. Over time, increases or decreases in net position serve as a useful indicator of whether the financial position of the Water Authority is improving or deteriorating.

The Statement of Revenues, Expenses and Changes in Net Position presents the results of the activities of the Water Authority and information as to how the net position changed during the year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. This statement also provides information about whether the Water Authority has successfully recovered its costs through its user fees and other charges, its profitability and credit worthiness.

The *Statement of Cash Flows* presents the changes in cash and cash equivalents resulting from operating, investing, and capital financing and non-capital financing activities. The statements present cash receipts and cash disbursements information, without consideration of the earning events, when an obligation arises or depreciation of capital assets.

The notes to the financial statements provide required disclosures and other information that are essential to a full understanding of material data provided in the statements. The notes present information about the Water Authority's accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any.

This section presents management's analysis of the Water Authority's financial conditions and activities for the fiscal years ended May 31, 2017 and May 31, 2016. Please read this information in conjunction with the financial statements, notes to the financial statements and the supplementary required information which follow this section.

## FINANCIAL HIGHLIGHTS

Management believes the Water Authority's financial condition is strong and improving. The Water Authority is well within its debt covenants and the more stringent financial policies and guidelines set by its Board. The following are financial highlights:

- Total assets as of May 31, 2017 were \$151.9 million, deferred outflows were \$2.7 million and exceeded total liabilities of \$128.9 million and deferred inflows of \$0.3 million by \$25.3 million (i.e. net position). Of the total net position, \$24.5 million was invested in capital assets, \$1.1 in restricted net position and \$0.3 million was the unrestricted net position deficit. The deficit is primarily a result of \$3.0 million other post-retirement benefits liability, which is a long-term obligation.
- Total assets increased by \$3.3 (2.2%) between May 31, 2016 and May 31,2017. Net position increased by \$3.3 million (15.1%) over the same period last year and the economic and financial position of the Water Authority improved.
- Operating revenues were \$18.7 million, showing an increase of \$1.7 million (10.3%), as compared to \$1.7 million (11.4%) rise in the previous year. The increased revenues from residential water sales of \$0.7 million (5.7%) and commercial and fire protection revenues of \$1.0 million (22.1%) were affected by average price increases of 4.3% for residential, 46.3% for commercial and 30.5% for private fire protection customers and to 2.7% lower pumpage.
- Total operating expenses increased by \$0.8 million (7.5%), from \$10.6 million to \$11.4 million, for the fiscal years ended May 31, 2016 and May 31, 2017. The rise in operating expenses included increases of \$0.2 (2.7%) million in operations expenses, \$0.5 million (22.7%) in maintenance expenses and \$0.2 million (7.1%) in depreciation expenses. The total operating expenses had decreased \$0.2 million (1.5%) in the previous year, principally due to lower operations expenses.
- Operating income for the fiscal years ended May 31, 2017 and 2016 were \$7.2 and \$6.3 million. The increase in operating income of \$1 million (15.1%), in the current year, follows the increases of \$1.9 million (42.8%), in the previous year. The added operating income is to meet the additional debt service requirements from the issuance of Series 2015 Bonds.
- The Water Authority's long-term bonded debt, including the current portion and premium, decreased by \$2.8 million (2.4%) from \$117.0, on May 31, 2016, to million to 114.3, on May 31, 2017, because of the principal payments and amortization of premiums.

#### **FINANCIAL ANALYSIS OF THE WATER AUTHORITY**

One of the most important objectives of the financial analysis is to determine if the Water Authority as a whole is better or worse off as a result of the year's activities. The Statement of Net Position and the statements of revenues, expenses and changes in net position provide useful information in this regard. The amount of net position, the difference between total assets and deferred outflows and liabilities and deferred inflows, is a significant measure of the financial health or financial position. Over time, increases or decreases in the Water Authority's net position are one indicator of whether its financial health is improving or deteriorating. However, other non-financial factors such as changes in economic conditions, population growth, and zoning and new or changed government legislation should be considered in evaluating the financial conditions of the Water Authority.

The following comparative condensed financial statements and other selected information serve as the financial data and indicators for management's monitoring and planning.

#### **NET POSITION**

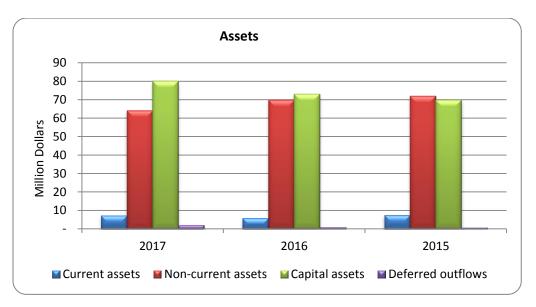
A summary of the Water Authority's balance sheets is presented in the following table:

	_			May 31,				2016 to 2 Increase (Dee	 se)		2015 to 2 Increase (De		
		2017		2016		2015		Amount	%		Amount		%
Current assets	\$	8,006,705	\$	5,873,845	\$	7,468,584	\$	2,132,860	36.3	\$	(1,594,739)		(21.4)
Noncurrent assets													
Other noncurrent assets		63,955,181		69,823,436		71,997,296		(5,868,255)	(8.4)		(2,173,860)		(3.0)
Capital assets	_	79,908,512		72,887,677		69,888,539		7,020,835	 9.6		2,999,138	_	4.3
Total assets		151,870,398		148,584,958		149,354,419		3,285,440	2.2		(769,461)		(0.5)
Deferred outflows		2,667,820		838,353		780,122		1,829,467	218.2		58,231		7.5
Current liabilities		7,203,308		5,127,665		5,369,268		2,075,643	40.5		(241,603)		4.5
Noncurrent liabilities		7,462,205		5,248,728		4,994,934		2,213,477	42.2		253,794		5.1
Long-term debt–bonds, net	_	114,275,418		117,030,506	_	119,683,201		(2,755,088)	 (2.4)	_	(2,652,695)	_	(2.2)
Total liabilities		128,940,931	-	127,406,899		130,047,403	-	1,534,032	 1.2	_	(2,640,504)		(2.0)
Deferred inflows	_	265,600		-		-		265,600	 -		-	_	-
Net position													
Invested in capital, Restricted for rate		24,508,287		20,874,337		17,286,185		3,633,950	17.4		3,588,152		20.8
stabilization		1,070,000		1,070,000		1,070,000		-	-		-		-
Unrestricted	-	(246,600)		72,075		1,730,953		(318,675)	 (442.1)		(1,658,878)	_	(95.8)
Total Net Position	\$	25,331,687	\$	22,016,412	\$	20,087,138	\$	3,315,275	 15.1	\$	1,929,274	=	9.6

## **CONDENSED STATEMENT OF NET POSITION (BALANCE SHEETS)**

The table above and Chart 1 show that the total assets increased by \$3,285,440 (2.2%) and the total liabilities increased by \$1,534,032 (1.2%), in the current year. The total assets had decreased by \$769,461 (0.5%) and the total liabilities decreased by \$2,640,504 (2.0%), in the previous year. The increases in nondepreciable and depreciable capital assets were \$9,591,106 and \$3,648,125, respectively, in the

current year, as compared to the increases of \$4,993,785 and \$4,918,920, respectively, in the previous year. The non-current assets, which includes the restricted cash and cash equivalents and investment of bond proceeds decreased by \$5,868,255 (8.4%) and \$2,173,860 (3.0%), in the current and previous year. The decreases in other noncurrent assets were related to the expenditure of restricted funds for construction and purchase of capital assets.



## CHART 1

Current assets increased by \$2,132,860 (36.3%), from \$5,873,845, in previous year to \$8,006,705, in the current year, primarily as a result of growth in revenues and related increases of \$894,186 (36.1%) in unrestricted cash and \$1,103,592 (37.9%) in billed and unbilled receivables. Current assets had decreased by \$1,594,739 (21.4%), in the previous year. The principal reasons for the decrease in current assets were the reduction of \$1,442,311 (36.8%) in unrestricted cash and \$163,022 (5.3%) in billed and unbilled accounts receivable.

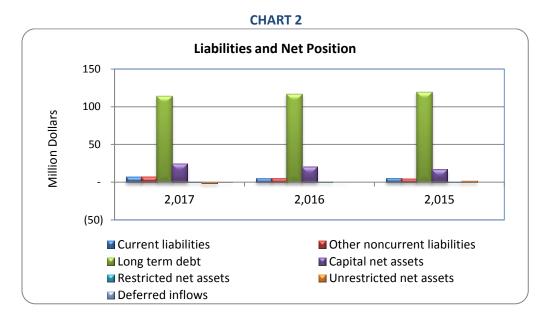
During the current year, the current liabilities increased by \$2,075,643 (40.5%), from \$5,127,665, on May 31, 2016 to \$7,203,308, on May 31, 2017. The principal reason for increase in current liabilities was the additional accounts payable of \$2,211,150 (143.2%), which is related to capital asset construction. In the previous year, the current liabilities had decreased by \$241,603 (4.5%) mainly because of \$660,338 (29.9%) decrease in accounts payable. The net working capital of the Water Authority was \$803,397, on May 31, 2017 as compared to \$746,180 on previous fiscal year end.

The long-term debt including the current portion and premium decreased by \$2,655,088 (2.2%) from \$119,310,506, in the year ended May 31, 2016, to \$116,655,418 in the year ended May 31, 2017. The decrease was because of the principal payment of \$2,280,000 and amortization of \$375,088 in premium (Chart 2).

The long-term debt including the current portion and premium had decreased by \$2,767,695 (2.3%), from \$122,078,201, in the year ended May 31, 2015, to \$119,310,506 in the year ended May 31, 2016. During the year ended May 31, 2016, the Water Authority defeased the Series 2005 Bonds, which had unpaid principal balance of \$23,885,000 in the beginning of the fiscal year, and made a principal payment of

\$1,265,000 on Series 2010A Bonds. The total principal payments made during the fiscal years ended May 31, 2017 and 2016 were \$2,395,000 and \$1,640,000 respectively.

The net position of the Water Authority increased by \$3,315,275 (15.1%) and \$1,929,274 (9.6%) in the current and previous year, respectively. The changes in net position reflect the excess of operating incomes of \$7,238,767 and \$6,288,115 over the net non-operating expenses of \$3,923,493 and \$4,358,841, during the fiscal years ended May 31, 2017 and 2016, respectively. The increased interest expense in the current and previous year is due to increase in bonds payable issued in the year ended May 31, 2015.



In the current year, the unrestricted net position decreased by \$318,675 (442.1%), as compared to a decrease of \$1,658,878 (95.8%), in the fiscal year ended May 31, 2016. The net position restricted for rate stabilization remained the same, to comply with the Bond covenants regarding maintaining Rate Stabilization restricted cash and cash equivalents. The net position invested in capital increased by \$3,633,950 (17.4%) and \$3,588,152 (20.8%), during the fiscal years ended May 31, 2017 and 2016, respectively.

## **OPERATING RESULTS**

As of May 31, 2017, the Water Authority provided water to 26,352 residential customers, 1,390 commercial customers, 201 private fire customers and 2,432 municipal fire hydrants. The corresponding figures for May 31, 2016 were 26,363 residential customers, 1,366 commercial customers, 197 private fire customers and 2,432 municipal fire hydrants.

The Water Authority's condensed statements of revenues, expenses and changes in net position are as follows:

	 			,		2016 to 2017			2015 to 2016		
			May 31,				Increase (De	rease (Decrease)		Increase (Deci	rease)
	2017		2016		2015		Amount	%	_	Amount	%
Water sales:											
Residential	\$ 12,837,135	\$	12,143,943	\$	10,694,380	\$	693,192	5.7	\$	1,449,563	13.6
Commercial,											
municipal and other	5,811,329	-	4,761,144		4,486,444		1,050,185	22.1	-	274,700	6.1
Total operating revenues	18,648,464		16,905,087		15,180,824		1,743,377	10.3		1,724,263	11.4
Operating expenses	10,040,404		10,905,087		15,160,624		1,745,577	10.5		1,724,205	11.4
	C 721 012		6 5 4 1 0 7 4		6 840 640		170.020	2.7		(200 ((())	
Operations	6,721,012		6,541,974		6,840,640		179,038	2.7		(298,666)	(4.4)
Maintenance	2,559,011		2,086,055		2,131,416		472,956	22.7		(45,361)	(2.1)
Depreciation Total operating	2,129,673	-	1,988,943		1,806,744	•	140,730	7.1	-	182,199	10.1
expenses	11,409,696		10,616,972		10,778,800		792,724	7.5		(161,828)	(1.5)
Operating income	7,238,768	-	6,288,115		4,402,024	•	950,653	15.1	-	1,886,091	42.8
Non-operating revenue (expense)	,,,		0)200)220		.,		200,000	1011		2,000,002	
Interest income	330,035		379,001		302,646		(48,966)	(12.9)		76,355	25.2
Miscellaneous income	316,216		332,936		346,696		(16,720)	(5.0)		(13,760)	(4.0)
Interest on long-term debt	(4,545,208)		(5,046,242)		(3,261,740)		501,034	(9.9)		(1,784,502)	(54.7)
Other amortization, net	(24,536)		(24,536)		(24,504)		-	(3.5)		(32)	(0.1)
Net non-operating expenses	(3,923,493)	-	(4,358,841)		(2,636,902)	•	435,348	(10.0)	-	(1,721,939)	65.3
Change in total net	(3,323,433)	-	(4,550,041)		(2,030,302)	•		(10.0)	-	(1,721,333)	
Position	3,315,275		1,929,274		1,765,122		1,386,001	71.8		164,152	9.3
GASB Statement Nos 68 and 71											
implementation	-		-		232,625		-	-		(232,625)	-
Net position, beginning	22,016,412		20,087,138		18,089,391		1,929,274	9.6	-	1,997,747	11.0
Net position, ending	\$ 25,331,687	\$	22,016,412	\$	20,087,138	\$	3,315,275	15.1	\$	1,929,274	9.6

## CONDENSED STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

#### **OPERATING REVENUES AND EXPENSES**

The Water Authority provides water treatment and distribution to an estimated population of 120,000, approximately equal to 10% of Nassau County's total population. The Authority's customer base is diverse with no significant customer concentration. It benefits economically from its proximity to New York City. Limited growth is expected because the towns served have little free area for new development and are not expected to undergo significant zoning changes.

The Water Authority's total operating revenues increased by \$1,743,377 (10.3%) and \$1,724,263 (11.4%), in fiscal years ended May 31, 2017 and 2016, respectively. The residential water sales revenue increased by \$693,192 (5.7%) and \$1,449,563 (13.6%) and commercial and fire protection water sales revenues rose by \$1,050,185 (22.1%) and \$274,700 (6.1%), during the current and previous years, respectively (Chart 3). The increase in revenues were primarily the result of 9.40% and 8.41% increase in water usage rates, in the years ended May 31, 2017 and 2016.

At its May 23, 2016 public rate meeting, the Board of Directors of the Water Authority of Western Nassau County (Water Authority) approved an overall 9.4% increase in water rates. Public fire hydrant rates

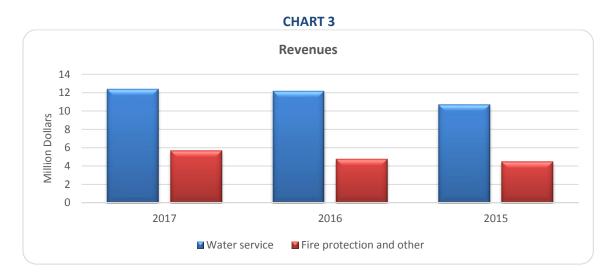
remained unchanged from the annual charge of \$936. The change in rate was after the Board of Directors and management of the Water Authority completed their reviews of the comprehensive rate study conducted by D&B Engineers and Architects, P.C. (D&B). D&B was hired to independently assess and evaluate the Water Authority's existing water rate structure as distributed to its four customer classes while ensuring adequate funding of all water operations as well as all capital and debt service costs. The quarterly bill for the minimum use customer increased from approximately \$41.51 to \$44.38. Average annual residential charges (based on approximately average usage of 103,500 gallons per year) increased from \$436 to \$452. The average annual commercial charges (based on approximately average usage of 477,800 gallons per year) increased from \$1,867 to \$2,019.

The 9.4% increase in rates was determined to be the amount necessary to meet the Water Authority's debt service costs of funding the Water Authority's capital plan which includes critical projects related to wellhead treatment or iron removal. The most significant project is the design and construction of two VOC ("Volatile Organic Compound") treatment facilities required to treat the water provided by four wells, all located in Elmont, which are currently out of service due to the VOC levels. These wells are responsible for providing approximately 7.5 million gallons of water capacity to our system on a daily basis and are critical to the western portion of our service territory. Water supplied by the four wells is stored in the five million gallons storage tank located across from Belmont Park.

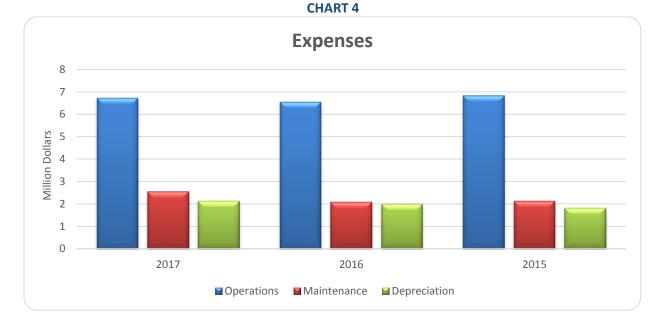
In the year ended May 31, 2017, the total amount of pumpage was down by 120 Million gallons (2.78%) and average gallons for residential and commercial customers had decreased by 1.13% and 0.63%, respectively. The changes in water rates resulted in the average price for the residential, commercial and private fire protection customers to increase by 4.30%, 46.30% and 30.5% respectively.

The Water Authority of Western Nassau County on May 26, 2015 had approved an 8.41 percent rate increase for residential, commercial and fire department customers to fund the authority's five-year, \$50.2 million plan to replace aging infrastructure and install wellhead treatment systems.

The Lloyd, Magothy and Upper Glacial aquifers provide the Water Authority with a high-quality water supply that requires minimal treatment. Storage facilities along with existing well fields provide ample pumping capacity (46 million gallons per day) in relation to actual demand. The water system is compliant with all applicable permits and regulatory standards.



The increase in total operating expenses during the current year was \$792,724 (7.5%) as compared to \$161,828 (1.5%) decrease, in previous year (Chart 4). The current year increase included \$472,956 (22.7%) additional maintenance expense and \$179,038 (2.7%) more operations expenses. The rise in maintenance expense and operations expense in the year ended May 31, 2017, were in part due to mains transmission and distribution maintenance and increase in customer accounting and central office expenses, respectively. The previous year decrease in operating expenses was caused by a reduction of \$298,666 (4.4%) in operations expenses and \$45,361 (2.1%) in maintenance expenses. The decrease in operations expense and maintenance expense in the previous year reflect the lower cost of purchased power and the costs of customer accounting and central office expenses, respectively. The depreciation expenses increased by \$140,730 (7.1%) and \$182,199 (10.1%), during the years ended May 31, 2017 and 2016, respectively, because of the increase in capital assets.



Changes in operating revenues and expenses, caused the operating incomes to increase by \$950,653(15.1%), during the years ended May 31, 2017 and \$1,886,091 (42.8%) in the previous year.

#### **NON-OPERATING REVENUES AND EXPENSES**

Non-operating revenue includes interest earnings on cash equivalents and investment assets and miscellaneous income. Interest incomes were \$330,035 and \$379,001, in the years ended May 31, 2017 and 2016 respectively. The interest income is mainly earned on the unexpended proceeds of Series 2015 Bonds.

Miscellaneous income remained relatively the same. The miscellaneous income was \$316,216 and \$332,936, in the year ended May 31, 2017 and 2016, respectively. This miscellaneous income involves the rental income realized from the lease of space atop water towers to cellular phone companies.

The amount of net interest expenses was \$4,545,208 and \$5,046,242 and the interest capitalized during the construction of capital assets was \$133,700 and \$104,900 and the, in the fiscal years ended May 31, 2017 and 2016, respectively. The Water Authority has presented the interest expense, net of the capitalized portion, for the year ended May 31, 2017 and May 31, 2016.

#### **CAPITAL ASSETS**

The Water Authority owns and maintains a broad range of infrastructure items including water plants, water lines, well-stations, administrative facilities, vehicles and equipment necessary for the treatment and distribution of potable water to its customers. The Water Authority has \$79,908,512 in net capital assets, showing an increase of \$7,020,835 (9.6%) from the prior year. The increase in net capital assets in prior year was \$2,999,138 (4.3%).

**CAPITAL ASSETS** MAY 31, 2015 **Capital Assets** 2017 2016 \$ Land 599,074 \$ 167,708 \$ 167,708 Construction in progress 7,151,780 2,080,762 2,006,198 Wells and standpipes 5,894,055 5,350,037 2,705,764 Pumping and purification 22,845,201 21,739,020 21,217,955 Distribution system 41,937,015 40,644,775 39,470,121 Building, vehicles and equipment 19,996,311 19,708,008 19,425,151 98,423,436 Total capital assets 89,690,310 84,992,897 Accumulated depreciation (18,514,924) (16, 802, 633)(15,104,358) Net capital assets 79,908,512 72,887,677 69,888,539

Capital assets consisted of the following for the years ended May 31:

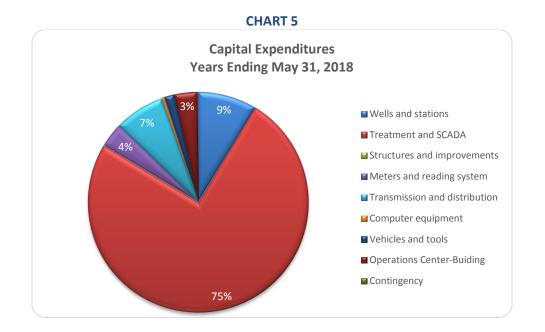
For more detailed information on capital assets activity, please refer to the financial statements Note 4 Property, Plant and Equipment.

#### **MAJOR INCREASES IN CAPITAL ASSETS**

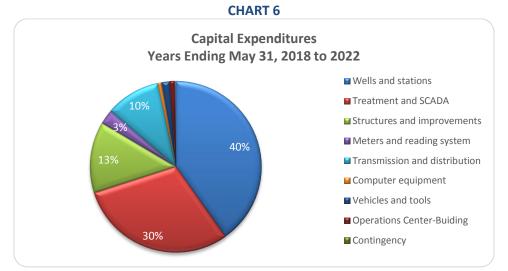
The new capital plan covers the anticipated projects for the fiscal years ending May 31, 2018 to 2022. The total plan amount is \$61,298,290 is financed by the balance of the 2015 Series A funds. The planned spending is aimed primarily at improvements to the treatment system, structure and improvements and repair and replacement of transmission and distribution lines. The planned capital expenditures for the year ending May 31, 2018 and five years ending May 31, 2022 are as follows:

## **PLANNED CAPITAL EXPENDITURES** YEAR ENDING MAY 31, 2018 AND TOTAL FOR YEARS ENDING 2018 TO 2022 (UNAUDITED)

	Year Ending		
	 May 31, 2018	_	2018 to 2022
Wells and stations	\$ 1,408,540	\$	24,622,040
Treatment and SCADA	12,287,650		18,305,885
Structures and improvements	-		8,270,530
Meters and reading system	588,500		1,714,180
Transmission and distribution	1,207,990		6,339,460
Computer equipment	74,885		433,845
Vehicles and tools	236,700		937,350
Operations Center Building	550,000		550,000
Contingency	25,000	_	125,000
Total projected capital expenditures	\$ 16,379,265	\$	61,298,290



Of the total planned capital expenditures of \$16,379,265, the major planned capital expenditures for the year ending May 31, 2018 include \$12,287,650 (75.0%) for treatment and SCADA, \$1,408,540 (8.6%) for wells and stations and \$1,207,990 (7.4%) for transmission and distribution (Chart 5). The capital expenditures for the year ending May 31, 2018, represents 26.7% of total \$61,298,920 planned capital expenditures, over the next five years.



The planned five-year expenditures of \$61,298,290, include \$24,622,040 million (40.2%) for wells and stations, \$18,305,885 (29.9%) for water treatment and SCADA, \$8,270,530 (13.5%) for structures and improvements and \$6,339,460 (10.3%) for transmission and distribution. (Chart 6).

#### **MAJOR ADDITIONS AND COMPLETED PROJECTS**

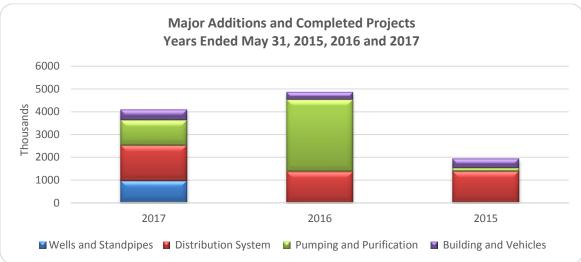
The Water Authority completed two Iron Removal Plants in Elmont and Franklin Square and the painting of an elevated storage tank in New Hyde Park. The major additions of completed projects put into service to the capital assets in the fiscal years ended May 31, 2017, 2016 and 2015 are presented in the following table and Chart 8:

The expenditures for completed projects were \$4,088,722 and \$4,872,771, in the years ended May 31, 2017 and 2016, respectively. In the year ended May 31, 2017, the major components of the total capital expenditures were as follows: \$975,383 (23.9%) for wells and standpipes, \$1,106,182 (27.1%) for improving pumping and purification system, \$991,886 (24.3%) for distribution system and \$451,789 (11.0%) for building and vehicles. (Chart 7)

MAJOR ADDITIONS AND COMPLETED PROJECTS										
Years Ended, May 31,										
		2017		2016		2015				
Wells and Standpipes										
Wells and standpipes	\$	975,383	\$	-	\$	-				
Distribution System										
Mains		445,125		290,893		164,493				
Services		308,497		380,295		398,334				
Meters and meter equipment		563,482		509,061		555,573				
Hydrants		238,264		199,062		265,416				
Pumping and Purification										
Electric pumping equipment		715,810		169,745		44,898				
Water treatment equipment		390,372		2,995,594		107,218				
Building and Vehicles										
Building		6,030		20,815		167,229				
Office equipment		7,774		191,452		49,496				
Vehicles		434,501		101,720		68,496				
Miscellaneous equipment		3,484		14,134		115,012				
Total additions	\$	4,088,722	\$	4,872,771	\$	1,936,165				

MAIOR ADDITIONS AND COMPLETED PROJECTS

Also completed was a comprehensive water rate study conducted by D&B Engineers and Architects, P.C., the company that the Water Authority had retained to perform the study. The broad objective of the study was to develop a rate structure based on meter size and usage to adequately fund all water operations, capital and debt service costs, while promoting water conservation. The study also included a review of miscellaneous rate charges including such items as frozen meters, no-access fees, turn-on/off charges, etc. The recommendations of the rate study, excluding the provisions for miscellaneous charges, were adopted effective June 2016.



#### CHART 7

#### LONG-TERM DEBT

#### **REVENUE SERIES 2005 BONDS**

On May 28, 1996, the Water Authority issued \$34,460,000 Water System Revenue Bonds, Series 1996 to finance the cost of acquisition and certain construction expenditures of the water system, including initial working capital of the Water Authority and the costs of the utility assets and additional improvements to the water system.

The \$33,875,000 Water System Revenue Bonds, Series 2005 (the "Series 2005 Bonds") were applied to advance refund Water Authority's outstanding Water System Revenue Bonds, Series 1996 and to finance the cost of acquisition and construction of improvements to the Water System, fund a deposit to the Reserve Account and pay certain costs of issuance relating to the Series 2005 Bonds.

### **REVENUE SERIES 2010 BONDS**

The Water Revenue Bonds, Series 2010 were dated April 1, 2010 and issued on April 15, 2010, with accrued interest. The Series 2010 Revenue Bonds include the Water System Revenue Bonds, Series 2010A, with aggregate principal balance of \$6,925,000, and, Series 2010B, federally taxable, Build America Bonds, with aggregate principal balance of \$33,965,000.

The Series 2010A Bonds were issued to finance costs of acquisition, improvements and additions to the water system, to fund a deposit to the Reserve Account, and to pay certain costs of issuance relating to the Series 2010A Bonds. The Series 2010B Bonds were issued to finance the cost of acquisition, improvements and additions to the water system, including the construction of the Water Authority's headquarters, to fund a deposit to the Reserve Account, and to pay certain costs of issuance relating to the Series 2010B Bonds.

Moody's and Fitch Ratings affirmed the "A1" and 'AA-' rating of the Water Authority's Series 2015 Bonds.

All proceeds of Series 2010 A bonds were expended for construction of capital assets, as of May 31, 2017,

## **REVENUE SERIES 2015 BONDS**

During the year ended May 31, 2015, the Water Authority completed new financing to fund future construction plans and to refund the 2005 Series A and B Bonds. Water System Series 2015A Revenue (Construction) Bonds and Water System Series 2015B Revenue (Refunding) Bonds were issued on April 22, 2015. The 2015A Bonds consist of \$21,660,000 (4.563 % average interest) Serial Bonds, \$17,640,000 (5% interest) Term Bonds due April 1, 2040, \$10,000,000 (5 % interest) Term Bonds due April 1, 2045 and \$4,900,000 (4% interest) Term Bonds due April 1, 2045. The 2015B Bonds consist of \$19,400,000 (4.506% average interest) Serial Bonds. A portion of the proceeds of the Bonds, along with funds transferred from amounts on deposit in the debt service funds, debt service reserve funds were deposited as cash and held in an irrevocable trust (the "Escrow Fund"), and were used solely to refund the \$23,885,000 outstanding balance of the Series 2005 Bonds.

The net present value of the economic gain from refunding the 2005 Series A and B Bonds was \$4,023,167 (16.84%) of refunded Bonds and deferred inflows from refunding gain was \$1,028,663.

## CASH AND INVESTMENTS

The total amounts of unrestricted and restricted cash, cash equivalents and investment in the US Treasury Securities were \$66,815,093, \$71,911,655 and \$75,482,709, on May 31, 2017, 2016 and 2015, respectively. In the years ended May 31, 2017 and 2016, the reductions of \$5,096,562 (7.1%) and \$3,571,054 (4.7%) in cash and investment of were mainly the result of increase in capital assets. The \$57,867,993 increase during the year ended May 31, 2015 was due to issuance of Series 2015A Bonds.

On May 31, 2017, the amount of restricted cash and cash equivalents held in the Construction Fund was \$22,967,668, in view of the planned capital expenditures of \$16,379,265 for the year ending May 31, 2017 and potential risks of increased interest rate. The amount of cash, cash equivalents in Bond reserve Funds was \$9,028,940.

On May 31, 2017, of the total cash and cash equivalents of \$38,373,606 the amount of \$35,005,202 (91.2%) was restricted and the amount of \$3,368,404 (8.8%) was unrestricted. On May 31, 2016, of the total cash and cash equivalents of \$24,135,040 the amount of \$2,474,218 (10.3%) was unrestricted and the amount of \$21,660,822 (89.7%) was restricted. In the years ended May 31, 2017 and 2016, cash equivalents were invested in money market accounts and Dreyfus Government Securities Fund. Dreyfus money market funds invest only in the securities of the US government or US government agencies and enterprises. As of May 31, 2017, and 2016, the maturities of investment in the Water Authority's US treasury securities were as follows:

## Restricted Investments Held by Trustee May 31, 2017

Bond Construction Fund Maturity Date- on or before	Investment	Fair value	Percent	Average Term (Days)
5/31/2018	US Treasury Notes/ Bonds	21,320,581	75.18%	164
5/31/2019	US Treasury Notes/ Bonds	4,993,235	17.61%	559
4/30/2020	US Treasury Notes/ Bonds	2,044,983	7.21%	910
		\$ 28,358,799	100.00%	287.11

## Restricted Investments Held by Trustee May 31, 2016

Bond Construction Fund Maturity Date- on or before	Investment	Fair value	Percent	Average Term (Days)
5/31/2017	US Treasury Notes/ Bonds	19,153,443	40.19%	197
5/31/2018	US Treasury Notes/ Bonds	21,399,215	44.91%	548
5/31/2019	US Treasury Notes/ Bonds	5,043,812	10.58%	928
4/30/2020	US Treasury Notes/ Bonds	2,055,569	4.31%	1,278
		\$ \$47,652,039	100.0%	730

The Water Authority's investment strategy is designed to eliminate the default risk and to maximize interest income by matching the maturities of the investments with the cash requirements of construction activities. The strategy minimizes the risk of having to liquidate the investment to pay construction under unfavorable market interest conditions. All of the Water Authority's investments are in the US Treasury Notes and Bonds with maturities of less than three years. All deposits were with a major national bank and were insured by FDIC or collateralized over 102% by the securities held by the Bank of New York Mellon under a tri-party collateral agreement.

## **Debt Service Coverage:**

During the year ended May 31, 2016, the Water Authority's utilized \$11.1 million net cash flows from operations, and \$19.7 million of cash from investing to finance \$9.3 million expenditures for expanding and improving its capital assets and paying its debt service requirements of \$7.3 million. The Water Authority's debt coverage ratio was as follows:

Cash A	vailable and Debt Service Requirement		Amount
Operat	ing income	\$	7,238,767
Add:	Depreciation and amortization		2,154,209
	Interest and other income	_	646,251
	Total cash available for coverage		10,039,227
	Debt service requirements:		
	Interest payments		5,011,149
	Principal payments	_	2,280,000
Total d	ebt service requirements	\$	7,291,149
	Coverage Ratio	=	1.38
	Coverage requirement as per Water System Revenue Bonds, Series 2010 and 2005		1.20

For more detailed information on long-term debt activity, please refer to the financial statements Note 5 – Revenue Bonds Payable.

#### **ECONOMIC FACTORS AND NEXT YEAR'S PLAN AND RATES**

The Water Authority's Board of Directors and Management considered many factors when setting the fiscal year ended May 31, 2017 plan, user fees and charges. Population Changes, unemployment rates in Nassau County and changes in the consumer price index for the New York – Northern New Jersey – Long Island area are among these factors.

## **Changes in Employment**

The unemployment rate in Nassau County has continued to be lower than the State of New York averages. The average unemployment rates in the County of Nassau was 3.8% in May 2017 as compared to 3.5% in May 2016. The county ranked the fourth with the lowest unemployment rate among 62 State of New York counties. The unemployment rates for the State of New York was 4.2%, 4.2% and 5.3%, in May 2017, 2016 and 2015, respectively.

## **Population changes**

The Water Authority's service area population is approximately 120,000. The Water Authority presently has over 28,000 accounts in western Nassau County, of which about 94% are residential. Commercial and fire protection constitute most of the remainder. The Water Authority's customer base has mirrored Nassau County's population. According to the US Census Bureau estimates, in June 2016, Nassau County's population was 1,361,500 and had increased by 1.6% from 1,339,532 in 2010. The population breakdown by towns within Nassau County for 2010 and 2000 is as follows:

NASSAU COUNTY	<b>2010 (a)</b>	2000 (b)
Town of North Hempstead	221,315	220,491
Town of Hempstead	759,185	756,360
City of Long Beach	35,615	35,482
Town of Oyster Bay	296,680	295,576
City of Glen Cove	26,737	26,637
TOTAL NASSAU COUNTY	1,339,532	1,334,546
a. Source: 2010 United States Census		

b. Source: 2000 United States Census

#### **Changes in Prices**

According to the United States Department of Labor, Bureau of Labor Statistics, prices in New York-Northern New Jersey-Long Island area, as measured by the Consumer Price Index for All Urban Consumers (CPI-U), rose 1.8 percent, over the year ended May 31, 2017. The index for all items less food and energy increased 1.4 percent. Shelter prices increased 2.5 percent, including a 2.5-percent rise in owners' equivalent rent and a 2.6-percent increase in residential rent. Medical care prices rose 2.8 percent, and recreation prices, 3.1 percent. In contrast, prices for education and communication were down 0.6 percent.

#### Forecast of Revenues and Expenses

The Water Authority has prepared and published an operating plan and forecast of revenues, expenses and changes in net position, for the five years ending May 31, 2022. For the year ending May 31, 2018, the total operating revenues, net of \$452,000 contribution to the rate stabilization fund, is estimated at \$18,371,500. Total operating expenses and operating income are estimated to be, \$11,509,640 and \$6,861,860, respectively. Non-operating expenses and revenues are estimated to be \$4,954,900 and \$1,111,300, respectively, resulting in net nonoperating expense of \$3,843,600. The increase in net position is estimated to be \$3.015,260. The revenues for the year ending May 31, 2018 are forecasted to increase by 5.3% as compared to the plan adopted for the year ended May 31, 2017. The estimate is

based on a 2.5% rate increase, average residential bill of \$471 and average commercial bill of \$1,896. Based on the detail estimates of the functional expenses, the total operation and maintenance expenses are estimated to increase by 1.7%, in the year ending May 31, 2018 as compared to the plan adopted for the year ended May 31, 2017. For the year ending May 31, 2018, the forecasted revenues, expenses and changes in net position are as follows:

# Forecasted Revenues, Expenses and Changes in Net Position Year Ending May 31, 2018

(Unaudited)		
		Amount
Operating Revenues		
Residential	\$	12,540,699
Commercial		3,447,327
Fire hydrants		2,333,411
Private fire		178,563
Total water sales		18,500,000
Other Revenues		
Late payment charges		34,700
Other fees and charges		288,800
Total other revenues		323,500
Total revenues from customers		18,823,500
Rate Stabilization Fund Contribution		(452,000)
Total revenues, net of contribution		18,371,500
Operating Expenses		
Operation and maintenance		9,289,640
Depreciation		2,220,000
Total operating expenses		11,509,640
Total utility operating income		6,861,860
Interest Charges and Other		
Interest on long-term debt, net		4,954,900
Amortization of debt expense		(344,100)
Interest and other income		(767,200)
Total interest charges and other		3,843,600
Increase in net position	\$	\$3,018,260
increase in het position	Ş	\$5,016,200

In planning the future revenues, the key considerations have been the forecast of water consumption and adjustment of the water rates to meet the debt service requirements, expected rises in capital and operating costs.

## **CONTACTING THE WATER AUTHORITY'S FINANCIAL MANAGEMENT**

This financial report is designed to provide our customers, creditors and public with a general overview of the Water Authority's finances and to demonstrate the Water Authority's accountability for the money it receives. If you have questions about this report or need additional information, contact the Water Authority's Superintendent at 1580 Union Turnpike, New Hyde Park, NY 11040.

## **BASIC FINANCIAL STATEMENTS**



# THE WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF NET POSITION

## MAY 31,

	-	2017	_	2016
Assets				
Current assets:				
Cash and cash equivalents	\$	3,368,404	\$	2,474,218
Accounts receivable:				
Billed, net of \$25,000 allowance for doubtful accounts		985,325		731,733
Unbilled		3,030,000		2,180,000
Prepayments and other current assets		407,920		181,774
Materials and supplies, at weighted average cost	-	215,056	_	306,120
Total current assets		8,006,705		5,873,845
Noncurrent assets:				
Restricted cash and cash equivalents				
Rate stabilization fund		1,070,000		1,070,000
Bond construction fund		22,967,668		9,297,458
Bond reserve fund		9,028,940		9,008,572
Bond arbitrage rebate				
Bond payment fund		772,211		1,163,269
Customer deposits		1,166,383		1,121,523
Restricted investments held by trustees				
, Bond construction fund		28,441,487		47,776,615
Bond reserve fund		, ,		
Capital assets				
Non-depreciable		7,750,854		2,294,620
Depreciable		72,157,658		70,593,057
Other assets		-,,		
Unamortized bond issue cost – prepaid insurance		16,080		20,846
Other assets		492,412		365,153
	-	132)112	-	
Total noncurrent assets	-	143,863,693	_	142,711,113
Total assets		151,870,398		148,584,958
Deferred Outflows of Resources				
Post-measurement date contributions		595,561		688,041
Changes in Retirement System assumptions		2,043,454		119,907
Deferred charges on refinancing	-	28,805	_	30,405
Total deferred outflow of resources		2,667,820		838,353

# THE WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF NET POSITION

## MAY 31,

	 2017	2016
Liabilities and Net position		
Current liabilities:		
Accounts payable and accrued expenses	\$ 3,755,745 \$	1,544,595
Unearned revenue	88,886	271,307
Accrued interest payable	820,114	836,740
Customer advance on construction	118,563	155,023
Water revenue bond payable	2,380,000	2,280,000
Accrued vacation and sick leave	 40,000	40,000
Total current liabilities	7,203,308	5,127,665
Noncurrent liabilities:		
Water revenue bonds payable (net of premium)	114,275,418	117,030,506
Customer deposits	1,209,885	1,181,447
Due to employee retirement system	2,240,809	470,745
Other post-employment benefits	3,100,611	2,738,036
Accrued vacation and sick leave	 910,900	858,500
Total noncurrent liabilities	 121,737,623	122,279,234
Total liabilities	128,940,931	127,406,899
Deferred inflows		
Changes in Retirement System assumptions	 265,600	-
Total deferred inflows	 265,600	
Net Position		
Net investment in capital assets	24,508,287	20,874,337
Restricted for rate stabilization	1,070,000	1,070,000
Unrestricted	 (246,600)	72,075
Total net position	\$ 25,331,687 \$	22,016,412

## THE WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE YEARS ENDED MAY 31,

	2017	2016
Operating revenues:		
Residential	\$ 12,837,135	\$ 12,143,943
Commercial	3,280,019	2,263,284
Fire protection	2,446,154	2,405,433
Other water revenues	85,156	92,427
Total operating revenues	18,648,464	16,905,087
Operating expenses:		
Operations	6,721,012	6,541,974
Maintenance	2,559,011	2,086,055
Depreciation	2,129,673	1,988,943
Total operating expenses	11,409,696	10,616,972
Operating income	7,238,768	6,288,115
Non-operating revenues (expenses):		
Interest income	330,035	379,001
Miscellaneous income, net	316,216	332,936
Interest on long-term debt, net	(4,545,208)	(5,046,242)
Other amortization, net	(24,536)	(24,536)
Net non-operating expenses	(3,923,493)	(4,358,841)
Change in net position	3,315,275	1,929,274
Net position - beginning	22,016,412	20,087,138
Total net position - ending	\$ 25,331,687	\$ 22,016,412

# THE WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED MAY 31

	2017	2016
Cash flows from operating activities:		
Receipts from customers	\$ 17,544,871	\$ 17,068,109
Rental property revenues	316,216	797,481
Payments to suppliers for goods or services	(2,551,105)	(5,189,564)
Payments for employee services	(4,233,869)	(3,698,909)
	(1)===)===)	(-//
Net cash provided by operating activities	11,076,113	8,977,117
Cash flows from capital and related financing activities:		
Repayment of water revenue bonds	(2,280,000)	(2,395,000)
Acquisition of capital assets	(9,292,154)	(5,452,628)
Interest paid on water revenue bonds	(4,930,556)	(4,847,726)
Net cash used by Capital and related financing activities	(16,502,710)	(12,695,354)
Cash flows from non-capital financing activities:		
Cash flows from investing activities:		
Decrease of fixed income securities	19,335,128	6,776,696
Arbitrage rebate	-	(231,818)
Interest and dividends received	330,035	379,001
Net cash provided by investing activities	19,665,163	6,923,879
Net increase (decrease) in cash and cash equivalents	14,238,566	3,205,642
Cash and equivalents, beginning of year	24,135,040	20,929,398
Cash and equivalents, end of year	\$ 38,373,606	\$ 24,135,040
cash and equivalents, end of year	- J0,J7J,000	

# THE WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED MAY 31

	 2017	 2016
Reconciliation of operating income to net cash provided by operating activities Operating income	\$ 7,238,768	\$ 6,288,115
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization Rental Income	2,129,673 316,216	1,988,943 332,936
<ul> <li>Changes in operating assets and liabilities:</li> <li>Accounts receivable</li> <li>Accrued unbilled revenue</li> <li>Prepaid items and other assets</li> <li>Inventory of materials and supplies</li> <li>Other assets</li> <li>Deferred outflows</li> <li>Accounts payable and accrued expenses</li> <li>Unearned revenues</li> <li>Net Pension liability</li> <li>Customer deposits</li> <li>Other post-employment benefits</li> <li>Compensated absences</li> <li>Deferred inflows</li> </ul>	(253,592) (850,000) (226,146) 91,064 (10,149) (1,831,067) 2,174,690 (182,421) 1,770,064 28,438 362,575 52,400 265,600	493,022 (330,000) 8,951 (19,545) 74,218 (59,832) 36,025 (89,511) (158,940) 43,536 359,198 10,000
Net cash provided by operating activities	\$ 11,076,113	\$ 8,977,117

Non-cash transactions: The fully depreciated capital assets of \$290,667 were written off.

#### NOTE 1 - ORGANIZATION

The Water Authority of Western Nassau County ("the Water Authority") was established on July 25, 1990, pursuant to the "Water Authority of Western Nassau County Act," of the State of New York, as amended on July 31, 1992 and codified under Title 8-C of Article 5 of the Public Authorities Law. As a governmental agency constituting a public benefit corporation, the Water Authority was created for the purpose of acquiring, constructing, maintaining and operating a water supply and distribution system within the territorial boundaries of the Water Authority of Western Nassau County District ("the District").

On May 28, 1996, the Water Authority, by exercise of the power of eminent domain, acquired the water supply and distribution system situated in the District previously owned by Jamaica Water Supply Company. The District serves a population of approximately 120,000 within the Town of Hempstead and the Town of North Hempstead. The Town of Hempstead component includes the incorporated villages of Bellerose, Floral Park, New Hyde Park, South Floral Park, Stewart Manor and portions of Garden City and Valley Stream. The area within the Town of Hempstead also includes the unincorporated areas of Bellerose Terrace, Elmont and portions of Franklin Square and North Valley Stream. The area within the Town of North Hempstead includes the unincorporated areas of Floral Park, Floral Park, Floral Park Centre and New Hyde Park.

The Water Authority is governed by a Board of Directors consisting of nine members. The town board of the Town of Hempstead appoints two members and the town board of the Town of North Hempstead appoints one member to the Board. The village boards of the Villages of Bellerose, Floral Park, Garden City, New Hyde Park, South Floral Park and Stewart Manor each appoint a single member to the Board. Each member serves for a period of two years. The number of votes of each Board member is proportional to the number of water customers in the town or village that appoints them.

Under the Government Accounting Standards Board ("GASB") Statement No. 14, *The Financial Reporting Entity*, Statement No. 39, *Determining Whether Certain Organizations Are Component Units-an Amendment of GASB Statement No.* 14 and Statement No. 61, *The Financial Reporting Entity: Omnibus* the Water Authority is classified as a primary government agency with no component units. The classification is based on the following criteria: (1) it has a separately appointed governing body; (2) pursuant to its charter, the Water Authority is a legally separate and distinct entity from the State of New York, the County of Nassau and the Towns and Villages that appoint its Board of Directors and (3) neither the State of New York, nor any of its municipal entities, are financially accountable or liable for the indebtedness of the Water Authority. The Water Authority determines its operating plan, sets rates and issues bonded debt without approval by another government entity.

#### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Measurement Focus, Basis of Accounting and Financial Statement Presentation

The financial statements of the Water Authority have been prepared in conformity with generally accepted accounting principles ("GAAP") as applied to governmental units. GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Water Authority applies all applicable pronouncements of GASB.

The activities of the Water Authority are accounted for similar to those often found in the private sector using the flow of economic resources measurement focus and the accrual basis of accounting. All assets, liabilities, net position, revenues and expenses are accounted for through a single enterprise fund with

revenues recorded when earned and expenses recorded at the time liabilities are incurred. The flow of economic resources refers to the reporting of all the net position available to the Water Authority for the purposes of providing related water services. The accounting objectives of this measurement focus are the determination of operating income, changes in net position (or cost recovery), financial position and cash flows. All assets and liabilities (whether current or noncurrent) and associated activities are reported, and equity is reported as net position.

Basis of accounting refers to when revenues, expenses, transfers and the related assets and liabilities are recognized and reported in the financial statements. Specifically, it relates to the timing of the measurements made regardless of the nature of the measurement.

The Water Authority uses the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recorded when incurred. Proprietary-type accounting also distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing water services and producing potable water for the service area in connection with the Water Authority's principal ongoing operations. The principal operating revenues of the Water Authority are charges to customers to provide potable water service. Other ancillary fees and services related to providing water are also recognized as operating revenues. Operating expenses include the cost of service, administration and depreciation of capital assets. All revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

The Water Authority has adopted the provisions of Government Accounting Standard Board (GASB) Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments* and GASB statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position.* These statements established reporting standards for all state and local governments, which include Statement of Net Position, Statements of Revenues, Expenses and Changes in Net Position and Statement of Cash Flows and inclusion of Management's Discussion and Analysis.

The Statement of Net Position of the Water Authority reports all assets, deferred outflows of resources, liabilities, deferred inflow of resources, and net position. The Statement of Net Position represents the difference between all other elements in a statement of financial position in three components: net investment in capital assets; restricted (distinguishing between major categories or restrictions) and unrestricted. The Statement of Net Position provides information about the nature and amount of investment in resources (assets) and obligations to the Water Authority's creditors (liabilities) at year-end. It also provides the basis for computing rate of return, evaluating the capital structure of the Water Authority and assessing the liquidity and financial flexibility of the Water Authority. Over time, increases or decreases in net position serve as a useful indicator of whether the financial position of the Water Authority is improving or deteriorating.

The Statement of Net Position requires the classification of net position into three components as follows:

1. Net investment in capital assets— This component of net position consists of capital assets, net of accumulated depreciation and is reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction or improvement of these assets. Deferred outflows of resources and deferred inflow of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt also should be included in this component of net position. If there are significant unspent related debt proceeds or

deferred inflows of resources at the end of the period, the portion of the debt or deferred inflow of resources attributable to unspent amount should not be included in the calculation of net investment in capital assets. Instead, that portion of the debt or deferred inflows of resources should be included in the same net position component (restricted or unrestricted) as the unspent amount.

- 2. Restricted The restricted component of net position consists of restricted assets reduced by liabilities and deferred inflow of resources related to those assets. Generally, a liability relates to the restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted asset reported. This component of net position consists of restrictions placed on net position as a result of external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.
- 3. Unrestricted net position The unrestricted component of net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

## Cash and Cash Equivalents

For the purpose of the Statement of Cash Flows, the Water Authority considers all highly liquid investments with maturity of three months or less, when purchased, to be cash equivalents. The Statement of Cash Flows presented uses the direct method of reporting cash flows.

Under the Bonds Covenants, the Water Authority maintains its cash and cash equivalents in the Water Revenue Fund, General Fund and Operating Fund. The Water Authority pays into the Water Revenue Fund all of the revenues and all other moneys required to be paid into the fund other than the revenues and other amounts expressly required or permitted to be credited to, or deposited in, any other fund account. Cash in the General Fund may be used for any lawful purpose of the Water Authority. All reasonable and necessary operations and maintenance expenses are paid from the Operating Fund.

## Restricted Cash, Cash Equivalents and Investments held by Trustee

Restricted cash, cash equivalents and investments are held in the following funds:

*Rate Stabilization Fund* – This is a fund maintained by the Water Authority. Money deposited into the Rate Stabilization Fund is used in the following order:

- 1. To the extent provided in the current operating plan, money should be credited to or transferred to any other fund or account created under resolution.
- 2. Transferred to the bond fund trustee for deposit in the Bond Fund to ensure that there are no deficiencies in payments to the Bond Fund.
- 3. Transferred to the bond fund trustee for deposit in the Secondary Bond Fund to ensure that there are no deficiencies in payments to the Secondary Bond Fund.
- 4. Transferred to Unrestricted Operating.

The amount of Rate Stabilization Fund cash and cash equivalents was \$1,070,000 as of May 31, 2017 and May 31, 2016.

*Bond Construction Fund* – In accordance with the bond resolution, money deposited in the Bond Construction Fund from the proceeds of the Water System Revenue Bonds, Series 2015 and Series 2010 are restricted to

the cost of improvements or the replacement of the water system. The Bond Construction Fund is to be maintained in trust and held by the fund trustee. The total amounts in the Bond Construction Funds at May 31, 2017 and May 31, 2016 were \$51,409,155 and \$57,074,073, respectively. As of May 31, 2017, the balances of Construction Funds are from 2015 Bond Series and the remaining balance of 2010 Bond Series Construction Fund was expended during the year.

*Bond Reserve Funds* – Under the Series 2015A and 2010 Resolutions, the Water Authority is required to deposit into the Reserve Accounts, the lesser of (i) 10% of the proceeds of the Series 2015A, Series 2010A and Series 2010B Bonds, (ii) the maximum principal and interest payments due on the Series 2015A, 2010A and Series 2010B Bonds in any Fiscal Year, (iii) 125% of the average of the annual installments of Debt Service with respect to all Series 2015A, Series 2010A and Series 2010B Bonds for the current and all future Fiscal Years.

The Bond Reserve Funds are to be maintained in trust and held by the fund trustee. Amounts in the Reserve Accounts are available to pay debt service when insufficient funds for that purpose are available in the Bond Fund.

As of May 31, 2017, and May 31, 2016, the total amounts of Bond Reserve Funds were \$9,028,940 and \$9,008,572, respectively. The Water Authority considers the expected changes in treasury yield curve in determining the optimal allocation of its debt reserve funds between cash and cash equivalents and investments.

*Bond Payment Fund* – The Water Authority's bond resolution authorizing the Water System Revenue Bonds, Series 2015, and Series 2010 bond issues has established the Bond Payment Fund. The Bond Fund is to be maintained in trust and held by the fund trustee. The Bond Fund is comprised of two separate fund accounts including the Bond Principal and Interest Fund. All money deposited in the Bond Fund is used solely for the purpose of paying the principal and interest on the bonds. On May 31, 2017 and May 31, 2016, the amounts in the Bond Fund cash and cash equivalents were \$772,211 and \$1,163,269, respectively.

*Investment Securities* — Investments are reported at fair value in the financial statements. Fair value is the amount in which an investment could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. If a quoted market price is available for an investment, the fair value is the total number of trading units of the instrument times the market price per unit. All investment income, including changes in fair value of investments is recognized as non-operating revenue in the operating statement.

## Accrued Unbilled Revenues

Accrued unbilled revenues represent revenue earned in the current year but not yet billed to customers until future days, usually within three months, based on the estimated billings occurring in the three months of the succeeding year. Historical trend is used to estimate accrued unbilled revenues.

## Accounts Receivable

Accounts receivable is net of an allowance for doubtful accounts of \$25,000 at May 31, 2017 and May 31, 2016. The allowance is estimated based on trends in historical collection rates and write-offs.

## Prepaid Items

Certain prepayments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in the Statement of Net Position.

## Materials and Supplies

Materials and supplies inventory is valued at weighted average cost, which approximates market.

## **Capital Assets**

Capital assets are defined by the Water Authority as assets with an initial individual cost of more than \$500 and an estimated useful life in excess of one year. Capital assets are carried at cost to the Water Authority. Improvements, renewals purchased or contributed property, replacements of retired units of property and significant repairs inclusive of materials, labor and certain overhead that extend the life of the asset are capitalized while minor repairs and maintenance costs are expensed as incurred.

Depreciation is provided on the straight-line basis using the following estimated useful lives for each asset type:

Capital Asset	Useful Life Years
Distribution system	35 - 105
Wells and standpipes	40 - 60
Pumping and purification	20 - 50
Other property and equipment	5 - 10

When assets are retired or otherwise disposed of, the related assets and accumulated depreciation is written off and any related gains or losses are recorded.

## Capitalization of Interest during Construction

The Water Authority capitalizes the interest cost during the construction of capital assets according to Financial Accounting Standards Board's Accounting Standards Codification Paragraph 835-20-30-10 through 835-20-30-12.

The amount of interest cost capitalized for qualifying assets is that portion of the interest cost incurred during the assets' acquisition periods that theoretically could have been avoided if expenditures for the assets had not been made. The amount capitalized in an accounting period is determined by applying the capitalization rate to the average amount of accumulated expenditures for the asset during the period. The capitalization rates used in an accounting period is based on the rates applicable to borrowings outstanding during the period. If the Water Authority's financing plans associate a specific new borrowing with a qualifying asset, the Water Authority uses the rate on that borrowing as the capitalization rate to be applied to that portion of the average accumulated expenditures for the asset that does not exceed the amount of that borrowing.

Interest earned is not to be offset against interest cost in determining either capitalization rates or limitations on the amount of interest cost to be capitalized except in situations involving acquisition of qualifying assets

financed with the proceeds of tax-exempt borrowings if those funds are externally restricted to finance acquisition of specified qualifying assets or to service the related debt.

The amount of interest cost capitalized on qualifying assets acquired with proceeds of tax-exempt borrowings that are externally restricted as specified in the preceding paragraph shall be the interest cost of the borrowing less any interest earned on related interest-bearing investments acquired with proceeds of the related tax-exempt borrowings from the date of the borrowing until the assets are ready for their intended use. The interest cost and interest earned on any portion of the proceeds of the tax-exempt borrowings that are not designated for the acquisition of specified qualifying assets and servicing the related debt are excluded.

The Water Authority has adopted GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, issued in December 2010, has fully incorporated the interest capitalization rules of ASC 835. The adoption of GASB Statement No. 62 did not have any effect on the financial statements.

The interest expenses are shown net of the capitalized portions of \$133,700 and \$104,900, in the financial statements for the years ended May 31, 2017 and May 31, 2016, respectively.

## Long-term Obligations

In the financial statements, long-term debt is reported as a liability in the Statement of Net Position. Long-term debt is reported at face value less any loss on defeasance and plus or minus applicable premium or discount, respectively.

Bond premiums and bond discounts are deferred and amortized over the life of the bonds in relation to principal payment over the life of the issue. The costs related to the insurance on long-term debt and the loss on the early retirement of refunded debt is amortized in relation to principal repayment over the life of the issue.

The amortizations of bond premiums were \$374,089 and \$372,694, in years ended May 31, 2017 and May 31, 2016. The amortization of Series 2010 deferred refunding loss was \$53,033 and the amortization of Series 2005 refunding loss was \$51,433, for both years ended May 31, 2017 and May 31, 2016.

#### **Unearned Revenues**

The Unearned revenues include advance payments by customers and charges for future repairs. The Water Authority recognizes the amounts charged as liabilities and credits them to revenue only when associated costs are incurred.

#### Other Postemployment Benefits

In addition to providing pension benefits, the Water Authority provides health insurance coverage for eligible retired employees. Substantially all the Water Authority's employees may become eligible for these benefits provided the employee has a minimum of ten years of full time employment with the Water Authority, has obtained 55 years of age and has terminated employment with the Water Authority within five years from the date on which entitled to a retirement allowance from the New York State and Local Employees Retirement System.

The Water Authority's Board of Directors adopted a resolution dated September 17, 2002, as amended November 9, 2009, that provides eligible enrollees with post-retirement medical insurance coverage, limited to the health insurance programs offered by the Water Authority to its then full-time employees, as modified from time to time by the Board of Directors of the Water Authority.

The Water Authority recognizes the cost of providing benefits by recording its share of insurance premiums as expenditures in the year paid. The liability for these other postemployment benefits is recorded as a long-term liability in the Statement of Net Position and is estimated based on the most recent actuarial valuation in accordance with the parameters of GASB Statement No. 45.

In June 2015, Government Accounting Standards Board (GASB) issued the Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, addresses reporting by governments that provide OPEB to their employees. This Statement requires the liability of employers to employees for defined benefit OPEB (net OPEB liability) to be measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees that is attributed to those employees' past periods of service (total OPEB liability), less the amount of the OPEB plan's fiduciary net position. The Statement requires governments to present more extensive note disclosures and required supplementary information (RSI) about their OPEB liabilities. The new RSI includes a schedule showing the causes of increases and decreases in the OPEB liability and a schedule comparing a government's actual OPEB contributions to its contribution requirements. This Statement is effective for fiscal years beginning after June 15, 2017. The Water authority is evaluating the effects of adopting this statement on its financial statements.

## Accrued Vacation and Sick Leave

In the event of termination or upon retirement, employees are entitled to receive accumulated but unused vacation and sick leave at various rates subject to certain maximum limitations pursuant to policies adopted by the Board of Directors.

The liability for vested or accumulated vacation or sick leave (compensated absences) is recorded as current and noncurrent obligations on the Statement of Net Position. The current portion of this liability is estimated based on historical trends. In the Statements of Revenues, Expenses and Changes in Net Position only the compensated absence liability payable from available financial resources is incurred.

## Net Pension Obligation and Deferred Outflows

The Water Authority provides retirement benefits for substantially all of its regular, full-time employees through contributions to the New York State and Local Employees' Retirement System. The system provides various plans and options, and all full-time employees are required to join the plan.

The Water Authority recognizes a net pension liability, which represents the Water Authority's proportional share of excess total pension liability over the pension plan assets, actuarially calculated, of New York Employees Retirement System, a cost-sharing multiple-employer plan, measured as of the pension plan's fiscal year-end. Changes in the net pension liability during the period are recorded as pension expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the period incurred.

#### **Revenue Recognition**

Revenues from water sales are recognized at the time of service delivery based on actual or estimated water meter readings. Billings for water service are generally rendered on a quarterly basis except for one consumer, which is billed monthly due to the requirements of a legal settlement. The Water Authority's Board of Directors has the power to set rates and charges, which are sufficient to meet its obligations, independently and is not subject to the regulation of any department or commission, including the New York State Public Service Commission.

## Operating and Non-Operating Revenues and Expenses

Operating revenues and expenses are related to operating transactions. The operating transactions are those other than capital and related financing activities, noncapital financing activities and investing activities. Operating revenues generally result from sales of water, grants for production and delivery of water, and reimbursement of operating expenses. Operating expenses include depreciation on all fixed assets. Non-operating revenue includes interest earnings on investment assets and miscellaneous income. Non-operating expenditures include interest expense on long-term debt.

## Taxes

As a Public Benefit Corporation, the Water Authority is exempt from federal and state income taxes, as well as state and local property taxes.

## Deferred Inflows of Resources/Deferred Outflows of Resources

Deferred outflows of resources are defined as a consumption of net assets by the government that is applicable to a future reporting period. Deferred inflows of resources are defined as an acquisition of net assets by the government that is applicable to a future reporting period. Deferred outflows of resources increase net position, similar to assets, and deferred inflows of resources decrease net position, similar to liabilities.

## Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### **Operating and Capital Plans**

The Water Authority adopts annual operating and capital plans. Plans are adopted on a basis consistent with generally accepted accounting principles. The current operating plan details the Water Authority's plans to earn and expend funds for charges incurred for operations, maintenance, certain interest and other charges for the fiscal year. The capital plan details the Water Authority's plan to receive and expend capital contribution fees and revenues for improving and expanding capital facilities.

All unexpended or encumbered appropriations in the operating plan remaining at the end of the fiscal year lapse. No appropriations for capital projects in the capital plan lapse until the purpose for which the appropriation was made, has been accomplished or changed.

Management submits a proposed plan to the Water Authority's Board of Directors prior to the commencement of the next fiscal year. A plan is adopted by resolution prior to June 1. During the year, the Board of Directors has to authorize the transfer of planned amounts between line items.

## NOTE 3 – CASH, CASH EQUIVALENTS AND INVESTMENTS

As of May 31, 2017, and 2016, the carrying amount petty cash, cash and cash equivalents and investment in cash equivalent and other investment consisted of the following:

		2017	2016
Petty cash	\$	700	\$ 700
Cash and cash equivalents		38,372,906	24,134,340
Investments	_	28,441,487	47,776,615
Total	\$	66,815,093	\$ 71,911,655

As of May 31, 2017, and 2016 the carrying amount of deposits, cash and cash equivalents were as follows:

		2017		2016
Unrestricted	-		•	
Deposit in banks	\$	3,362,514	\$	2,468,436
Money Market Funds		5,190		5,082
Petty cash		700	_	700
Total unrestricted cash and cash equivalents		3,368,404		2,474,218
Restricted				
Bank Deposit				1,684,310
Money Market Funds and cash equivalents	-	35,005,202	•	19,976,512
Total restricted cash and cash equivalents	-	35,005,202		21,660,822
Total cash and cash equivalents	\$	38,373,606	\$	24,134,040

*Custodial Credit Risk* – All cash deposits of the Water Authority are required to be insured by the Federal Deposit Insurance Corporation ("FDIC") or to be secured by obligations of, or guaranteed by, the United States of America or of the State of New York of a market value equal at all times to the amount on deposit and all banks and trust companies are authorized to give such security for such deposits.

The Water Authority's cash accounts are secured by the appropriate amount from the FDIC with all remaining amounts covered by fully pledged collateral securities, at over 102% of the amounts on deposit. All pledged collateral is classified in the highest category by being held by the Bank of New York Mellon under a tri-party collateral agreement in the Water Authority's name. All time and savings deposits and demand deposits of the Water Authority are held in insured depository institution within the State of New York and are separately insured up to \$250,000.

#### Investments

*Investments Authorized by the State of New York and Bond Resolutions.* Pursuant to the Bond Resolution, the Water Authority may only invest moneys on deposit in various funds established under the resolution in certain investment securities. In addition, and in accordance with the requirements of the State of New York Public Authorities Law, the Water Authority has adopted comprehensive investment guidelines which govern the investment of all moneys of the Water Authority. These guidelines provide that moneys on deposit with the Water Authority may only be invested in:

- 1. Direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America ("USA").
- 2. Bonds, debentures, notes, participation certificates or other evidences of indebtedness issued or guaranteed by any agency or instrumentality of the USA or any other corporation wholly owned by the USA.
- 3. Public housing bonds or preliminary, temporary or project notes issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions, under an annual contributions contract, or contracts with the USA or any federal agency.
- 4. Direct and general obligations of any State or political subdivision of State, as to the payment of the principal of and interest on which the full faith and credit of the issuer is pledged and at the time of their purchase, such obligations of any such state or political subdivision are rated in either of the two highest rating categories by two nationally recognized bond rating agencies.
- 5. Bank time deposits evidenced by certificates of deposit and bankers' acceptances issued by any bank or trust company, which is a member of the FDIC.
- 6. Obligations consisting of notes, bonds and debentures which are direct obligations of a solvent corporation existing under the laws of the USA or any state thereof, provided that such investments shall be rated in the two highest rating categories established by at least two nationally recognized bond rating agencies.
- 7. Certificates or other obligations of the USA or any state, political subdivision, agency or instrumentality of the USA or any state or political subdivision. It is required that such obligations shall be held in trust by a bank or trust company or a national banking association meeting the requirements for a Bond Fund Trustee under the Bond Resolution. Certificates or other obligations of a state or political subdivision, the payments of all principal of, and interest on such certificates or such obligations, shall be fully insured or unconditionally guaranteed by, or otherwise unconditionally payable pursuant to a credit support arrangement provided by, one or more financial institutions or insurance companies or associations which shall be rated in the highest rating category by Moody's Investors Service, L.P. ("Moody's") and either Standard & Poor's Corporation ("S&P") or Fitch Investors Service, Inc. ("Fitch"), or, in the case of an insurer providing municipal bond insurance policies insuring the payment, when due, of the principal of and interest on municipal bonds, such insurance policy shall result in such municipal bonds being rated in the highest rating category by Moody's and either S&P or Fitch.
- 8. Written investment agreements, rated or the issuer of which is rated, in one of the two highest rating categories by at least two nationally recognized rating agencies, and if rated by Moody's, S&P or Fitch, such investment agreements or the long-term unsecured debt obligations of the insurer thereof must be rated in one of the two highest rating categories by the respective agency rating such investment agreements.
- 9. Money market funds registered under the Investment Company Act of 1940, as amended, the investment portfolios of which are comprised solely of investments in obligations described in items 1, 2 and 3 above, and which money market funds are rated in one of the two highest rating categories by the respective agency rating such money market funds.

*Disclosures Relating to Credit Risk* – There is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Any moneys of the Water Authority not required for immediate use or disbursement may, at the discretion of the Water Authority, be invested in those obligations specified pursuant to the provisions of Section 98(a) of the State Finance Law and the Bond Resolution with respect to the Water Authority's Water System Revenue Bonds, Series 2010 and 2005 Bonds.

In addition, there is the risk of loss attributed to the magnitude of the Water Authority's investment in a single issuer. Given the relative safety of those investment instruments that the Water Authority can purchase, the policies of the Water Authority do not place a limit on the amount that may be invested in any one issuer. As of May 31, 2017, and May 31, 2016, the Water Authority's investment, including the investment in cash equivalents was as follows.

		May 31, 2017			May 31, 2016	
		S&P-AAAm			S&P-AAAm	
		Moody's-	US		Moody's-	
		Aaa-mf	Treasury		Aaa-mf	US Treasury
	Fair Value	NAIC-Class 1	Securities	Fair Value	NAIC-Class 1	Securities
Dreyfus Government						
Securities Funds	\$326,036	\$326,036	\$-	\$17,784,989	\$17,784,989	\$-
US Treasury Bonds	28,441,487	-	28,441,487	47,652,038	-	47,652,038
Total	\$28,767,523	\$326,036	\$28,441,487	\$65,437,027	\$17,784,989	\$47,652,038

At May 31, 2017 and 2016, all Water Authority funds were invested in credit risk free US Treasury Securities and money market funds with highest credit rating. The money market funds are managed by Dreyfus Corporation, a BNY Mellon Company. Dreyfus Government Securities Fund invests in securities issued or guaranteed as to the timely payment of principal and interest by the U.S. Government, or its agencies or instrumentalities. The fund does not invest in repurchase agreements or any other type of money market instrument or security. The investment in the money market funds is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency.

*Interest Rate Risk* – When investing idle funds, there is the risk that changes in interest rates will adversely affect the fair value of that investment. The Water Authority currently has an investment policy that limits its exposure to fair value losses by establishing maturity timeframes that meet the cash flow requirements for ongoing operations, thereby avoiding the need to sell securities on the open market prior to maturity.

On May 31, 2017 and May 31, 2017, the maturity dates of the Water Authority's investment securities were as follows:

May 31, 2017		Fair Value		12 Months or Less		13 to 21 Months
Dreyfus Government Securities Funds	\$	326,036	\$	326,036	\$	-
US Treasury Bonds	_	28,441,487	_	21,347,432		7,094,055
Total	\$	28,767,523	\$	21,673,468		7,094,055
May 31, 2016	-				-	
Dreyfus Government Securities Funds	\$	17,784,989	\$	17,784,989	\$	-
US Treasury Bonds	_	47,652,038	_	19,153,443		28,498,595
Total	\$	65,437,027	\$	36,938,432	\$	28,498,595

The Weighted Average Maturity of Dreyfus Government Securities has been very short, less than 60 days. The yields from money market funds may vary, although they have not in the past year, and is not fixed for a specific period. A sharp and unexpected rise in interest rates could cause the share price to drop below a dollar. However, the extremely short maturities of the securities held in the portfolio reduce the potential for price fluctuation. Also, the yields of US Treasury securities' and money market funds will fluctuate as the short-term securities in the Water Authority portfolio mature and the proceeds are reinvested in securities with different interest rates.

#### Custodial Risk of Investments

Custodial credit risk for investments exists when, in the event of the failure of the counterparty, a government will not be able to recover the value of its investments or collateral securities that are in possession of an outside party. The Bank of New York Mellon as the trustee and custodian holds the Water Authority's investments.

## NOTE 4 – PROPERTY, PLANT AND EQUIPMENT

The changes in the cost of capital assets and accumulated depreciation during the years ended May 31, 2017 and May 31, 2016 were as follows:

Year Ended May 31,	_	2016	Increase	_	Decrease	_	2017
Capital assets not subject to depreciation:				-		-	
Land and land rights	\$	167,708	\$ 431,366	\$		\$	599,074
Construction in progress		2,080,762	 9,159,740	_	(4,088,722)	_	7,151,780
Total capital assets not being depreciated		2,248,470	9,591,106	-	(4,088,722)	-	7,750,854
Capital assets being depreciated:							
Wells and standpipes		5,350,037	544,018				5,894,055
Pumping and purification		21,739,020	1,106,181				22,845,201
Distribution system		40,644,775	1,516,270		(224,030)		41,937,015
Building, vehicles and equipment		19,708,008	481,656		(193,353)		19,996,311
Total capital assets being depreciated		87,441,840	3,648,125		(417,383)		90,672,582
Less accumulated depreciation:							
Wells and standpipes		(1,241,419)	(112,920)				(1,354,339)
Pumping and purification		(5,751,687)	(535,309)				(6,286,996)
Distribution system		(6,262,550)	(817,124)		224,030		(6,855,644)
Building, vehicles and equipment		(3,546,977)	(664,321)		193,353		(4,017,945)
Total accumulated depreciation		(16,802,633)	(2,129,674)	_	417,383	_	(18,514,924)
Total net capital assets being depreciated		70,639,207	1,518,451		-		72,157,658
Total net capital assets	\$	72,887,677	\$ 11,109,557	\$	(4,088,722)	\$	79,908,512

Year Ended May 31, 2016	_	2015		Increase	Decrease	2016
Capital assets not subject to depreciation:						
Land and land rights	\$	167,708	\$	-	\$ -	\$ 167,708
Construction in progress		2,006,198	_	4,993,785	(4,919,221)	2,080,762
Total capital assets not being depreciated		2,173,906		4,993,785	(4,919,221)	2,248,470
Capital assets being depreciated:						
Wells and standpipes		2,705,764				2,644,273
Pumping and purification		21,217,955		521,065	-	21,739,020
Distribution system		39,470,121		1,425,462	(250,808)	40,644,775
Building, vehicles and equipment		19,425,151	_	328,120	(45,263)	19,708,008
Total capital assets being depreciated		82,818,991	-	4,918,920	(296,071)	87,441,840
Less accumulated depreciation:						
Wells and standpipes		(1,176,624)		(64,795)	-	(1,241,419)
Pumping and purification		(5,233,437)		(518,250)	-	(5,751,687)
Distribution system		(5,684,756)		(823,462)	245,668	(6,262,550)
Building, vehicles and equipment		(3,009,541)		(582,438)	45,002	(3,546,977)
Total accumulated depreciation		(15,104,358)		(1,988,945)	290,670	(16,802,633)
Total net capital assets being depreciated		67,714,633		2,929,975	(5,401)	70,639,207
Total net capital assets	\$	69,888,539	\$	7,923,760	\$ (4,924,622)	\$ 72,887,677

As of May 31, 2017, and May 31, 2016, the amounts of capitalized interest included in construction in progress were \$133,700 and \$104,900, respectively.

## **NOTE 5 – REVENUE BONDS PAYABLE**

The changes in Revenue Bonds Payable in the year ended May 31, 2017 and May 31, 2016 were as follows:

	May 31,2016	-	Decreases	-	Increases	_	May 31,2017
Water System Revenue Bonds payable	\$ 110,195,000	\$	(2,280,000)	\$	-	\$	107,915,000
Adjustment for deferred amounts:							
Unamortized premium	9,115,506		(375,088)	-	-		8,740,418
Total Revenue Bonds	119,310,506	\$	(2,655,088)	\$	-	-	116,655,418
Less: due within one year	(2,280,000)			-		-	(2,380,000)
Noncurrent portion	\$ 117,030,506					\$	114,275,418
	May 31,2015	_	Decreases	-	Increases	_	May 31,2016
Water System Revenue Bonds payable	\$ 112,590,000	\$	(2,395,000)	\$	-	\$	110,195,000
Adjustment for deferred amounts:							
Unamortized premium	9,488,201		(372,695)	-	-	_	9,115,506
		ć	(2, 7, 7, 7, 0, 0, 0, 0)	ć			119,310,506
Total Revenue Bonds	122,078,201	\$	(2,767,695)	\$	-		119,510,500
Total Revenue Bonds Less: due within one year	122,078,201 (2,395,000)	Ş.	(2,767,695)	Ş.	-	•	(2,280,000)
	, ,	Ş.	(2,767,695)	Ş.	-	•	, ,

#### SERIES 2005 REVENUE BONDS PAYABLE

On August 4, 2005, the Water Authority issued \$33,065,000 Water System Revenue Bonds, Series 2005 in part to provide sufficient funds to affect the advanced refunding of 1996 Series bonds, to finance the cost of acquisition and construction of improvements to the Water System and pay certain costs of issuance relating to the Series 2005 Bonds.

The interest on the refunding bonds ranged from 2.84% to 5.30% (average interest of 3.7%) and the bonds were issued at a premium of \$1,642,140. The \$28,155,000 remaining balance of the Water Authority's outstanding Series 1996A bonds had interest rates ranging from 5.65% to 6.43% (average interest of 5.6%). Simultaneously with the issuance of the Series 2005 Bonds, \$28,758,320, the amount of \$27,900,000 from the proceeds of the sale of the Series 2005 Bonds together with other available moneys, were used to purchase non-callable direct obligations of the USA. Those securities were deposited in an irrevocable trust with an escrow agent to provide for the May 1, 2006, redemption of the bonds, at a redemption price of 102% plus accrued interest. As a result, \$28,225,000 of Series 1996A bonds are considered defeased and the liability for those bonds were removed from the financial statements.

The refunding resulted in a difference between the reacquisition price and the net carrying amount of the refunded debt of \$2,230,412. The Water Authority completed the refunding to reduce its total debt service payments over the next 30 years to obtain an economic gain (difference between the present values of the old and new debt service payments) of \$2,314,315.

## SERIES 2010 REVENUE BONDS PAYABLE

On April 15, 2010, the Water Authority issued its Series 2010 Revenue Bonds. The Series 2010 Revenue Bonds include the Water System Revenue Bonds, Series 2010A (the "Series 2010A Bonds"), with aggregate principal balance of \$6,925,000, and Water System Revenue Bonds, Series 2010B (the "Series 2010B Bonds"), federally taxable, Build America Bonds, with aggregate principal balance of \$33,965,000. The Bonds were issued pursuant to the water system revenue bonds General Resolution adopted by the Water Authority on May 13, 1996 and the supplemental Series 2010 Resolution adopted on January 25, 2010. The Series 2010 Bonds are the third and fourth Series of Bonds (as that term is defined herein) to be issued under the General Resolution.

The Series 2010A Bonds were issued to finance costs of acquisition, improvements and additions to the water system, to fund a deposit to the Reserve Account, and to pay certain costs of issuance relating to the Series 2010A Bonds. The Series 2010B Bonds were issued to finance the cost of acquisition, improvements and additions to the water system, including the construction of the Water Authority's headquarters, to fund a deposit to the Reserve Account, and to pay certain costs of issuance relating to the Series 2010B Bonds. The Series 2010B Bonds, which are issued as Senior Lien Bonds, are the third and fourth Series of Bonds issued under the General Resolution. The Series 2010 Bonds are payable as to both interest and principal solely from the net revenues on a parity with other outstanding Bonds.

The Water Authority has elected to treat the Series 2010B Bonds as "Build America Bonds" for purposes of the American Recovery and Reinvestment Act of 2009 (the "Recovery Act") and to receive a cash subsidy from the US Treasury in connection therewith. Pursuant to the Recovery Act, the Water Authority is entitled to receive cash subsidy payments rebating a portion of the interest on the Build America Bonds from the US Treasury equal to 35% of the interest payable on the Series 2010B Bonds. The Water Authority will use this subsidy exclusively to pay interest on the Series 2010B Bonds.

The Series 2010A Bonds are not subject to redemption prior to maturity. The Series 2010B Bonds are subject to Make-Whole and Extraordinary Redemption at the option of the Water Authority.

#### SERIES 2015 REVENUE BONDS PAYABLE

On April 22, 2015, the Water Authority issued the \$54,200,000 Water System Revenue Bonds Series 2015A and \$19,400,000 Water Revenue Refunding Series 2015B. The Series 2015A proceeds are used to finance the cost of construction of improvements to water system, to fund a portion of reserve account and to pay certain issuance costs. The proceeds of Series 2015B Bond together with Series 2005 Bond Debt Reserve Fund balances were applied to refund the \$23,885,000 outstanding balance of the Series 2005 Bonds, to pay \$666,789 of interest and fund a portion of reserve account and to pay certain issuance costs. The sources and uses of the Series 2015 Bonds are as follows:

Sources:	Total	Uses:	
Bond Proceeds:		Escrow Fund	\$ 24,551,790
Par Amount	\$ 73,600,000	Construction Fund	55,822,774
Net Premium	9,410,647	Reserve account, Series 2015	4,780,500
		Deposit to Capitalized	
Released Bond Funds	3,715,130	Interest Account Series 2015	1,128,088
		Costs of Issuance	442,625
Total sources	\$ 86,725,777		
		Total Uses	\$ 86,725,777

Series 2005A and 2005B Bonds are considered to be defeased and the liability for those bonds were removed from the financial statements.

The refunding resulted in a difference between the reacquisition price and the net carrying amount of the refunded debt of \$1,028,663. The Water Authority completed the refunding to reduce its total debt service payments over the next 30 years to obtain an economic gain (difference between the present values of the old and new debt service payments) of \$4,023,167. The economic gain represents 16.84% of the outstanding balance of the refunded bonds.

The Series 2015 Bonds are subject to redemption at the option of the Water Authority on or after April 1, 2025, in whole or in part, at a price of par, plus accrued interest.

The Series 2015A Bonds maturing on April 1, 2040 (\$17,640,000), April 1, 2045 (\$10,000,00 at 4% interest) and April 1, 2045 (\$4,900,000 at 5% interest) are subject to mandatory redemption, at a price equal 100% of the principal plus accrued interest, over five-year periods, commencing on 2036, 2041 and 2041, respectively.

The average life and duration of the Series 2015 Bonds are 17.84 and 12.19, respectively. The average annual debt service is \$4,530,667 and the maximum annual debt service is \$4,780,500. The yield of the component bonds ranges from 0.31% to 3.79%, depending on the term of the bonds.

## Make-whole Redemption

The Series 2010B Bonds are subject to redemption, in whole or in part, prior to their stated maturities, on any date. The redemption price is equal to the greater of:

- (i) 100% of the principal amount of such Series 2010B Bonds to be redeemed, plus accrued and unpaid interest, or
- (ii) The sum of the present values of the remaining scheduled payments of principal and interest discounted to the date of redemption at the Treasury Rate plus 30 basis points. "Treasury Rate" is the yield to maturity of the Treasury Issue, with equivalent maturity.

## Extraordinary Redemption

The Series 2010B Bonds are subject to redemption prior to maturity at the option of the Water Authority, in whole or in part, on any date following the occurrence of an "Extraordinary Event", at redemption price equal to the greater of:

- (i) 100% of the principal amount of such Series 2010B Bonds to be redeemed, plus accrued and unpaid interest, or
- (ii) The sum of the present values of the remaining scheduled payments of principal and interest on such Series 2010B Bonds to be redeemed discounted to the date of redemption on a semiannual basis at the Treasury Rate plus 100 basis points.

An "Extraordinary Event" occurs if the 35% cash subsidy payment from the US Treasury to the Water Authority is reduced or eliminated as a result of change in provisions of Internal Revenue Code of 1986 pertaining to Build America Bonds or determination by the Internal Revenue Service or the US Treasury that the Bonds do not qualify to receive the subsidy.

The Series 2010B Bonds maturing on April 1, 2025, 2030 and 2040 are subject to mandatory redemption prior to their stated maturity in part on each April 1 on and after April 1, 2021, 2026 and 2031, respectively. The Bonds will be redeemed from moneys required to be credited to the Bond Retirement Account in the Bond Fund at a redemption price equal to the principal amount to be redeemed, together with interest accrued on such principal amount to the date fixed for redemption.

The General Resolution requires the Water Authority to establish rates and other charges for the water that will be sufficient in each fiscal year to produce revenues (with deposits from Rate Stabilization Fund) that will be at least equal to: (i) the fiscal year's debt service and reserve fund replenishment obligations, operation and maintenance expenses (including amounts to be deposited to the Rate Stabilization Fund), and any other charges or liens; (ii) 1.20 times the debt service for such Fiscal Year.

## **OUTSTANDING REVENUE BONDS PAYABLE**

The outstanding Water System Revenue Bonds at May 31, 2017 consist of the following:

Water System Revenue Bonds	Maturity Date	Interest Rate	Average Rate	_	Original Principal	_	Outstanding Principal
Series 2010:				-		-	
Series A Bond							
Uninsured Serial Bond	2011-2012	2-3%	2.64%	\$	785,000	\$	-
Serial Bond	2013-2020	3-4%	3.80%		6,140,000		3,125,000
Total Series A Bonds					6,925,000	-	3,125,000
Series B Bond							
Term Bond	2025	6.01%	6.01%		6,090,000		6,090,000
Term Bond	2030	6.45%	6.45%		7,420,000		7,420,000
Term Bond	2040	6.70%	6.70%		20,455,000		20,455,000
Total Series B					33,965,000	-	33,965,000
Total Series 2010 Bonds					40,890,000		37,090,000
Series 2015:							
Serial Bonds - Refunding (2015B)	2035	3%-5%	4.51%	\$	19,400,000	\$	16,905,000
Serial Bonds - New Money (2015A)	2035	4%-5%	4.56%		21,660,000		21,380,000
Term Bond 2040 - New Money (2015A)	2040	5%	5.00%		17,640,000		17,640,000
Term Bond 2045 - New Money (2015A)	2045	5%	5.00%		10,000,000		10,000,000
Term Bond 2045 - New Money (2015A)	2045	4%	4.00%		4,900,000		4,900,000
Total Series 2015A					54,200,000	•	53,920,000
Total Series 2015					73,600,000	•	70,825,000
Total				\$	114,490,000	\$	107,915,000

## FUTURE DEBT SERVICE REQUIREMENTS

At May 31, 2017, debt service requirements to maturity for the Bond Series 2010 and 2015 were as follows:

201	OA BONDS				
_	Principal		Interest		Total
\$	1,000,000	\$	125,000	\$	1,125,000
	1,040,000		85 <i>,</i> 000		1,125,000
	1,085,000		43,400		1,128,400
\$	3,125,000	\$	253,400	\$	3,378,400
	<b>01</b> \$ \$	\$ 1,000,000 1,040,000 1,085,000	Principal           \$ 1,000,000         \$           1,040,000         1,085,000	Principal         Interest           1,000,000         \$         125,000           1,040,000         \$5,000           1,085,000         43,400	Principal         Interest           \$ 1,000,000         \$ 125,000         \$ 125,000           1,040,000         85,000         1,085,000

## SERIES 2010B BONDS

			Gross		Net	Total	Total
Date	_	Principal	Interest	Subsidy	Interest	Gross	Net
2018	\$	-	\$ 2,215,180	\$ (775,313)	\$ 1,439,867	\$ 2,215,180	\$ 1,439,867
2019		-	2,215,180	(775,313)	1,439,867	2,215,180	1,439,867
2020		-	2,215,180	(775,313)	1,439,867	2,215,180	1,439,867
2021		1,125,000	2,215,180	(775,313)	1,439,867	3,340,180	2,564,867
2022-202	6	6,330,000	10,006,955	(3,502,434)	6,504,521	16,336,955	12,834,521
2027-203	1	7,730,000	7,850,450	(2,747,657)	5,102,793	15,580,450	12,832,793
2032-203	6	9,540,000	5,067,966	(1,773,788)	3,294,178	14,607,966	12,834,178
2037-204	1	9,240,000	1,580,766	(553,268)	1,027,498	10,820,766	10,267,498
Total	\$	33,965,000	\$ 33,366,857	\$ (11,678,399)	\$ 21,688,458	\$ 67,331,857	\$ 55,653,458

#### SERIES 2015A BONDS

Date	Principal		Interest	-	Total
2018 \$	70,000	\$	2,547,863	\$	2,617,863
2019	75,000	·	2,543,663		2,618,663
2020	80,000		2,541,413		2,621,413
2021	80,000		2,539,013		2,619,013
2022-2026	470,000		12656,213		13,126,213
2027-2031	10405,000		11,701,612		2,210,6612
2032-2036	13,385,000		9,105,575		22,490,575
2036-2041	17,165,000		5,332,250		22,497,250
2042-2045	12,190,000	_	1,447,000	_	13,637,000
Total \$ _	53,920,000	\$ <u>-</u>	50,412,502	\$	104,332,502
Date	Principal		Interest		Total
Date 2018 \$	Principal 1,310,000	- \$		\$	
	Principal 1,310,000 1,375,000	\$	Interest 799,981 734,481	\$	Total 2,109,981 2,109,481
2018 \$	1,310,000	\$	799,981	\$	2,109,981
2018 \$ 2019	1,310,000 1,375,000	\$	799,981 734,481	\$	2,109,981 2,109,481
2018 \$ 2019 2020	1,310,000 1,375,000 1,440,000	\$	799,981 734,481 665,731	\$	2,109,981 2,109,481 2,105,731
2018 \$ 2019 2020 2021	1,310,000 1,375,000 1,440,000 1,515,000	\$	799,981 734,481 665,731 593731	\$	2,109,981 2,109,481 2,105,731 2108731
2018 \$ 2019 2020 2021 2022-2026	1,310,000 1,375,000 1,440,000 1,515,000 8,780,000	- \$	799,981 734,481 665,731 593731 1,754,406	\$	2,109,981 2,109,481 2,105,731 2108731 10,534,406

## NOTE 6 – OTHER LONG-TERM LIABILITIES

Changes in long-term liabilities, other than the Bonds, were as follows:

	May 31, 2016	Addition	Reduction	May 31, 2017		Noncurrent Liability
Accrued vacation and sick leave	\$858,520	\$132,400	\$(40,000)	\$950,900	\$40,000	\$910,900

#### **NOTE 7 – EMPLOYEE BENEFITS**

#### **Retirement Plan Description**

The Water Authority participates in the New York State and Local Employees' Retirement System (ERS) which are collectively referred to as New York State and Local Retirement System (the System). These are cost-sharing multiple-employer defined benefit retirement systems. The net position of the System is held in the New York State Common Retirement Fund (the Fund), which was established to hold all net assets and record changes in fiduciary net position allocated to the System. The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of the System.

The Comptroller is an elected official determined in a direct statewide election and serves a four-year term. Thomas P. DiNapoli has served as Comptroller since February 7, 2007. In November 2014, he was elected for a new term commencing January 1, 2015. System benefits are established under the provisions of the New York State Retirement and Social Security Law (RSSL). Once a public employer elects to participate in the System, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute. The Water Authority also participates in the Public Employees' Group Life Insurance Plan (GLIP), which provides death benefits in the form of life insurance.

The System is included in the State's financial report as a pension trust fund. That report may be found at www.osc.state.ny.us/retire/publications/index.php or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, NY 12244.

#### **Benefits Provided**

The System provides retirement benefits as well as death and disability benefits.

#### Tiers 1 and 2

Eligibility: Tier 1 members, with the exception of those retiring under special retirement plans, must be at least age 55 to be eligible to collect a retirement benefit. There is no minimum service requirement for Tier 1 members. Tier 2 members, with the exception of those retiring under special retirement plans, must have five years of service and be at least age 55 to be eligible to collect a retirement benefit. The age at which full benefits may be collected for Tier 1 is 55, and the full benefit age for Tier 2 is 62.

Benefit Calculation: Generally, the benefit is 1.67 percent of final average salary for each year of service if the member retires with less than 20 years. If the member retires with 20 or more years of service, the benefit is 2 percent of final average salary for each year of service. Tier 2 members with five or more years of service can retire as early as age 55 with reduced benefits. Tier 2 members age 55 or older with 30 or more years of service can retire with no reduction in benefits.

As a result of Article 19 of the RSSL, Tier 1 and Tier 2 members who worked continuously from April 1, 1999 through October 1, 2000 received an additional month of service credit for each year of credited service they have at retirement, up to a maximum of 24 additional months. Final average salary is the average of the wages earned in the three highest consecutive years. For Tier 1 members who joined on or after June 17, 1971, each year of final average salary is limited to no more than 20 percent of the previous year. For Tier 2 members, each year of final average salary is limited to no more than 20 percent of the average of the previous two years.

## Tiers 3, 4, and 5

Eligibility: Tier 3 and 4 members, with the exception of those retiring under special retirement plans, must have five years of service and be at least age 55 to be eligible to collect a retirement benefit. Tier 5 members, with the exception of those retiring under special retirement plans, must have ten years of service and be at least age 55 to be eligible to collect a retirement plans, must have ten years of service and be at least age 55 to be eligible.

Benefit Calculation: Generally, the benefit is 1.67 percent of final average salary for each year of service if the member retires with less than 20 years. If a member retires with between 20 and 30 years of service, the benefit is 2 percent of final average salary for each year of service. If a member retires with more than 30 years of service, an additional benefit of 1.5 percent of final average salary is applied for each year of service over 30 years. Tier 3 and 4 members with five or more years of service and Tier 5 members with ten or more years of service can retire as early as age 55 with reduced benefits. Tier 3 and 4 members age 55 or older with 30 or more years of service can retire with no reduction in benefits.

Final average salary is the average of the wages earned in the three highest consecutive years. For Tier 3, 4 and 5 members, each year of final average salary is limited to no more than 10 percent of the average of the previous two years.

## Tier 6

Eligibility: Tier 6 members, with the exception of those retiring under special retirement plans, must have ten years of service and be at least age 55 to be eligible to collect a retirement benefit. The full benefit age for Tier 6 is 63 for ERS members and 62 for PFRS members.

Benefit Calculation: Generally, the benefit is 1.67 percent of final average salary for each year of service if the member retires with less than 20 years. If a member retires with 20 years of service, the benefit is 1.75 percent of final average salary for each year of service. If a member retires with more than 20 years of service, an additional benefit of 2 percent of final average salary is applied for each year of service over 20 years. Tier 6 members with ten or more years of service can retire as early as age 55 with reduced benefits. Final average salary is the average of the wages earned in the five highest consecutive years. For Tier 6 members, each year of final average salary is limited to no more than 10 percent of the average of the previous four years.

## Ordinary Disability Benefits

Generally, ordinary disability benefits, usually one-third of salary, are provided to eligible members after ten years of service; in some cases, they are provided after five years of service.

## Accidental Disability Benefits

For all eligible Tier 1 and Tier 2 ERS and PFRS members, the accidental disability benefit is a pension of 75 percent of final average salary, with an offset for any Workers' compensation benefits received. The benefit for eligible Tier 3, 4, 5 and 6 members is the ordinary disability benefit with the years-of-service eligibility requirement dropped.

## Ordinary Death Benefits

Death benefits are payable upon the death, before retirement, of a member who meets eligibility requirements as set forth by law. The first \$50,000 of an ordinary death benefit is paid in the form of group term life insurance. The benefit is generally three times the member's annual salary. For most members, there is also a reduced post-retirement ordinary death benefit available.

#### Post-Retirement Benefit Increases

A cost-of-living adjustment is provided annually to: (i) all pensioners who have attained age 62 and have been retired for five years; (ii) all pensioners who have attained age 55 and have been retired for ten years; (iii) all disability pensioners, regardless of age, who have been retired for five years; (iv) ERS recipients of an accidental death benefit, regardless of age, who have been receiving such benefit for five years and (v) the spouse of a deceased retiree receiving a lifetime benefit under an option elected by the retiree at retirement. An eligible spouse is entitled to one-half the cost-of-living adjustment amount that would have been paid to the retiree when the retiree would have met the eligibility criteria. This cost-of-living adjustment is a percentage of the annual retirement benefit of the eligible member as computed on a base benefit amount not to exceed \$18,000 of the annual retirement benefit. The cost-of-living percentage shall be 50 percent of the annual Consumer Price Index as published by the U.S. Bureau of Labor, but cannot be less than 1 percent or exceed 3 percent.

## Contributions

The System is noncontributory except for employees who joined the New York State and Local Employees' Retirement System after July 27, 1976, who contribute 3 percent of their salary for the first ten years of membership, and employees who joined on or after January 1, 2010 (ERS) or January 9, 2010 (PFRS) who generally contribute 3 percent of their salary for their entire length of service. For Tier 6 members, the contribution rate varies from 3 percent to 6 percent depending on salary. Generally, Tier 5 and 6 members are required to contribute for all years of service. Under the authority of the NYSRSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers' contributions based on salaries paid during the Systems' fiscal year ending March 31. Contributions for the current year and two preceding years were equal to 100 percent of the contributions required, and were as follows:

Year Ended May 31,	Contribution
2017	\$595 <i>,</i> 561
2016	688,041
2015	748,116

# Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At May 31, 2017 and May 31, 2016, the Water Authority's reported a liability of \$2,240,809 and \$470,745, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of March 31, 2015, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Water Authority's proportion of the net pension liability was based on a projection of the Water Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating members, actuarially determined. At May 31, 2017 and May 31, 2016, the Water Authority's proportion was 0.0139611% and 0.0139346%., respectively.

For the year ended May 31, 2017 and May 31, 2016, the Water Authority recognized pension expense of \$830,137 and \$439,292, respectively. At May 31, 2017, the Water Authority's reported deferred outflows of resources related to pensions from the following sources:

	Deferred Outflow of Resources		Deferred Inflow of Resources
Difference between expected and actual experience	\$ 11,323	\$	265,609
Changes in assumptions Net difference between expected and actual investment earnings on	597,554		-
pension assets	1,329,366		-
Changes in proportion and difference between employer contributions and proportionate share of contributions	105,211		<u>-</u>
Authority contributions subsequent to the measurement date	595,561	_	<u>-</u>
Total deferred outflows and inflows of resources	\$ 2,639,015	<u>\$</u>	265,609

The \$595,561 reported as deferred outflows of resources related to pensions resulting from the Water Authority contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended May 31, 2017. Other amounts reported as deferred outflows of resources related to pensions are recognized in pension expense as follows:

Year	Amount
2017	\$453,840
2018	453,840
2019	453,840
2020	453,840
Thereafter	-

-

Actuarial Assumptions. The total pension asset/(liability) as of the measurement date was determined by using an actuarial valuation as noted in the table below, with update procedures used to roll forward the total pension asset/(liability) to the measurement date. The actuarial valuation used the following actuarial assumptions for May 31, 2017 and 2016:

	2017	2016
Measurement date	March 31, 2016	March 31, 2015
Actuarial valuation date	April 1, 2015	April 1, 2014
Interest Rate	7.00%	7.50%
Salary Scale	3.80%	4.90%
Decrement tables	April 1, 2010 –	April 1, 2005-
	April 1, 2015	April 1, 2014
System's Experience System's Experience Inflation rate	2.50%	2.70%
Projected Cost of Living Adjustments 1	1.3% annually	1.4% annually

The actuarial assumptions used in the April 1, 2015 valuation are based on the results of an actuarial experience study for the period April 1, 2010 – March 31, 2015.

The entry age normal actuarial cost method is used. Pensioner mortality rates are based on April 1, 2010 – March 31, 2015 System's experience with adjustments for mortality improvements based on Society of Actuaries Scale MP-2014.

The long-term expected rate of return on pension plan investments was determined in accordance with Actuarial Standard Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations.* ASOP No. 27 provides guidance on the selection of an appropriate assumed investment rate of return. Consideration was given to expected future real rates of return (expected returns, net of pension plan investment expense and inflation) for equities and fixed income as well as historical investment data and plan performance.

Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation are summarized as follows:

		Long-term
	Asset	Expected
Asset Class	Allocation	Rate of Return
Domestic equity	38.00%	7.30%
International equity	13.00%	8.55%
Private equity	10.00%	11.00%
Real estate	8.00%	8.25%
Absolute return strategies	3.00%	6.75%
Opportunistic portfolio	3.00%	8.60%
Real assets	3.00%	8.65%
Bonds and mortgages	18.00%	4.00%
Cash	2.00%	2.25%
Inflation-indexed bonds	2.00%	4.00%
	100.00%	

**Discount-Rate**. The discount rate used to calculate the total pension liability was 7%. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current rates and contributions from employers will be made at the statutorily required rates, actuarially. Based upon the assumptions, the State Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the proportionate share of the net pension liability to the discount rate assumption. The following presents the Water Authority's proportionate share of the net pension liability/(asset) calculated using the discount rate of 7%, as well as what the Water Authority's proportionate share of the net pension liability/(asset) would be if it were calculated using a discount rate that is 1% lower (6%) or 1% higher (8%) than the current rate:

	Discount Rate		
	1% Decrease	Current Discount	1% increase
	6%	7 %	8%
Employer's proportionate share of the net pension liability/(asset)	\$5,052,841	\$2,240,800	\$ (135,255)

## **Collective Net Position Liability of Participating Employers and Actuarial Information**

The components of the net pension liability of the employers as of March 31, 2016 and 2015 were as follows:

(In Thousands)	2016	2015
Employers' total pension liability	\$172,303,544	\$164,591,504
Plan net position	<u>(156,253,265)</u>	<u>(161,213,259)</u>
Employers' net pension liability	16,050,279	3,378,245
Fiduciary net position as a percentage of total pension liability	90.7%	97.9%
Retiree Healthcare Benefits		

The Water Authority's Board of Directors has amended a resolution for postretirement benefits. The Water Authority has been self-funding retiree benefits and as of May 31, 2017 had net OPEB obligation of \$3,100,611.

## Accrued Vacation and Sick Leave

The Water Authority employees earn vacation leave each month at a scheduled rate in accordance with the years of service and sick leave at the rate of one day per month. The maximum accumulated sick leave is 60 days. Accumulated unpaid vacation and sick leave amounts are accrued as earned. On May 31, 2017 and May 31, 2016, the liabilities for accrued vacation were \$375,200 and \$344,600 and for the sick leave were \$575,700 and \$553,900, respectively.

#### NOTE 8 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSION\S

From an accrual accounting perspective, the cost of postemployment healthcare benefits, similar to the cost of pension benefits, generally should be associated with the periods in which the cost occurs, rather than in the future year when it will be paid. Since adopting the requirements of GASB Statement No. 45 during the year ended May 31, 2009, the Water Authority recognized the cost of postemployment healthcare in the year when the employee services were received, reported the accumulated liability from prior years, and provided information useful in assessing potential demands on the Water Authority's future cash flows. Recognition of the liability accumulated from prior periods was phased in over 30 years, commencing with the 2009 liability.

## Plan Description

Postemployment health insurance coverage is afforded under single employer defined benefit plan to the Water Authority's retired employees and their dependents in accordance with the provisions of a resolution adopted by the Water Authority's Board of Directors on September 17, 2002 and as amended November 9, 2009. Substantially all Water Authority employees may become eligible for these benefits provided the employee has a minimum of ten years full-time employment with the Water Authority, has obtained 55 years of age and has terminated employment with the Water Authority within five years from the date on which entitled to a retirement allowance from the ERS.

The Board adopted resolution and amended resolution provides eligible enrollees with postretirement medical insurance coverage, limited to the health insurance programs offered by the Water Authority to its

then full-time employees, as modified from time-to-time by the Board. The Water Authority pays 60% of the cost of premium for individual coverage and 40% of the cost for dependent coverage for eligible retired employees. These benefits continue for the lifetime of the retiree.

The Water Authority provides life insurance policies, at no cost to the retiree, for individuals who were hired prior to June 1996. The life insurance benefit is \$20,000 for hourly employees and \$40,000 for salaried employees and is subject to age reductions set by the insurance carrier.

The number of participants as of June 1, 2012 and June 1, 2015, and the effective date of the annual OPEB valuation, are as follows:

	June 1,	June 1, 2012		, 2015
Participants	Number	Average Age	Number	Average Age
Active employees	48	47	44	48
Retired employees	6	66	7	68
Total	54		51	

## Funding Policy

The Water Authority currently pays for postemployment health care benefits on a pay-as-you-go basis.

## Annual Other Postemployment Benefit Cost

The Water Authority's annual other postemployment benefit cost is calculated based on the annual required contribution (ARC) of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

The annual OPEB cost, the percentage of annual OPEB cost contributed to the Plan and Net OPEB obligation for fiscal year 2017 and 2016 were as follows:

## Annual OPEB Cost and Net OPEB Obligation

Fiscal year ending May 31,	2017	_	2016
Annual required contribution (ARC)	\$ 462,161	\$	454,002
Interest on NOO at 4.5%	109,521		95,154
Adjustment to ARC (NOO)	(152,282)	_	(132,305)
Annual OPEB cost (AOC)	419,400		416,851
Less: amount contributed	(56,825)		(57 <i>,</i> 653)
Change in net OPEB obligation	362,575	-	359,198
Net OPEB obligation (NOO), beginning balance	2,738,036	_	2,378,838
Net OPEB obligation, ending balance	\$ 3, 100,611	\$	2,738,036

The actual contribution of \$56,825 is the sum of the following:

	Contributions
Medical premium paid	\$ 75,136
Part B premium paid	10,932
Life premium paid	623
Implicit subsidy	7,786
Retiree contributions	(37,652)
Actual contribution	\$ 56,825

For the three years ended May 31, 2017, the Water Authority's schedule of required and actual annual contributions is presented below:

Year Ended		Annual Required	Actual	Percentage
May 31,	_	Contribution	Contribution	Contributed
2017	\$	462,161	\$56,825	12%
2016		454,002	57,653	13%
2015		395,940	48,260	12%

The Water Authority's annual OPEB cost, the percentage of annual OPEB cost contributed and the net OPEB obligation for the eight years ended May 31, 2017 were as follows:

Fiscal	Fiscal Annual OPEB				PEB (	_	Net OPEB	
Year Ended		Cost		Amount	_	Percentage	-	Obligation
May 31, 2017	\$	419,400	\$	56,825		14%	\$	3,100,611
May 31, 2016		416,851		57 <i>,</i> 663		14%		2,738,036
May 31, 2015		367,613		48,260		13%		2,378,838
May 31, 2014		363,653		39,149		11%		2,059,485

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the Water Authority are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

For the fifteen fiscal years beginning June 1, the projected benefit payments of the Water Authority are presented in the following Table:

<b>Fiscal Year</b>			
Beginning	Active	Retired	
June 1,	Employees	Employees	Total
2015	\$2,900	\$61,000	\$63,900
2016	8,800	66,700	75,500
2017	22,200	72,700	94,900
2018	29,800	79,600	109,400
2019	44,200	75,100	119,300
2020	63,600	80,500	144,100
2021	87,500	75,400	162,900
2022	109,400	79,300	188,700
2023	121,200	69,500	190,700
2024	144,800	72,000	216,800
2025	154,700	61,800	216,500
2026	170,600	62,600	233,200
2027	197,300	63,300	260,600
2028	225,400	63,800	289,200
2029	244,700	64,100	308,800

#### Projected Benefit Payments

## Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The actuarial assumptions used in the determination of costs and liabilities are as follows:

Interest:

4:0% (previously 4.5%)

Mortality

RP-2000 Mortality Table is used with separate male and female rates, with no collar adjustment, separate table for non-annuitants and annuitants, projected to the valuation date with Scale BB. (Previously, RP-2000 Mortality table was used with separate male and female rates with no collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale AA.)

Mortality Improvement

Projected to date of decrement using Scale BB (generational mortality). (previously projected to date of decrement using Scale AA.)

## Employee Turnover

Vaughn Ultimate Table multiplied by 0.5, Percentage of Employees Terminating prior to End of Year:

Age	Rate
25	6.80%
30	5.05%
35	3.95%
40	3.25%
45	2.75%
50	2.25%
55+	0.00%

Retirement Age: Percentage of Employees Retiring Prior to End of Year:

Age	Rate
62-64	9%
65-69	20%
70+	100%

Annual Medical Premium:

	2015	2014
Pre-65 - Employee Only	\$ 9,661	\$ 9,258
Pre-65 – Family	21,706	20,570
Post 65 – Employee Only	48,225	4,905
Post 65 – Two Person	12,030	11,864

Medical Claims Assumption

For the valuation, 50% of the 2014 Premium and 50% of the 2015 premium was used.

#### Marriage Rates at Retirement:

It is assumed 50% of active females and 50% of active males will be married at retirement, and that husbands will be 3 years older than their wives.

## Medical Trend

Starts at 8.0% in 2015, grading down 0.5% per year to 5.0% in 2021 and beyond. (Previously 9.0% in 2012, grading down 1.0% per year to 5.0% 5.0% in 2016 and beyond.)

Medicare Part B: 3% annual increases.

## **Claims Morbidity**

It is assumed that actual claims will be distributed according to the following table (pre-65):

Age	<b>Relative Claims Cost</b>
55	\$11,413
60	13,621
64	16,057

Actuarial Methodologies

Actuarial Cost Method: Projected Unit Credit

The Normal Cost is derived for each active participant as the actuarial present value of the projected benefits that are attributed to expected service in the current plan year. The Normal Cost for plan benefits is the total of the individual Normal Costs for active participants.

The Accrued Liability is equal to the portion of the present value of future benefits that is allocated to years of service before the valuation date.

Amortization Method:	30 years, level dollar, open
Inflation rate	3%

The Unfunded Accrued Liability is amortized each year over a constant 30-year period, as a level dollar amount.

Asset Valuation Method: Market Value

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"): Effective in 2018 there will be a 40% excise tax on per capita medical benefit cost in excess of certain thresholds, which are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds for retirees who are between ages 55 and 65 are \$11850 and \$30950 for single and family coverage respectively. After 2018, the thresholds are indexed by CPI (CPI plus 1% in 2018 only). CPI is assumed to be 3% in all future years.

The impact of this future excise tax has been reflected in the plan liabilities. For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on the plan liabilities.

#### NOTE 10 - NET POSITION

Net position represents the difference between assets and liabilities. The net asset amounts were:

	May 31, 2017		May 31, 2016
Invested in capital assets net of related debt:			
Capital assets, net of accumulated depreciation	\$ 79,908,512	\$	72,887,677
Less: related debt			
Revenue bonds payable	(107,915,000)		(110,195,000)
Bond premium	(8,740,416)		(9,115,506)
Deferred outflows	28,805		30,406
Unspent debt proceeds in construction and reserve funds	61,210,306		67,245,914
Bond issue costs	16,080	_	20,846
Total invested in capital assets, net of related debt	24,508,287		20,874,337
Restricted for Rate Stabilization and Customer Deposits:			
Restricted cash and equivalents	2,236,383		2,191,523
Less: customer deposits	(1,166,383)	_	(1,121,523)
Total restricted for capital activity, rate stabilization and debt service	1,070,000		1,070,000
GASB 68 and 71 implementations	-		-
Unrestricted	(246,600)	_	72,075
Total net assets	\$ 25,331,687	\$	22,016,412

On May 31, 2017, the unrestricted net position deficit is primarily related to the long-term obligation of \$3,100,611 for other postemployment benefits.

#### **NOTE 11 – COMMITMENTS AND CONTINGENCIES**

#### Litigation

The Water Authority is subject to lawsuits in the ordinary conduct of its affairs. The Water Authority does not believe, however, that any such suits, individually or in the aggregate, are likely to have a material adverse effect on the financial condition of the Water Authority.

#### **Risk Management**

The Water Authority is exposed to various risks of loss related to torts, theft, damage, injuries, errors and omissions, natural disasters and other risks. These risks are covered by commercial insurance purchased from independent third parties. Settled claims from these risks have not exceeded commercial insurance coverage for the past three years.

#### Insurance

The Water Authority's commercial insurance coverage provides for virtually all risks of loss including property, liability, automobile accidents and public official's coverage. The Water Authority also carries umbrella liability insurance coverage. This coverage is comparable to that of the prior fiscal year.

## Compliance

The Water Authority is subject to various laws and regulations, which establish uniform minimum national water quality standards. The Water Authority has set up procedures for the continued evaluation of its operations to identify potential exposures and assure compliance with these standards.

## NOTE 12 – LEASE REVENUE AGREEMENTS

The Water Authority has several lease agreements in place with various cell phone providers for the leasing of Water Authority property to install and maintain cell phone transmission towers. These lease agreements range for a period of one year to five years and are renewable at the discretion of the cell phone providers for periods that coincide with the initial lease period. The minimum amount of lease income expected to be recognized by the Water Authority over the next remaining lease periods is summarized in the following table:

Year ending May 31, 2018 \$287,700

#### NOTE 13 – RATE CHANGES

Under the Water Authority Charter, the Board is empowered to set rates for all its customers. The rates are to be sufficient to pay for operations, maintenance, reserves, debt service, additions, extensions and betterment of the facilities. The Board approved 2.5% increase in water rates effective on June 1, 2017.

#### **NOTE 14 – SUBSEQUENT EVENTS**

The Water Authority evaluated subsequent events from May 31, 2017 through August 30, 2017, the date on which the financial statements were available to be issued, and determined that there were no material subsequent events.

## SECTION C: REQUIRED SUPPLEMENTARY INFORMATION



# THE WATER AUTHORITY OF WESTERN NASSAU COUNTY SCHEDULE OF FUNDING PROGRESS FOR THE OTHER POST EMPLOYMENT BENEFIT PLAN JUNE 1, 2015, 2012 AND 2011

:

Actuarial Valuation Date June 1,	Actuarial A		Actuarial Accrued Liability (AAL)	Accrued Accrued Liability Liability			Funded Ratio	Covered Payroll	(UAAL) as a Percentage of Covered Payroll	
2015	\$	-	\$	4,408,394	\$	4,408,394		-	\$ 3,924,590	112%
2012		-		3,335,117		3,335,117		-	3,715,880	90%
2011		-		2,470,292		2,470,292		-	3,708,940	67%

# THE WATER AUTHORITY OF WESTERN NASSAU COUNTY SCHEDULE OF PROPORTIONATE SHARE OF NET PENSION LIABILITY OF NEW YORK STATE EMPLOYEE'S RETIREMENT SYSTEM LAST THREE FISCAL YEARS

	Year Ended May 31,							
		2017		2016		2015		
Measurement date		h 31, 2016	March	31, 2015	Marc	h 31, 2014		
Water Authority's Proportion share of net pension								
liability (asset)		0.0139611%	(	0.0139346%	0	0.0139346%		
Water Authority's Proportionate share of net pension liability (asset)	\$	2,240,800	\$	470,745	\$	629,685		
Water Authority's covered-employee payroll		4,181,783		3,914,860		3,924,590		
Water Authority's proportionate share of the net pension liability as a percentage of its covered-								
employee payroll		53.6%		12.0%		16.0%		
Plan fiduciary net position as a percentage of the total pension liability		90.70%		97.90%		97.20%		

#### THE WATER AUTHORITY OF WESTERN NASSAU COUNTY

# SCHEDULE OF CONTRIBUTIONS TO NEW YORK STATE EMPLOYEES RETIREMENT SYSTEM LAST TEN FISCAL YEARS

Year Ended May31,	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Contractually required contribution	\$595,561	\$688,041	\$748,116	\$748,116 \$724,700		\$696,900 \$595,700		\$306,700	\$354,260	\$285,414
Contributions in relation to required contribution	595,561	688,041	748,116	724,700	696,900	595,700	452,300	306,700	354,260	285,414
Contribution excess (deficiency)	\$-	\$-	\$-	\$ -	\$-	\$-	\$-	\$ -	\$-	\$-
Covered-employee payroll	\$4,181,783	3,914,860	\$3,924,590	3,776,376	\$3,589,958	\$3,715,880	\$3,708,940	3,544,464	3,446,623	\$2,968,770
Contributions as percentage of covered payroll	14.2%	17.6%	19.2%	19.1%	19.4%	16.0%	12.2%	8.7%	10.3%	9.6%

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## **SECTION C: STATISTICAL SECTION**



#### WATER AUTHORITY OF WESTERN NASSAU COUNTY

### STATISTICAL SECTION (UNAUDITED)

This section of the Water Authority of Western Nassau County's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Water Authority's overall financial health.

### **Contents Page**

	Page
Financial Trends These schedules contain trend information to help the reader understand how the Water Authority's financial performance has changed over time.	89
Revenue Capacity These schedules contain information to help the reader assess the Water Authority's most significant revenue source – water sales.	97
Debt Capacity These schedules present information to help the reader assess the affordability of the Water Authority's current levels of outstanding debt and the Water Authority's ability to issue additional debt in the future	103
Demographic and Economic Information These schedules offer demographic and economic indicators to help the reader understand the environment within which the Water Authority's financial activities take place	109
Operating Information These schedules contain service and infrastructure data to help the reader understand how the information in the Water Authority's financial report relates to services the Water Authority provides and the activities it performs.	115

### **SECTION C: STATISTICAL SECTION**

**Financial Trends** 



WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF NET POSITION										
			LAST TE	N FISCAL YEAF	RS					
ASSETS	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Current assets										
Cash and cash equivalents	\$3,368,404	\$2,474,218	\$3,916,529	\$4,059,739	\$4,318,014	\$ 3,730,917	\$ 2,411,292	\$ 2,798,391	\$ 3,131,838	\$ 298,547
Accounts receivable, net	985,325	731,733	1,224,755	678,043	535,186	405,653	414,560	466,695	392,124	329,033
Unbilled	3,030,000	2,180,000	1,850,000	1,810,000	2,241,000	1,950,000	1,797,000	1,640,000	1,451,000	1,262,000
Due from litigation settlement				-		-	-			2,362,677
Prepayments & other current assets	407,920	181,774	190,725	205,946	137,527	205,510	212,774	150,335	138,522	199,973
Materials and supplies,	215,056	306,120	286,575	235,586	253,955	218,512	224,152	247,821	267,422	284,845
Total current assets	8,006,705	5,873,845	7,468,584	6,989,314	7,485,682	6,510,592	5,059,778	5,303,242	5,380,906	4,737,075
Restricted cash & cash Equivalents										
Customer deposits	1,166,383	1,121,523	1,077,947	1,029,887	990,612	949,312	911,551	881,758	848,853	812,514
Rate stabilization fund	1,070,000	1,070,000	1,070,000	570,000	560,000	560,000	460,000	445,000	445,000	500,000
Bond construction and Reserve Fund	31,996,608	18,306,030	14,335,018	10,783,178	11,272,406	11,752,270	15,756,126	3,080,296	-	-
Bond interest and Payment Fund	772,211	1,163,269	529,904	232,945	234,875	234,874	237,995	3,113	-	270,404
Total Restricted cash and cash equivalents	35,005,202	21,660,822	17,012,869	12,616,010	13,057,893	13,496,456	17,365,672	4,410,167	1,293,853	1,582,918
Restricted investments										
Construction fund	28,441,487	47,776,615	54,553,311	309,970	3,811,774	9,956,005	16,668,826	32,165,352	212,391	2,605,019
Bond reserve fund	-	-	-	628,997	1,519,860	4,852,095	3,250,664	4,065,959	2,367,434	2,396,166
Bond payment fund	-	-	-	-	-	-	-	-	280,735	-
Total restricted investments	28,441,487	47,776,615	54,553,311	938,967	5,331,634	14,808,100	19,919,490	36,231,311	2,860,560	5,001,185
Capital and other assets										
Property, plant and equipment, net	79,908,512	72,887,677	69,888,539	68,063,563	63,873,372	52,433,616	44,800,607	40,236,512	35,818,270	32,150,650
Other assets	508,492	385,999	431,116	566,327	687,485	675,114	703,897	658,191	739,471	780,281
Total capital and other assets	80,417,004	73,273,676	70,319,655	68,629,890	64,560,857	53,108,730	45,504,504	40,894,703	36,557,741	32,930,931
Total non-current assets	143,863,693	142,711,113	141,885,835	82,184,867	82,950,384	81,413,286	82,789,666	81,536,181	40,712,154	39,515,034
Total assets	151,870,398	148,584,958	149,354,419	89,174,181	90,436,066	87,923,878	87,849,444	86,839,423	46,093,060	44,252,109
Deferred outflows										
Post measurement date contributions	595,561	688,041	748,116	-	-	-	-	-	-	-
Change in retirement system assumptions	2,043,454	119,907	-	-	-	-	-	-	-	-
Loss of refunding	28,805	30,405	32,006	\$1,132,345	1,201,753	1,268,612	1,333,206	1,395,813	1,456,438	1,515,365
Total deferred outflows Source: Accounting Department	2,667,820	838,353	780,122	1,132,345	1,201,753	1,268,612	1,333,206	1,395,813	1,456,438	1,515,365

# WATER AUTHORITY OF WESTERN NASSAU COUNTY

### WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF NET POSITION LAST TEN FISCAL YEARS (Continued)

#### LIABILITIES AND NET ASSETS

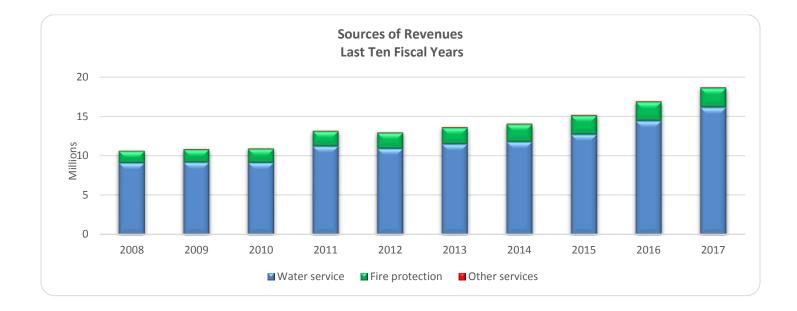
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Current liabilities	40.0-1.000	44 600 640	40.000000	A	40.000 -000	A	** ***	<u>.</u>	A	
Accounts payable and accrued expenses	\$3,874,308	\$1,699,618	\$2,187,360	\$1,458,447	\$3,401,530	\$1,672,924	\$2,005,436	\$1,884,050	\$2,668,135	\$ 1,010,814
Unearned revenue	88,886	271,307	360,818	466,723	568,843	662,014	769,251	858,985	817,387	819,887
Accrued interest payable	820,114	836,740	271,896	377,905	383,460	388,747	393,897	332,935	120,281	122,881
Non-current liabilities due within one year										
Water revenue bonds payable	2,380,000	2,280,000	2,395,000	1,640,000	1,595,000	1,550,000	1,505,000	1,525,000	1,070,000	1,040,000
Due to employees' retirement system		-	114,194	48,840	124,500	104,600	148,475	71,200	42,612	47,600
Accrued vacation and sick leave	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	37,005	33,580
Total current liabilities	7 202 209	F 137 CCF		4 021 015	6 112 222	4 410 205	4 962 050	4 712 170	4 755 420	2 074 762
Total current liabilities	7,203,308	5,127,665	5,369,268	4,031,915	6,113,333	4,418,285	4,862,059	4,712,170	4,755,420	3,074,762
Non-current liabilities										
Revenue bonds payable, net of premium	114,275,418	117,030,506	119,683,201	64,215,818	65,924,806	67,578,373	69,189,683	70,755,330	31,335,554	32,456,057
Customer deposits payable	1,209,885	1,181,447	1,137,911	1,089,817	1,050,528	1,009,232	972,116	942,205	957,889	997,825
Due to employee retirement system	2,240,809	470,745	629,685	-	-	-	-	-	-	-
Post-employment benefits payable	3,100,611	2,738,036	2,378,838	2,059,485	1,734,981	1,408,447	1,152,955	945,547	747,110	539,800
Accrued vacation and sick leave	910,900	858,500	848,500	820,100	788,100	778,900	771,900	950,600	703,095	638,020
	·,	,	,	,	,	,	,	,	,	<u>,                                     </u>
Total non-current liabilities	121,737,623	122,279,234	124,678,135	68,185,220	69,498,415	70,774,952	72,086,654	73,593,682	33,743,648	34,631,702
Total liabilities	128,940,931	127,406,899	130,047,403	72,217,135	75,611,748	75,193,237	76,948,713	78,305,852	38,499,068	37,706,464
Defense disflama										
Deferred inflows										
Changes in Retirement System assumptions	265,600	-	-	-	-	-	-	-	-	-
Net position										
Invested in capital assets, net	24,508,287	20,874,337	17,286,185	15,436,386	14,543,793	11,525,474	11,521,029	8,841,891	7,588,516	5,315,381
Restricted	1070,000	1,070,000	1,070,000	570,000	560,000	560,000	460,000	445,000	445,000	500,000
Unrestricted	(246,600)	72,075	1,730,953	2,083,005	922,278	1,913,779	252,908	642,493	1,016,914	2,245,629
Total net assets	\$25,331,687	\$22,016,412	\$20,087,138	\$18 <u>080</u> 201	\$16,026,071	\$13,999,253	\$12,233,937	\$9,929,384	\$9,050,430	\$8,061,010
	,007 ,007	722,010, <del>4</del> 12	<i>720,007,130</i>	\$10,00 <i>3</i> ,351	<i>J</i> 10,020,071	<i>413,3333,</i> 233	Y12,233,337	<i>,3,323,</i> 304	<i>,,,,,,,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>40,001,010</i>
Source: Accounting Department										

### WATER AUTHORITY OF WESTERN NASSAU COUNTY STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION LAST TEN FISCAL YEARS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Revenues										
Water service	\$16,117,154	\$14,407,227	\$12,701,608	\$11,772,296	\$11,475,847	\$10,909,705	\$11,217,605	\$9,133,347	\$9,182,718	\$9,093,383
Fire protection	2,446,154	2,405,433	2,396,619	2,239,254	2,109,979	2,019,112	1,920,169	1,786,241	1,648,961	1,524,886
Other	85,156	92,427	82,597	66,316	71,021	59,650	63,305	52,994	50,270	53,273
Total operating revenues	18,648,464	16,905,087	15,180,824	14,077,866	13,656,847	12,988,467	13,201,079	10,972,582	10,881,949	10,671,542
Operating expenses:										
Operations	6,721,012	6,541,974	6,840,640	7,155,325	6,682,648	6,154,917	5,972,061	5,920,498	6,076,842	6,108,059
Maintenance	2,559,011	2,086,055	2,131,416	1,913,099	1,924,246	1,845,803	1,871,302	1,869,872	1,915,638	1,767,985
Operating expenses before depreciation	9,280,023	8,628,029	8,972,056	9,068,424	8,606,894	8,000,720	7,843,363	7,790,370	7,992,480	7,876,044
Depreciation	2,129,673	1,988,943	1,806,744	1,546,468	1,271,165	1,168,265	1,051,110	953,313	847,340	814,527
Total operating expenses	11,409,696	10,616,972	10,778,800	10,614,892	9,878,059	9,168,985	8,894,473	8,743,683	8,839,820	8,690,571
Operating income	7,238,768	6,288,115	4,402,024	3,462,974	3,778,788	3,819,482	4,306,606	2,228,899	2,042,129	1,980,971
Non-operating revenue (expense):										
Interest income	330,035	379,001	302,646	74,188	122,817	247,852	536,218	247,009	154,080	293,519
Miscellaneous income	316,216	332,936	346,696	375,941	375,320	357,310	349,509	346,336	241,664	224,046
Interest on long term debt	(4,545,208)	(5,046,242)	(3,261,740)	(1,825,291)	(2,226,107)	(2,624,800)	(2,853,926)	(1,656,025)	(1,471,971)	(1,502,209)
Other amortization, net	(24,536)	(24,536)	(24,504)	(24,492)	(24,000)	(34,528)	(45,320)	(501,643)	(37,617)	(37,173)
Total non-operating expenses	(3,923,493)	(4,358,841)	(2,636,902)	(1,399,654)	(1,751,970)	(2,054,166)	(2,013,519)	(1,564,323)	(1,113,844)	(1,021,817)
Income before extraordinary items	3,315,275	1,929,274	1,765,122	2,063,320	2,026,818	1,765,316	2,293,087	664,576	928,285	959,154
Extraordinary item - litigation settlement	-	-	-	-	-	-	11,466	214,378	116,135	2,362,677
Change in net position	3,315,275	1,929,274	1,765,122	2,063,320	2,026,818	1,765,316	2,304,553	878,954	1,044,420	3,321,831
Less: board approved customer subsidies	-	-	-	-	-	-	-	-	(55,000)	(590,577)
Net change in total net position	3,315,275	1,929,274	1,765,122	2,063,320	2,026,818	1,765,316	2,304,553	878,954	989,420	2,731,254
GASB Statement Nos. 68 & 71 implementation		-	232,625	-	-	-	-	-	-	-
Net position beginning	22,016,412	20,087,138	18,089,391	16,026,071	13,999,253	12,233,937	9,929,384	9,050,430	8,061,010	5,329,756
	405 004 COT	400 04 C 440		440.000.00 <i>1</i>	64.C 00C 0=1	640 000 <b>0</b> -0	440 000 00 <del>-</del>	<u> </u>	40.050.400	<u> </u>
Net position ending	\$25,331,687	\$22,016,412	\$20,087,138	\$18,089,391	\$16,026,071	\$13,999,253	\$12,233,937	\$9,929,384	\$9,050,430	\$8,061,010

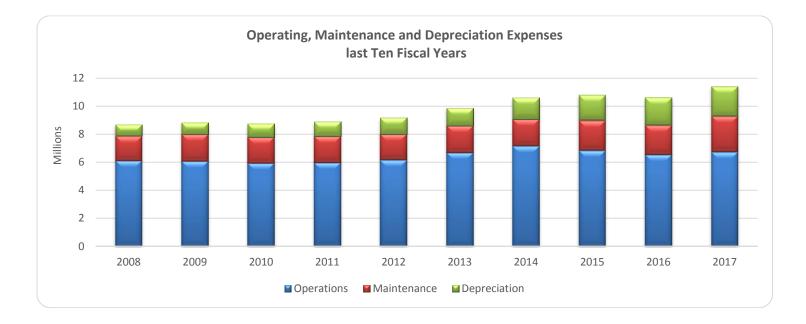
### WATER AUTHORITY OF WESTERN NASSAU COUNTY OPERATING REVENUE BY SOURCE LAST TEN FISCAL YEARS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Water service	\$16,117,154	\$14,407,227	\$12,701,608	\$11,772,296	\$11,475,847	\$10,909,705\$	11,217,605	\$9,133,347	\$9,182,718	\$9,093,383
Fire protection	2,446,154	2,405,433	2,396,619	2,239,254	2,109,979	2,019,112	1,920,169	1,786,241	1,648,961	1,524,886
Other services	85,156	92,427	82,597	66,316	71,021	59,650	63,305	52,994	50,270	53,273
Total	\$18,648,464	\$16,905,087	\$15,180,824	\$14,077,866	\$13,656,847	\$12,988,467\$	13,201,079	\$10,972,582	\$10,881,949	\$10,671,542



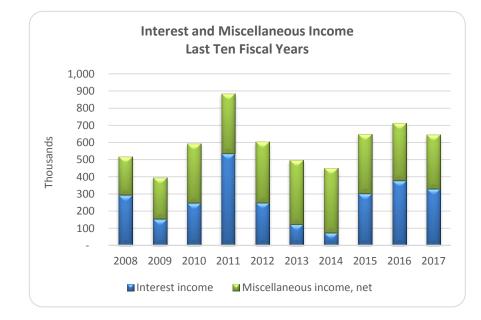
### WATER AUTHORITY OF WESTERN NASSAU COUNTY OPERATING EXPENSES LAST TEN FISCAL YEARS

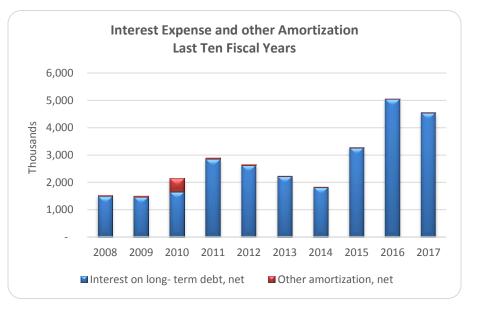
	_	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Operations	ć	6 721 012 \$	6.541.974 Ś	6,840,640 \$	7 155 225 6	6,682,648 \$	6.154.917 S	5 072 061	\$ 5,920,498 \$	6 076 942 0	6 109 050
•	Ş	-, ,- 1	-/- /-	, , ,	, , ,	, , ,	-, -, -				
Maintenance		2,559,011	2,086,055	2,131,416	1,913,099	1,924,246	1,845,803	1,871,302	1,869,872	1,915,638	1,767,985
Depreciation	_	2,129,673	1,988,943	1,806,744	1,546,468	1,271,165	1,168,265	1,051,110	953,313	847,340	814,527
Total operating					_						
expenses	\$	11,409,696 \$	10,616,972 \$	10,778,800 \$	10,614,892 \$	9,878,059 \$	9,168,985 \$	8,894,473	\$ <u>8,743,683</u> \$	8,839,820 \$	8,690,571
rce: Accounting Departmen	nt -										



### WATER AUTHORITY OF WESTERN NASSAU COUNTY NON-OPERATING REVENUES AND EXPENSES LAST TEN FISCAL YEARS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
	¢220.025	¢270.001	6202 C4C	674 400	ć122.017	6247 052	ĆE 26 24 9	6247.000	ć1 F 4 080	¢202 F10
Interest income	\$330,035	\$379,001	\$302,646	\$74,188	\$122,817	\$247,852	\$536,218	\$247,009	\$154,080	\$293,519
Miscellaneous income, net	316,216	332,936	346,696	375,941	375,320	357,310	349,509	346,336	241,664	224,046
Interest on long- term										
debt, net	(4,545,208)	(5,046,242)	(3,261,740)	(1,825,291)	(2,226,107)	(2,624,800)	(2,853,926)	(1,656,025)	(1,471,971)	(1,502,209)
Other amortization, net	(24,536)	(24,536)	(24,504)	(24,492)	(24,000)	(34,528)	(45,320)	(501,643)	(37,617)	(37,173)
Total non-operating										
expenses	\$(3,923,493)	\$(4,358,841)	\$(2,636,902)	\$(1,399,654)	\$(1,751,970)	\$(2,054,166)	\$(2,013,519)	\$(1,564,323)	\$(1,113,844)	\$(1,021,817)

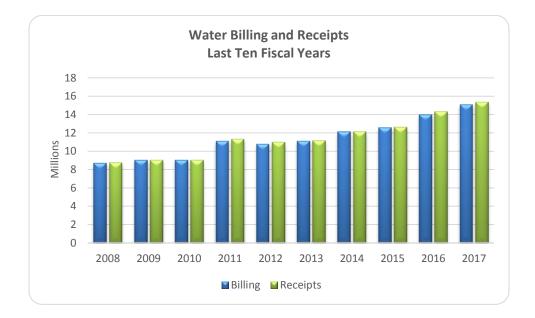




### WATER AUTHORITY OF WESTERN NASSAU COUNTY HISTORICAL COLLECTION RATES LAST TEN FISCAL YEARS

Fiscal	Total	Total	Percent
Year	Billing	Receipts	Collected
2017	\$ 15,075,774	\$15,355,416	101.85%
2016	13,980,919	14,307,894	102.34%
2015	12,553,754	12,595,730	100.33%
2014	12,105,577	12,144,396	100.32%
2013	11,082,651	11,152,059	100.63%
2012	10,764,804	10,977,814	101.98%
2011	11,092,105	11,293,152	101.81%
2010	9,031,708	9,027,978	99.96%
2009	9,023,097	9,021,270	99.98%
2008	8,681,132	8,720,945	100.46%

### Excludes fire hydrants billings and receipts Source: Accounting Department



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### **SECTION C: STATISTICAL SECTION**

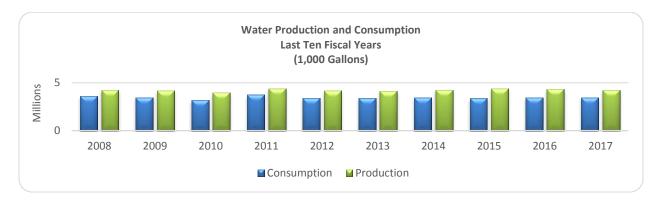
**Revenue Capacity** 

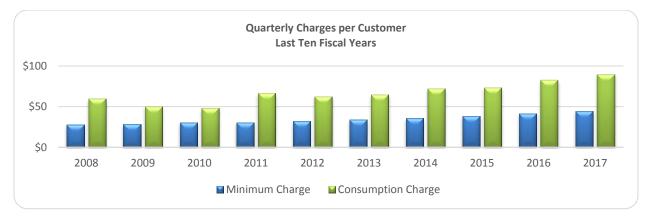


### WATER AUTHORITY OF WESTERN NASSAU COUNTY WATER PRODUCED AND CONSUMED (in Thousands of Gallons) LAST TEN FISCAL YEARS

				Average Quarterly Charge						
					Per C	Customer	Average			
Fiscal	Water	Water	Unbilled	Percent	Minimum	Consumption	Annual			
Year	Produced	Consumed	Potable Water	Unbilled (a)	Charge	Charge	Charge			
2017	4,208,000	3,441,000	767,000	18.23%	\$44.38	\$89.65	\$536.12			
2016	4,328,000	3,476,000	852,000	19.69%	41.51	82.54	496.18			
2015	4,378,000	3,367,000	1,011,000	23.1%	38.29	73.48	447.07			
2014	4,258,000	3,470,000	788,000	18.5%	35.78	72.02	437.22			
2013	4,137,000	3,363,000	774,000	18.7%	33.75	64.80	394.22			
2012	4,159,000	3,401,000	758,000	18.2%	32.20	62.52	378.86			
2011	4,401,000	3,728,000	673,000	15.3%	30.71	66.61	389.29			
2010	3,961,000	3,199,000	762,000	19.2%	30.51	48.19	314.81			
2009	4,190,000	3,463,000	727,000	17.4%	28.46	50.23	314.77			
2008	4,200,000	3,611,000	589,000	14.0%	27.88	59.89	351.07			
(.) I. I. I.										

(a) Included in the water produced figures are planned programs including the annual main flushing and well and pump maintenance which results in higher percentages of unbilled water. Source: Accounting Department

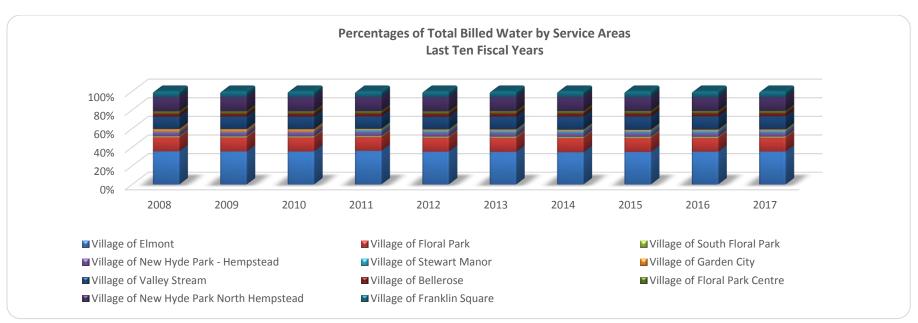




### WATER AUTHORITY OF WESTERN NASSAU COUNTY BILLED WATER SALES BY SERVICE AREA LAST TEN FISCAL YEARS

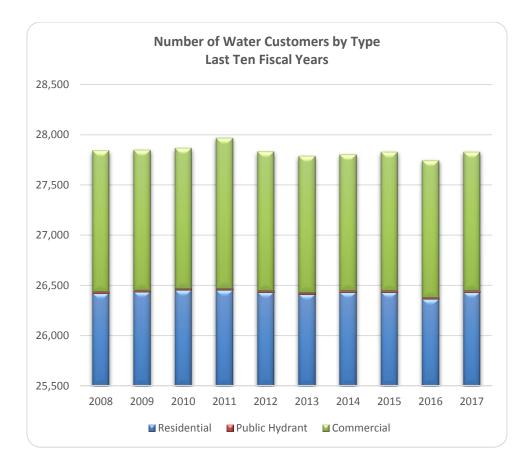
Service Area	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Elmont	\$5,326,861	\$ \$4,919,907 \$	\$4,384,296 \$	4,190,560 \$	3,874,622 \$	3,790,032	\$ 3,999,662 \$	3,202,566\$	3,195,249 \$	3,085,428
Village of Floral Park	2,225,536	2,039,630	1,861,490	1,828,007	1,658,847	1,603,562	1,639,218	1,346,999	1,346,646	1,296,389
Village of South Floral Park	185,519	183,830	165,273	154,414	145,064	133,361	138,094	112,003	115,846	108,645
Village of New Hyde Park - Hempstead	628,522	579,847	511,696	497,942	469,049	460,808	460,322	387,656	385,664	362,963
Village of Stewart Manor	331,748	315,836	277,859	274,910	247,190	231,316	243,989	63,460	66,497	64,141
Village of Garden City	198,364	186,277	164,393	168,303	148,798	139,437	143,302	243,090	245,857	241,365
Village of Valley Stream	2,164,807	2,019,127	1,817,399	1,731,468	1,551,599	1,480,146	1,501,441	1,242,830	1,236,732	1,174,800
Village of Bellerose	487,400	453,713	415,129	398,272	365,199	352,349	352,404	289,162	280,430	270,390
Village of Floral Park Centre	343,966	323,938	293,575	294,433	269,043	256,324	256,414	214,414	214,929	208,803
New Hyde Park North Hempstead	2,270,598	2,097,012	1,885,243	1,836,022	1,698,090	1,663,522	1,701,295	1,389,572	1,397,417	1,337,013
Franklin Square	912,453	861,802	777,401	731,246	655,150	653,947	655,964	539,956	537,830	531,195
Total	\$15,075,774	\$ <u>\$13,980,919</u> \$	\$12,553,754 \$	12,105,577 \$	11,082,651 \$	10,764,804	\$ <u>11,092,105</u> \$	9,031,708\$	9,023,097 \$	8,681,132

Source: Accounting Department (Excludes fire hydrant billing; Customers rezoned in 2011)



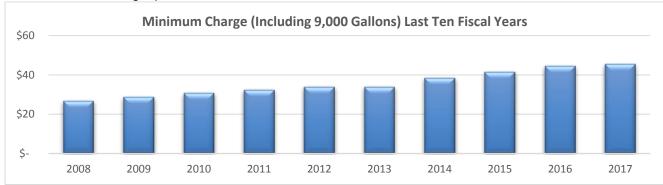
### WATER AUTHORITY OF WESTERN NASSAU COUNTY NUMBER OF WATER CUSTOMERS BY TYPE LAST TEN FISCAL YEARS

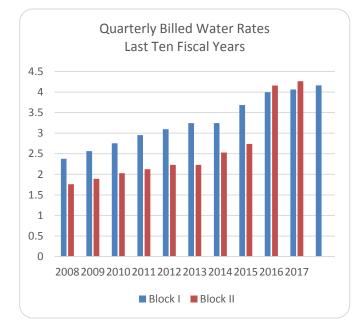
		Public Fire		
Fiscal	Residential	Hydrant	Commercial	Total
Year	Customers	Customers	Customers	Customers
2017	26,352	13	1,390	27,755
2016	26,363	13	1,366	27,742
2015	26,430	13	1,385	27,828
2014	26,430	13	1,359	27,802
2013	26,412	13	1,360	27,785
2012	26,432	13	1,385	27,830
2011	26,453	13	1,499	27,965
2010	26,453	13	1,399	27,865
2009	26,435	13	1,397	27,845
2008	26,422	13	1,404	27,839

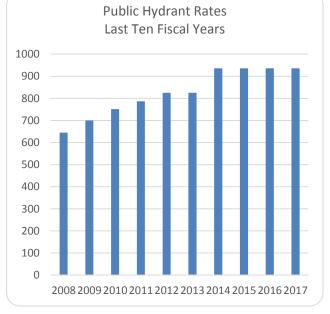


	LAST TEN FISCAL YEARS								
	Water Rates	Per 1,000	) Gallons	Public	Private				
Year	Minimum	Block I	Block II	Hydrant	Fire				
2017	\$45.39	\$4.162	\$4.264	960.00	Varies				
2016	44.38	4.060	4.160	936.00	Varies				
2015	41.51	3.993	2.739	936.00	Varies				
2014	38.29	3.683	2.527	936.00	Varies				
2013	33.75	3.246	2.228	825.00	Varies				
2012	33.75	3.246	2.228	825.00	Varies				
2011	32.20	3.097	2.125	787.00	Varies				
2010	30.71	2.954	2.027	751.00	Varies				
2009	28.64	2.755	1.890	700.00	Varies				
2008	26.67	2.565	1.760	645.00	Varies				

# WATER AUTHORITY OF WESTERN NASSAU COUNTY QUARTERLY BILLED WATER RATES







### WATER AUTHORITY OF WESTERN NASSAU COUNTY

ANNUAL BILLINGS OF TEN LARGEST CUSTOMERS

#### LAST TEN FISCAL YEARS

		2017		20	016	20	015	20	)14	20	)13
Customer Name	Rank	Amount	% of Total								
NY Racing Association	1	\$811,731	5.38%	\$600,397	4.30%	\$484,418	3.86%	\$413,824	3.42%	\$411,911	3.71%
Franklin Hospital Medical Center	2	104,685	0.69%	71,152	0.51%	62,679	0.50%	58,106	0.48%	57,711	0.52%
Valley Park Owners Co	3	100,568	0.67%	78,548	0.56%	74,009	0.59%	65,713	0.54%	59,974	0.54%
Broadval LLC/Dutchcon LLC	4	69,779	0.46%	39,465	0.28%	33,936	0.27%	25,210	0.21%	22,141	0.20%
Village of Floral Park	5	63,185	0.42%	39,918	0.29%	38,677	0.31%	40,298	0.33%	45,559	0.41%
Central High School District 2	6	47,927	0.32%	22,199	0.16%	30,499	0.24%	36,672	0.30%	31,130	0.28%
Flower View Gardens	7	45,807	0.30%	40,069	0.29%	36,703	0.29%	31,825	0.26%	29,974	0.27%
Elmont School District	8	41,762	0.28%	28,858	0.21%	19,854	0.16%	17,477	0.14%	16,007	0.14%
Town of North Hempstead	9	38,710	0.26%	21,469	0.15%	20,019	0.16%	19,087	0.16%	13,328	0.12%
Central High School District 1	10	37,476	0.25%	9,862	0.07%-	6,218	0.05%	12,340	0.10%	6,420	0.06%-

	20	012	20	011	20	010	20	009	20	008
Customer Name	Amount	% of Total								
NY Racing Association	\$436,303	4.09%	\$576,146	5.24%	\$344,764	3.86%	\$368,435	4.12%	\$385,766	4.48%
Franklin Hospital Medical Center	55,821	0.52%	57,834	0.53%	61,944	0.69%	51,691	0.58%	44,653	0.52%
Valley Park Owners Co	59,042	0.55%	55,647	0.51%	47,262	0.53%	46,886	0.52%	44,519	0.52%
Broadval LLC/Dutchcon LLC	14,536	0.14%	8,704	0.08%	2,831	0.03%	-	-	-	-
Village of Floral Park	27,026	0.25%	35,662	0.32%	30,774	0.34%	25,660	0.29%	24,729	0.29%
Central High School District 2	15,971	0.15%	28,792	0.26%	14,793	0.17%	21,601	0.24%	27,078	0.31%
Flower View Gardens	38,397	0.36%	27,483	0.25%	22,649	0.25%	23,170	0.26%	20,437	0.24%
Elmont School District	12,834	0.12%	26,389	0.24%	16,925	0.19%	23,010	0.26%	22,351	0.26%
Town of North Hempstead	27,127	0.25%	13,537	0.12%	15,649	0.18%	12,291	0.14%	11,577	0.13%
Central High School District 1	6,923	0.06%	7,064	0.06%	3,037	0.03%	2,688	0.03%	10,187	0.12%

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# **SECTION C: STATISTICAL SECTION**

Debt Capacity



## WATER AUTHORITY OF WESTERN NASSAU COUNTY AMOUNTS, RATIOS AND PER CAPITA AMOUNTS OF OUTSTANDING DEBT LAST TEN FISCAL YEARS

(IN THOUSANDS)

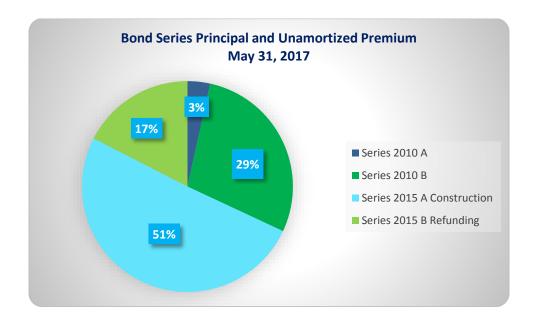
Debt by Type	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Water Revenue Bonds, Series 2005										
Serial Bonds 3.00% - 5.00%, due through 2026	\$-	\$-	\$-	\$ 19,985	\$ 21,210	\$ 22,390	\$ 23,530	\$ 24,635	\$ 25,705	\$ 26,745
Term Bonds 5.00%, due 2030	-	-	-	2,015	2,015	2,015	2,015	2,015	2,015	2,015
Term Bonds 5.00%, due 2035	-	-	-	3,150	3,150	3,150	3,150	3,150	3,150	3,150
Subtotal Series 2005	-	-	-	25,150	26,375	27,555	28,695	29,800	30,870	31,910
Premium on Series 2005	-	-	-	1,258	1,317	1,375	1,430	1,484	1,536	1,586
Subtotal Series 2005 and premium	-	-	-	26,408	27,692	28,930	30,125	31,284	32,406	33,496
Water Revenue Bonds Series 2010										
Serial Bonds A 2.00% - 4.00%, due through 2020	3,125	4,090	5,025	5,400	5,770	6,140	6,505	6,925	-	-
Term Bonds B 6.00% - 6.70%, due through 2040	33,965	33,965	33,965	33,965	33,965	33,965	33,965	33,965	-	-
Subtotal Series 2010	37,090	38,055	38,990	39,365	39 <i>,</i> 735	40,105	40,470	40,890	-	-
Premium on series 2010	51	66	78	83	93	94	100	-	-	-
Subtotal Series 2010 and premium	37,141	38,121	39,068	39,448	39,828	40,199	40,570	40,890		
Water Revenue Bonds Series 2015										
Serial & Term Bonds A 4.00% - 5.00%, due										
through 2045	53,920	53,990	54,200	-	-	-	-	-	-	-
Serial Bonds B 3.00% - 5.00%, due through 2035	16,905	18,150	19,400	-	-	-	-	-	-	-
Subtotal Series 2015	70,825	72,140	73,600	-	-	-	-	-	-	-
Premium on series 2015	8,689	9,050	9,411	-	-	-	-	-	-	-
Subtotal Series 2015 and premium	79,514	81,190	83,011	-	-	-	-	-	-	-
Total long-term debt and premium	\$116,655	\$119,311	\$122,079	\$65 <i>,</i> 856	\$67,520	\$69,129	\$70,695	\$72,174	\$32,406	\$33,496
Percentage Series 2005	-	-	-	40%	41%	42%	43%	43%	100%	100%
Percentage Series 2010	32%	32%	32%	60%	59%	58%	57%	57%	0%	0%
Percentage Series 2015	68%	68%	68%	-	-	-	-	-	-	-
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Per Capita Debt (dollars)										
Service area population	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000
Per capita debt	\$972.13	\$994.25	\$1,017.32	\$548.80	\$562.67	\$576.07	\$589.12	\$601.45	\$270.05	\$279.13

	DEDT WATOKITT SCHEDOLE DT SERIES										
					lay	31, 2017					
		Series		Series		Series		Series			
Year		2010 A	-	2010 B		2015 A	-	2015 B		Total	
2018	\$	1,000,000	\$	-	\$	70,000	\$	1,310,000	\$	2,380,000	
2019		1,040,000		-		75,000		1,375,000		2,490,000	
2020		1,085,000		-		80,000		1,440,000		2,605,000	
2021		-		1,125,000		80,000		1,515,000		2,720,000	
2022		-		1,170,000		85,000		1,590,000		2,845,000	
2023		-		1,215,000		90,000		1,670,000		2,975,000	
2024		-		1,265,000		95,000		1,750,000		3,110,000	
2025		-		1,315,000		95,000		1,840,000		3,250,000	
2026		-		1,365,000		105,000		1,930,000		3,400,000	
2027		-		1,420,000		1,895,000		245,000		3,560,000	
2028		-		1,480,000		1,990,000		250,000		3,720,000	
2029		-		1,545,000		2,095,000		255,000		3,895,000	
2030		-		1,610,000		2,155,000		265,000		4,030,000	
2031		-		1,675,000		2,270,000		275,000		4,220,000	
2032		-		1,750,000		2,380,000		285,000		4,415,000	
2033		-		1,825,000		2,505,000		295,000		4,625,000	
2034		-		1,905,000		2,585,000		305,000		4,795,000	
2035		-		1,985,000		2,730,000		310,000		5,025,000	
2036		-		2,075,000		3,185,000		-		5,260,000	
2037		-		2,165,000		3,345,000		-		5,510,000	
2038		-		2,260,000		3,520,000		-		5,780,000	
2039		-		2,355,000		3,700,000		-		6,055,000	
2040		-		2,460,000		3,890,000		-		6,350,000	
2041		-		-		2,710,000		-		2,710,000	
2042		-		-		2,840,000		-		2,840,000	
2043		-		-		2,975,000		-		2,975,000	
2044		-		-		3,115,000		-		3,115,000	
2045		-	_	-		3,260,000		-		3,260,000	
Total	\$	3,125,000	\$	33,965,000	\$	53,920,000	\$	16,905,000	\$	107,915,000	
	-		-				-		-		

### WATER AUTHORITY OF WESTERN NASSAU COUNTY DEBT MATURITY SCHEDULE BY SERIES

# WATER AUTHORITY OF WESTERN NASSAU COUNTY OUTSTANDING PRINCIPAL AND UNAMORTIZED PREMIUM BY BOND SERIES May 31, 2017

		Principal		Unamortized	
Series		Amount		Premium	Total
Series 2010 A	\$	3,125,000	\$	51,088	\$ 3,176,088
Series 2010 B		33,965,000		-	33,965,000
Series 2015 A Construction		53,920,000		6,152,944	60,072,944
Series 2015 B Refunding		16,905,000		2,536,386	19,441,386
	•		•		
Total	\$	107,915,000	\$	8,740,418	\$ 116,655,418



### WATER AUTHORITY OF WESTERN NASSAU COUNTY

SCHEDULE OF DEBT SERVICE

MAY 31, 2017

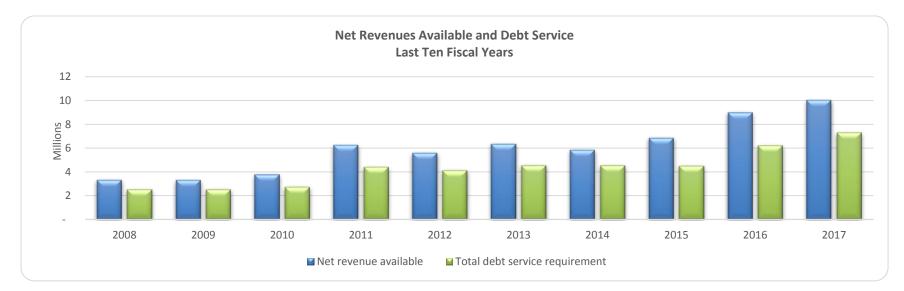
					Build America					
	Series 201	10 A	Series 20	010 B	Bond Subsidy	Series 2015A Co	nstruction	Series 2015 B	Refunding	
Year	Redemption	Interest	Redemption	Interest	2010 B	Redemption	Interest	Redemption	Interest	Total
2018	\$ 1,000,000	\$ 125,000	\$-	\$ 2,215,180	\$ (775,313)	\$70,000	\$2,545,763	\$1,310,000	\$799,981	\$7,290,611
2019	1,040,000	85,000	-	2,215,180	(775,313)	75,000	2,543,663	1,375,000	734,481	7,293,011
2020	1,085,000	43,400	-	2,215,180	(775,313)	80,000	2,541,413	1,440,000	665,731	7,295,411
2021	-	-	1,125,000	2,215,180	(775,313)	80,000	2,539,013	1,515,000	593,731	7,292,611
2022	-	-	1,170,000	2,147,601	(751,660)	85,000	2,536,613	1,590,000	517,981	7,295,535
2023	-	-	1,215,000	2,077,319	(727,062)	90,000	2,534,063	1,670,000	438,481	7,297,801
2024	-	-	1,265,000	2,004,334	(701,517)	95,000	2,531,362	1,750,000	354,981	7,299,160
2025	-	-	1,315,000	1,928,346	(674,921)	95,000	2,528,512	1,840,000	267,482	7,299,419
2026	-	-	1,365,000	1,849,354	(647,274)	105,000	2,525,663	1,930,000	175,481	7,303,224
2027	-	-	1,420,000	1,761,298	(616,454)	1,895,000	2,522,513	245,000	78,981	7,306,338
2028	-	-	1,480,000	1,669,693	(584,393)	1,990,000	2,427,763	250,000	71,631	7,304,694
2029	-	-	1,545,000	1,574,219	(550,976)	2,095,000	2,328,262	255,000	64,131	7,310,636
2030	-	-	1,610,000	1,474,551	(516,093)	2,155,000	2,265,412	265,000	56,482	7,310,352
2031	-	-	1,675,000	1,370,690	(479,741)	2,270,000	2,157,662	275,000	48,200	7,316,811
2032	-	-	1,750,000	1,258,448	(440,457)	2,380,000	2,044,163	285,000	39,606	7,316,760
2033	-	-	1,825,000	1,141,180	(399,413)	2,505,000	1,925,163	295,000	30,344	7,322,274
2034	-	-	1,905,000	1,018,887	(356,610)	2,585,000	1,843,750	305,000	20,756	7,321,783
2035	-	-	1,985,000	891,233	(311,932)	2,730,000	1,714,500	310,000	10,463	7,329,264
2036	-	-	2,075,000	758,218	(265,376)	3,185,000	1,578,000	-	-	7,330,842
2037	-	-	2,165,000	619,172	(216,710)	3,345,000	1,418,750	-	-	7,331,212
2038	-	-	2,260,000	474,096	(165,934)	3,520,000	1,251,500	-	-	7,339,662
2039	-	-	2,355,000	322,653	(112,928)	3,700,000	1,075,500	-	-	7,340,225
2040	-	-	2,460,000	164,845	(57,696)	3,890,000	890,500	-	-	7,347,649
2041	-	-	-	-	-	2,710,000	696,000	-	-	3,406,000
2042	-	-	-	-	-	2,840,000	567,600	-	-	3,407,600
2043	-	-	-	-	-	2,975,000	434,000	-	-	3,409,000
2044	-	-	-	-	-	3,115,000	295,000	-	-	3,410,000
2045	-	-	-	-	-	3,260,000	150,400	-	-	3,410,400
Total	\$3,125,000	\$253,400	\$33,965,000	\$33,366,857	(11,678,399) \$0	\$53,920,000	\$50,412,503	\$16,905,000	\$4,968,924\$	185,238,285

#### WATER AUTHORITY OF WESTERN NASSAU COUNTY

DEBT SERVICE COVERAGE

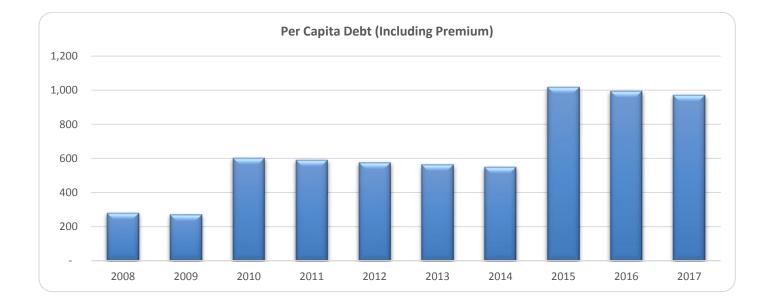
#### LAST TEN FISCAL YEARS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total operating revenues Total operating expenses Operating income Interest & other income Add: Depreciation & amortization	\$18,648,464 11,409,696 7,238,768 646,251 2,129,673	\$16,905,087 10,616,972 6,288,115 711,937 1,988,943	\$15,180,824 10,778,800 4,402,024 649,342 1,806,744	\$14,077,866 10,614,892 3,462,974 450,129 1,936,732	\$13,656,848 9,878,059 3,778,789 1,281,037 1,271,165	\$12,988,467 9,168,985 3,819,482 605,162 1,168,265	\$13,201,079 8,894,473 4,306,606 885,727 1,051,110	\$10,972,582 8,743,683 2,228,899 593,345 953,313	\$10,881,949 8,839,820 2,042,129 395,744 847,340	\$10,671,542 8,690,571 1,980,971 517,565 814,527
Net revenue available Interest expense Principal repayment	10,014,692 5,011,149 2,280,000	8,988,996 3,824,539 2,395,000	6,858,110 2,840,080 1,640,000	5,849,835 2,945,386 1,595,000	6,330,991 2,992,499 1,550,000	5,592,909 2,624,800 1,505,000	6,243,443 2,853,926 1,525,000	3,775,557 1,656,025 1,070,000	3,285,213 1,471,971 1,040,000	3,313,063 1,502,209 1,005,000
Total debt service requirement	\$7,291,149	\$6,219,593	\$4,480,080	\$4,540,386	\$4,542,499	\$4,129,800	\$4,378,926	\$2,726,025	\$2,511,971	\$2,507,209
Debt coverage ratio	1.38	1.45	1.53	1.29	1.39	1.35	1.43	1.38	1.33	1.56



### WATER AUTHORITY OF WESTERN NASSAU COUNTY WATER AUTHORITY PER CAPITA INDEBTEDNESS LAST TEN FISCAL YEARS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total outstanding indebtedness	\$107,915,000	\$110,195,000	\$112,590,000	\$64,515,000	\$66,110,000	\$67,660,000	\$69,165,000	\$70,690,000	\$30,870,000	\$31,910,000
Unamortized premium on revenue bonds	8,740,418	9,115,506	9,488,201	1,340,818	1,409,806	1,468,373	1,529,683	1,483,588	1,535,549	1,586,052
Total outstanding debt & unamortized premium	\$116,655,418	\$119,310,506	\$122,078,201	\$65,855,818	\$67,519,806	\$69,128,373	\$70,694,683	\$72,173,588	\$32,405,549	\$33,496,052
Population served (estimated)	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000
Per capita debt (including premium) Source: Accounting Department <u>Source</u> : Accounting Depart	\$972.13 ment.	\$994.25	\$1,017.32	\$548.80	\$562.67	\$576.07	\$589.12	\$601.45	\$270.05	\$279.13



# **SECTION C: STATISTICAL SECTION**

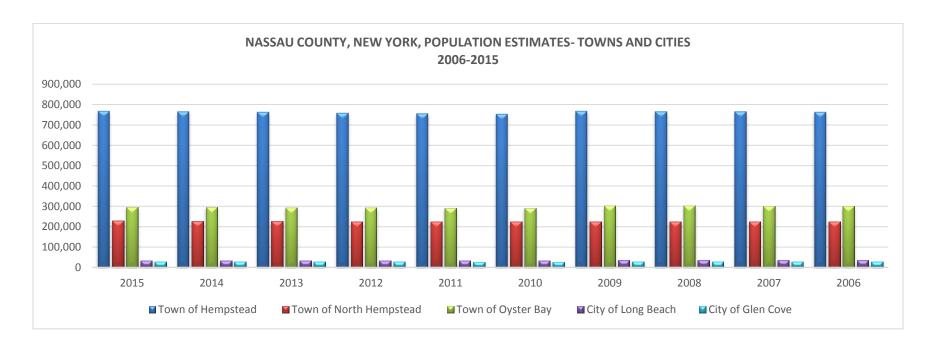
Demographic and Economic Information



# WATER AUTHORITY OF WESTERN NASSAU COUNTY NASSAU COUNTY, NEW YORK, POPULATION ESTIMATES- TOWNS AND CITIES

2006 to 2015											
NASSAU COUNTY SUBDIVISIONS	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
Town of Hempstead	767,916	765,852	761,975	759,197	755,943	753,645	766,878	764,234	765,111	763,822	
Town of North Hempstead	229,105	228,245	227,029	225,971	224,664	223,659	226,109	225,291	224,774	223,870	
Town of Oyster Bay	296,876	295,821	294,307	293,270	292,162	291,609	303,285	302,589	301,273	300,616	
City of Long Beach	33,470	33,522	33,407	33,356	33,364	33,442	36,201	36,051	36,002	35,692	
City of Glen Cove	27,245	27,161	27,047	26,918	26,814	26,728	27,654	27,564	27,374	27,342	
TOTAL NASSAU COUNTY	1,354,612	1,350,601	1,343,765	1,338,712	1,332,947	1,329,083	1,360,127	1,355,729	1,354,534	1,351,342	

Sources: LIPA: Data for 2006 to 2009; US Census Bureau, 2010 Census for 2010; and Annual Community Survey Five Year Estimates, for 2011-2015.



### WATER AUTHORITY OF WESTERN NASSAU COUNTY SERVICE AREA POPULATION, MEDIAN AGE, MEDIAN HOUSEHOLD INCOME AND OCCUPIED HOUSING UNITS

	Population			Median	Age	Median Household	Occupied Ho	ousing Units
	2016	2015	2010	2011-2015	2010	Income 2011-2015	2016	2010
Village of Bellerose	1,171	1,132	1,193	41.9	37.7	177,500	352	399
Village of Floral Park	16,093	15,951	13,524	42.3	41.0	100,829	5,701	5,630
Village of New Hyde Park	9,863	9,788	9,712	41.1	44.2	103,811	2,942	3,240
Village of Stewart Manor	2,113	1,969	1,896	42.9	40.4	112,917	747	723
Village of South Floral Park	2,058	1,800	1,764	35.9	43.2	91,250	576	497
Village of Garden City	22,545	22,575	22,371	42.6	40.8	153,506	7,344	7,087
Village of Valley Stream	37,673	37,838	37,511	38.4	38.2	90,018	11,517	11,626
Elmont	NA	37,388	33,198	37.0	36.9	89,523	9,857	9,777
Franklin Square	NA	31,544	29,320	40.6	42.5	96,568	9,667	9,992
North Valley Stream	NA	17,845	16,628	41.2	38.8	97,868	5,173	5,101

The Water Authority serves a population of approximately 120,000 within the Town of Hempstead and the Town of North Hempstead. The Town of Hempstead component includes the incorporated villages of Bellerose, Floral Park, New Hyde Park, South Floral Park, Stewart Manor and portions of Garden City and Valley Stream. The area within the Town of Hempstead also includes the unincorporated areas of Bellerose Terrace, Elmont and portions of Franklin Square and North Valley Stream. The area within the Town of North Hempstead includes the unincorporated areas of Floral Park, Floral Park Centre and New Hyde Park. NA- Not available.

Sources: U.S. Census Bureau's 2010 Census and American Community Survey of 2011-2015 and 2016 Survey.



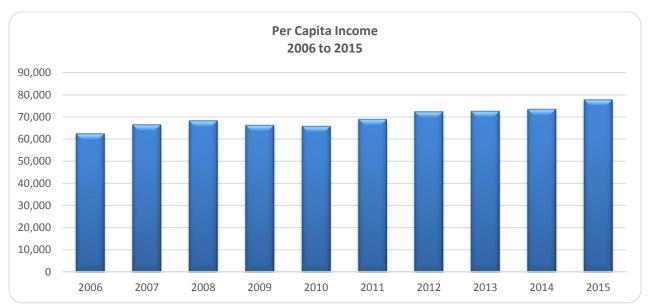


### WATER AUTHORITY OF WESTERN NASSAU COUNTY NASSAU COUNTY, NEW YORK, POPULATION, TOTAL PERSONAL INCOME AND PER CAPITA PERSONAL INCOME AND UNEMPLOYMENT RATE 2006-2016

	<b>Total Personal Income</b>		Per Capita	Unemployment
Year	(In Thousands) (a)	Population (b)	Income (c)	Rate (d)
2016	\$ NA	1,361,500	\$ NA	3.9%
2015	105,860,697	1,361,350	77,762	4.3%
2014	100,046,324	1,358,673	73,618	4.8%
2013	98,311,077	1,354,842	72,549	5.9%
2012	97,887,881	1,350,924	72,460	7.1%
2011	92,904,849	1,347,270	68,979	6.7%
2010	88,218,382	1,341,882	65,761	7.1%
2009	89,901,328	1,325,129	66,210	6.9%
2008	92,453,438	1,322,578	68,303	4.7%
2007	90,092,214	1,353,061	66,584	3.6%
2006	84,566,467	1,351,809	62,558	3.7%

Source: US Department of Commerce, Bureau of Economic Analysis

- a. All dollar estimates are in current dollars (not adjusted for inflation).
- Last updated: November 17, 2016-- new estimates for 2015; revised estimates for 1998-2014. Census Bureau midyear population estimates. Estimates for 2010-2015 reflect county population estimates available as of March 2016.
- c. Per capita personal income was computed using Census Bureau midyear population estimates. Estimates for 2010-2015 reflect county population estimates available as of March 2016.



d. New York State Department of Labor NA – Not available

### WATER AUTHORITY OF WESTERN NASSAU COUNTY NASSAU COUNTY, NEW YORK, ANNUAL AVERAGE EMPLOYMENT BY INDUSTRY LAST TEN YEARS

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Total, all industries	622,054	612,815	604,709	596,302	588,790	586,165	582,551	581,614	600,942	603,910
Total, all private	544,081	534,792	526,876	519,169	510,770	504,936	499,299	498,048	517,164	521,514
Agriculture, forestry, fishing and hunting	191	173	175	173	205	207	209	217	255	243
Crop production	26	26	25	24	56	65	67	74	74	76
Animal production	67	65	66	6	-	-	59	54	52	52
Fishing, hunting and trapping	3	4	7	84	8	8	6	8	11	11
Agriculture & forestry support activity	95	77	77		84	74	77	81	119	104
Mining	12	-	2	3	6	8	6	7	7	4
Utilities	3,882	3,757	3,637	2,465			2,631	2,654	2,692	2,688
Construction	30,058	29,275	28,557	27,360	25,207	24,614	25,309	27,649	30,843	30,133
Construction of buildings	7,411	7,201	6,948	6,832	6,205	6,218	6,865	7,512	8,438	7,816
Heavy and civil engineering construction	2,254	2,205	1,923	1,828	1,768	1,699	1,729	1,830	1,677	1,807
Specialty trade contractors	20,393	19,869	19,685	18,701	17,234	16,697	16,715	18,308	20,729	20,511
Manufacturing	17,334	17,568	17,793	18,684	18,932	19,002	19,497	20,998	23,417	24,696
Food manufacturing	2,945	2,942	2,844	2,784	2,784	2,627	2,560	2,539	2,543	2,425
Beverage & tobacco product manufacturing	90	88	75	84	71	65	51	28	41	43
Textile mills	33	39	47	69	72	96	109	116	120	114
Textile product mills	240	223	199	183	195	182	190	254	280	294
Apparel manufacturing	210	250	253	251	285	326	313	338	375	350
Leather and allied product manufacturing			34		38	43	34	34		
Wood product manufacturing	166	195	160	236	210	233	254	294	337	371
Paper manufacturing	159	182	195	188	205	210	215	302	404	446
Printing and related support activities	1,101	1,079	1,110	1,196	1,170	1,228	1,456	1,870	2,102	2,245
Petroleum & coal products manufacturing			14			29	30	32	31	32
Chemical manufacturing	979	992	1030	1179	1253	891	922	1091	1239	1341
Plastics & rubber products manufacturing	898	869	831	886	793	831	954	1028	996	1155
Nonmetallic mineral product manufacturing	479	450	435	372	388	262	291	306	319	322
Primary metal manufacturing	94	112	110	116	90	92	99	100	164	175
Fabricated metal product manufacturing	2,119	2,141	2,104	2,100	2,149	2,205	2,326	2,349	2,518	2,720
Machinery manufacturing	1,967	2,176	2,197	2,387	2,484	2,843	2,778	2,954	3,290	3,316
Computer and electronic product manufacturing	2,131	2,137	2,180	2,231	2,286	2,279	2,257	2,231	2,626	3,174
Electrical equipment and appliances	489	450	361	366	358	357	361	440	593	478
Transportation equipment manufacturing	1,072	1,166	1,600	1,981	2,151	2,233	2,201	2,372	2,407	2,475
Furniture and related product mfg	802	803	781	788	705	692	738	812	958	1024
Miscellaneous manufacturing	1,333	1,233	1,234	1,239	1,232	1,278	1,358	1,511	2,030	2,149
Wholesale trade	26,802	27,689	27,320	27,484	26,904	26,873	26,707	26,964	29,102	29,796
Merchant wholesalers, durable goods	13,638	14,120	13,788	13,781	13,228	13,387	13,649	13,832	15,025	15,470
Merchant wholesalers, nondurable goods	10,603	10,956	10,928	10,749	10,709	10,578	10,252	10,256	10,987	10,856
Electronic markets and agents/brokers	2,560	2,613	2,604	2,955	2,967	2,909	2,806	2,877	3,090	3,471
Retail trade	80,141	80,002	79,775	78,730	77,619	76,741	75,889	75,800	81,073	81,502
Motor vehicle and parts dealers	7,199	7,140	6,935	6,732	6,589	6,354	6,121	6,060	6,887	7,322
Furniture and home furnishings stores	3,010	3,049	3,026	3,040	3,445	3,280	3,226	3,412	4,175	4,004
Electronics and appliance stores	3,276	3,541	3,355	3,230	3,401	3,474	3,295	3,148	3,372	2,988
Building material & garden supply stores	5,547	5,472	5,531	5,486	4,587	4,718	4,716	4,725	5,218	5,427
Food and beverage stores	17,971	17,862	17,617	16,954	16,825	16,676	16,181	16,071	15,899	15,990
Health and personal care stores	6,804	6,704	6,794	6,965	6,907	6,638	7,021	7,069	7,358	7,167
Gasoline stations	1,529	1,511	1,465	1,456	1,541	1,560	1,493	1,488	1,473	1,526
Clothing and clothing accessories stores	10,069	9,914	9,923	10,100	10,259	9,974	10,836	10,701	13,635	13,642
Sporting goods/hobby/book/music stores	3,848	3,775	3,619	3,394	3,394	3,294	3,393	3,283	3,522	3,556
General merchandise stores	13,722	14,008	14,540	14,450	13,932	14,009	12,746	12,745	11,986	12,031
Miscellaneous store retailers	3,647	3,526	3,625	3,572	3,830	3,673	3,704	3,976	4,286	4,542
Nonstore retailers	3,519	3,500	3,347	3,352	2,909	3,092	3,158	3,123	3,264	3,309

### WATER AUTHORITY OF WESTERN NASSAU COUNTY NASSAU COUNTY, NEW YORK ANNUAL AVERAGE EMPLOYMENT BY INDUSTRY LAST TEN YEARS (CONTINUED)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Transportation and warehousing	15,537	15,264	15,184	15,515	15,202	14,815	14,888	14,917	15,146	15,408
Air transportation	430	401	451	460	485	504	496	415	432	450
Water transportation	418	450	468	485	608	642	693	604	662	648
Truck transportation	2,340	2,245	2,239	2,168	2,054	1,944	1,907	1,867	2,161	2,268
Transit and ground passenger transport	4,992	5,094	5,187	5,636	5,464	4,502	4,670	4,736	4,777	4,612
Scenic and sightseeing transportation	63	66	75	48	58	48	33	58	64	69
Support activities for transportation	3,711	3,575	3,470	3,379	3,315	3,247	2,974	2,995	3,366	3,366
Couriers, messengers and other	2,853	2,684	2,620	2,587	2,572	3,307	3,414	3,526	2,769	3,000
Warehousing and storage	725	745	675	695	595	569	652	655	865	992
Information	10,367	10,989	11,907	13,424	13,607	13,663	14,163	13,907	14,319	14,641
Publishing industries	1,568	1,575	1,913	2,083	2,238	2,327	2,442	2,262	2,522	2,763
Motion picture & sound recording	817	797	831	1593	1877	1784	1824	1664	1689	1769
Broadcasting (except internet)	629	624	650				4769	4821	4655	4613
Telecommunications	5,831	6,426	6,761	2,984	2,980	3,203	3,296	3,242	3,539	3,812
Search portals, & data processing	1,030	1,034	1,027	1,101	1,089	1,067	1,104	1,275	1,328	1,148
Other information services	492	533	724	743	674	687	729	644	587	536
Finance and insurance	29,912	31,127	31,253	31,070	30,943	30,451	30,103	31,382	33,603	35,804
Credit intermediation & related activity	9,458	10,491	10,709	10,801	10,773	10,377	9,711	10,077	11,495	13,292
Financial investment & related activity	3,478	3,580	3,477	3,458	3,680	3,910	4,086	4,141	4,359	4,359
Insurance carriers & related activities	16,858	16,948	17,017	16,763	15,945	15,628	15,771	16,624	17,260	17,638
Funds, trusts & other financial vehicles	117	109	45	46	547	536	535	541	489	514
Real estate and rental and leasing	10,644	10,390	10,316	9,747	9,895	9,628	9,489	9,748	10,224	10,426
Real estate	9,147	8,988	8,643	8,259	8,418	8,317	8,171	8,387	8,640	8,790
Rental and leasing services	1,427	1,351	1,540	1,362	1,341	1,191	1,211	1,255	1,470	1,524
Lessors, nonfinancial intangible assets	70	52	134	127	136	119	107	106	114	111
Professional and technical services	38,578	38,448	37,771	36,605	35,200	34,173	34,098	34,757	36,513	37,246
Management of companies and enterprises	7,343	6,716	6,604	6,462	6,981	6,501	6,776	6,891	7,059	6,938
Administrative and waste services	32,329	30,509	30,086	29,443	29,243	28,819	27,421	29,300	31,691	32,510
Administrative and support services	30,732	29,093	28,747	28,126	27,988	27,538	26,109	28,240	30,651	31,502
Waste management and remediation service	1,597	1,415	1,339	1,317	1,255	1,281	1,312	1,060	1,041	1,008
Educational services	20,802	20,305	19,864	19,900	20,167	19,678	19,651	19,437	19,411	19,107
Health care and social assistance	125,346	120,248	115,383	114,014	113,402	114,455	111,494	104,277	101,880	99,629
Ambulatory health care services	47,570	46,675	44,813	43,828	43,025	42,156	41,984	40,866	39,830	38,866
Hospitals	42,251	39,271	36,749	37,333	37,268	38,761	36,727	31,716	30,394	29,314
Nursing and residential care facilities	13,736	13,472	13,484	13,435	14,388	14,706	14,854	14,746	14,962	15,395
Social assistance	21,789	20,830	20,337	19,418	18,722	18,832	17,929	16,948	16,694	16,053
Arts, entertainment, and recreation	11,701	11,910	11,911	11,842	11,303	11,199	11,358	11,617	12,077	11,846
Performing arts and spectator sports	3,367	3,715	4,026	4,070	3,932	3,910	4,057	3,959	4,239	4,075
Museums, parks and historical sites	335	319	324	326	309	317	309	426	425	369
Amusement, gambling & recreation	8,000	7,876	7,561	7,446	7,062	6,972	6,991	7,231	7,413	7,402
Accommodation and food services	48,781	48,221	47,179	45,983	43,818	41,661	40,230	38,591	38,946	39,635
Accommodation	2,371	2,359	2,380	2,472	2,466	2,340	2,341	2,176	2,272	2,400
Food services and drinking places	46,409	45,861	44,799	43,511	41,352	39,321	37,890	36,415	36,674	37,235
Other services, ex. Public administration	29,925	29,202	28,912	27,984	27,544	27,459	27,169	26,761	27,061	26,634
Repair and maintenance	6,657	6,660	6,595	6,398	6,443	6,581	6,610	6,229	6,287	6,295
Personal and laundry services	12,931	12,309	11,885	11,187	10,824	10,812	10,566	10,408	10,317	10,092
Membership organizations & associations	8,547	8,467	8,572	8,596	8,411	8,224	8,197	8,334	8,590	8,136
Private households	1,790	1,765	1,859	1,804	1,866	1,843	1,796	1,790	1,867	2,110
Government	77,973	78,023	77,833	77,133	78,020	81,229	83,252	83,566	83,778	82,396
Federal government	5,258	5,201	5,155	5,218	5,264	5,468	6,174	6,122	6,256	6,352
State government	3,162	3,143	3,107	2,220	2,557	3,644	3,770	3,825	3,802	3,777
Local government	69,553	69,679	69,571	69,695	70,199	72,117	73,308	73,619	73,720	72,267
Unclassified	4,400	2,997	3,249	2,281	2,106	2,445	2,211	2,177	1,845	2,628
	.,400	_,,		_/=01	_,	_,,		_,_,,	_,0+0	_,520

<u>Source</u>: Quarterly Census of Employment and Wages, developed through a cooperative program between the State of New York and the Bureau of Labor Statistics.

### WATER AUTHORITY OF WESTERN NASSAU COUNTY COUNTY OF NASSAU, NEW YORK PRINCIPAL EMPLOYMENT BY INDUSTRY 2016 AND 2007

2007 2016 Average Average Annual Percentage Annual Percentage **Employment Sector** of Total of Total Employment Rank Employment Rank 125,346 Health care and social assistance 1 20.2% 101,880 1 17.0% 80,141 Retail trade 2 12.9% 3 13.5% 81,073 77,973 All government 3 12.5% 2 13.9% 83,778 Accommodation and food services 48,781 4 7.8% 38,946 4 6.5% 38,578 Professional and technical services 5 6.2% 5 36,513 6.1% Administrative and waste services 32,329 6 5.2% 31,691 7 5.3% 8 30,058 7 4.8% 30,843 5.1% Construction Other services, ex. Public admin 29,925 8 4.8% 27,061 10 4.5% Finance and insurance 29,912 9 4.8% 6 5.6% 33,603 26,802 9 Wholesale trade 4.8% 10 4.3% 29,102 Educational services 20,802 11 3.3% 12 3.2% 19,411 Manufacturing 17,334 12 2.8% 11 3.9% 23,417 Transportation and warehousing 15,537 13 2.5% 15,146 13 2.5% Arts, entertainment, and recreation 11,701 1.9% 15 2.0% 14 12,077 1.7% 16 1.7% Real estate and rental and leasing 10,644 15 10,224 Information 16 1.7% 14 2.4% 10,367 14,319 Management of companies and enterprises 1.2% 7,343 17 1.2% 7,059 17 Utilities 4,400 18 0.7% 1,845 19 0.3% Other 4,084 19 0.6% 2,954 18 0.4% 622,057 100.0% 600,942 100.0%

Source: Quarterly Census of Employment and Wages developed through a cooperative program between the State of New York and the U.S. Bureau of Labor Statistics.

### **SECTION C: STATISTICAL SECTION**

**Operating Information** 



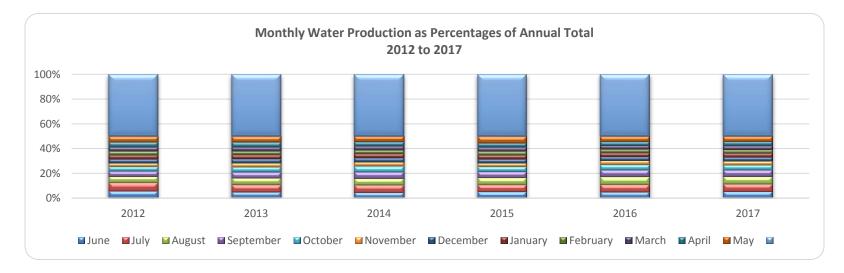
# WATER AUTHORITY OF WESTERN NASSAU COUNTY STATISTICAL SUMMARY AND FLASH REPORT LAST TEN FISCAL YEARS

	2017	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008
Estimated population served	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000
Employees head count	48	50	47	49	51	50	51	52	52	52
Billed consumption (million gallons)	3,441	3,976	3,367	3,470	3,401	3,401	3,728	3,199	3,463	3,611
Average daily consumption										
(million gallons)	9.43	9.52	9.23	9.51	9.31	9.31	10.21	8.77	9.49	11.89
Average daily peak consumption										
(million gallons)	18.3	20.2	19.3	20.2	22.1	22.1	24.3	17.4	21.7	19.2
OPERATINGINFORMATION										
Treated water reservoir capacity										
(million gallons)	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Fire hydrants operated and maintained	2,432	2,432	2,432	2,432	2,432	2,432	2,432	2,432	2,432	2,432
FINANCIAL INFORMATION										
Net property, plant & equipment	\$79,908,512	\$72,887,677	\$69,888,539	\$68,063,563	\$63,874,772	\$52,433,616	\$44,800,607	\$40,236,512	\$35,818,270	\$32,150,650
Rate stabilization cash and cash equivalent	\$1,070,000	\$1,070,000	\$1,070,000	\$570,000	\$560,000	\$560,000	\$460,000	\$445,000	\$445,000	\$500,000
	\$1,070,000	., ,	. , ,	\$570,000	\$500,000	\$500,000	\$400,000	\$70.690.000	\$30,870,000	\$31,910,000
Total long-term debt Rate increases	\$107,915,000 2.50%	\$110,195,000 9.40%	\$112,590,000 8.41%	304,515,000 7.0%	\$00,110,000 6.02%	307,000,000 4.8%	\$09,105,000 4.8%	370,090,000 7.2%	350,870,000 7.4%	331,910,000 7.8%
Operating revenues	\$18,648,464 \$11,409,696	\$16,905,087 \$10,616,972	\$15,180,824	\$14,077,866	\$13,656,848 \$9,878,059	\$12,988,468	\$13,201,079	\$10,972,582	\$10,881,949	\$10,671,542
Operating expenses	\$7,238,768	\$6,288,115	\$10,778,800 \$4,402,024	\$10.614,892	\$9,878,059 \$3,778,789	\$9,168,985 \$3,819,483	\$8,894,473	\$8,743,683	\$8,839,820 \$2,042,129	\$8,690,571
Operating income	.,,,	. , ,	.,,,	\$3,462,974	.,,,	., ,	\$4,306,606	\$2,228,899	.,,,	\$1,980,971
Debt service	\$7,291,149	\$6,219,539	\$4,480,080	\$4,540,386	\$4,547,786	\$4,129,800	\$4,428,783	\$2,726,025	\$2,512,000	\$2,507,000
Depreciation and other amortization	\$2,129,673	\$1,988,943	\$1,806,744	\$1,936,732	\$1,310,273	\$1,202,793	\$1,096,432	\$1,454,956	\$884,957	\$851,700
GASB Statement Nos 68 and 71 implementation	-	-	232,625	-	-	-	-	-	-	-
Net increase in net position Source: Accounting Department	\$3,315,275	\$1,929,274	\$1,765,122	\$2,063,320	\$2,026,818	\$1,765,317	\$2,304,551	\$878,954	\$989,420	\$2,731,254

# WATER AUTHORITY OF WESTERN NASSAU COUNTY MONTHLY WATER PRODUCTION (GALLONS) LAST SIX FISCAL YEARS AND LAST TEN FISCAL YEARS AVERAGE

**Ten-Year Average** 

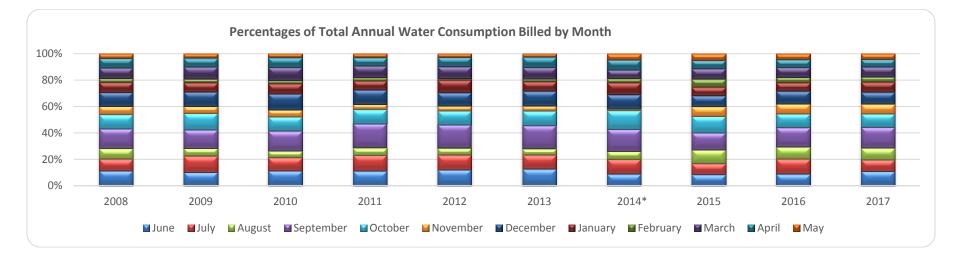
							-
	2017	2016	2015	2014	2013	2012	2008-2017
June	468,505,512	451,895,352	468,927,660	413,476,668	415,920,744	485,796,408	456,213,592
July	499,834,194	522,179,940	494,058,606	500,476,506	490,898,166	567,544,986	506,320,765
August	509,743,866	528,555,198	485,088,174	452,281,272	447,850,242	417,422,346	470,185,329
September	437,057,460	477,790,212	431,253,348	447,688,476	396,395,910	345,894,732	421,907,972
October	351,037,894	368,361,132	349,110,516	393,596,754	332,347,356	306,189,468	345,666,683
November	272,569,974	307,161,090	279,347,682	294,783,900	287,086,254	252,733,512	278,752,781
December	265,565,196	268,037,064	276,014,592	280,999,356	271,980,438	265,064,268	272,455,035
January	266,223,354	255,909,846	283,432,278	284,563,734	270,144,930	276,207,689	293,561,485
February	239,321,826	241,954,314	259,273,926	254,241,018	245,128,584	254,568,474	249,107,905
March	266,026,380	262,654,920	287,733,204	280,909,686	279,318,678	277,330,218	275,542,142
April	283,944,036	284,911,374	292,221,828	286,489,632	323,435,292	342,281,604	301,062,478
May	348,114,654	358,831,620	471,478,446	368,398,014	376,549,128	367,582,458	375,312,817
	4,207,944,346	4,328,242,062	4,377,940,260	4,257,905,016	4,137,055,722	4,158,616,163	4,246,088,984



## WATER AUTHORITY OF WESTERN NASSAU COUNTY ANNUAL WATER CONSUMPTION BILLED BY MONTH (GALLONS) LAST TEN FISCAL YEARS

Month	2017	2016	2015	2014*	2013	2012	2011	2010	2009	2008
June	378,644,250	310,895,250	285,524,250	309,621,750	425,337,750	413,437,500	417,933,000	364,995,750	354,737,250	409,091,250
July	296,893,500	392,601,750	283,273,500	385,202,250	356,779,500	382,331,250	445,953,750	321,195,000	424,296,000	322,451,250
August	307,693,500	318,147,750	353,835,750	210,009,750	154,800,000	171,570,750	202,803,000	160,192,500	203,133,750	286,518,000
Septembe	r 542,663,250	511,770,000	428,210,250	582,278,250	597,716,250	604,166,250	683,575,500	478,103,250	487,212,000	540,705,000
October	353,409,000	363,897,000	422,100,000	486,779,250	368,883,750	361,052,250	405,327,750	345,252,000	434,728,500	388,932,000
November	253,351,500	257,098,500	245,076,750	49,267,500	129,597,750	121,548,000	141,743,250	171,511,500	180,569,250	228,657,000
December	308,926,500	342,065,250	282,745,500	373,030,500	381,285,772	350,163,000	412,925,250	389,115,000	377,025,750	384,685,500
January	266,373,750	218,660,250	218,567,250	313,923,000	243,748,500	321,443,250	258,597,750	246,305,250	244,586,250	275,902,500
February	136,882,500	140,912,250	204,788,250	105,366,750	69,076,500	33,393,750	91,151,250	75,555,750	96,087,750	102,807,750
March	256,349,250	262,326,000	265,101,750	231,380,250	292,157,257	309,940,500	327,708,000	315,026,250	319,692,750	288,594,750
April	195,435,750	206,359,500	211,508,250	264,096,750	261,793,500	241,111,500	235,841,250	242,871,750	231,180,750	262,256,250
May	144,825,000	151,575,750	166,416,000	159,300,750	81,789,000	90,583,500	104,868,000	89,511,750	109,857,750	120,750,750
Total	3,441,447,750	3,476,309,250	3,367,147,500	3,470,256,750	3,362,965,529	3,400,741,500	3,728,427,750	3,199,635,750	3,463,107,750	3,611,352,000

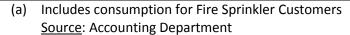
\* In fiscal year 2014 the Water Authority adjusted its billing schedule.

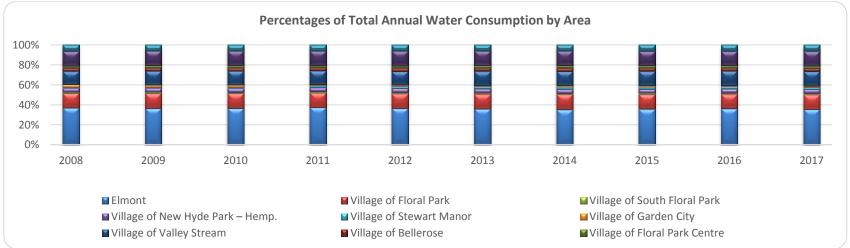


# WATER AUTHORITY OF WESTERN NASSAU COUNTY ANNUAL WATER CONSUMPTION BY SERVICE AREA(a) LAST TEN FISCAL YEARS

#### (IN THOUSANDS OF GALLONS)

Service Area	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Elmont	1,222,858	1,261,769	1,206,584	1,229,779	1,208,479	1,242,617	1,403,907	1,173,992	1,270,621 1	L,333,346
Village of Floral Park	506,127	500,831	496,190	522,931	501,113	502,937	543,707	474,230	514,696	536,653
Village of South Floral Park	41,492	44,241	42,360	42,291	42,278	40,872	45,186	38,409	43,372	43,545
Village of New Hyde Park – Hemp.	140,729	140,143	133,865	139,271	140,057	136,763	144,898	129,122	139,825	142,259
Village of Stewart Manor	75,370	77,225	72,930	77,449	73,814	72,030	81,342	22,705	26,025	27,264
Village of Garden City	45,724	45,042	42,822	46,995	43,924	42 <i>,</i> 935	46,775	85,090	92,795	98,123
Village of Valley Stream	499,399	503,633	490,068	498,735	472,111	468,658	502,992	443,548	475,214	485,133
Village of Bellerose	110,723	111,092	110,240	112,558	108,968	109,921	115,688	100,603	104,524	108,801
Village of Floral Park Centre	76,561	76,067	74,438	80,408	77,501	76,892	80,853	72,382	78,381	82,313
New Hyde Park N. Hemp.	512,062	503,198	490,290	511,231	497,118	502,727	545,851	469,862	513,266	533,633
Franklin Square	210,403	213,066	207,361	208,609	197,603	204,390	217,229	189,841	204,678	220,282
Total	3,441,448	3,476,309	3,367,148	3,470,257	3,362,966	3,400,742	3,728,428	3,199,784	3,463,397 3	3,611,352

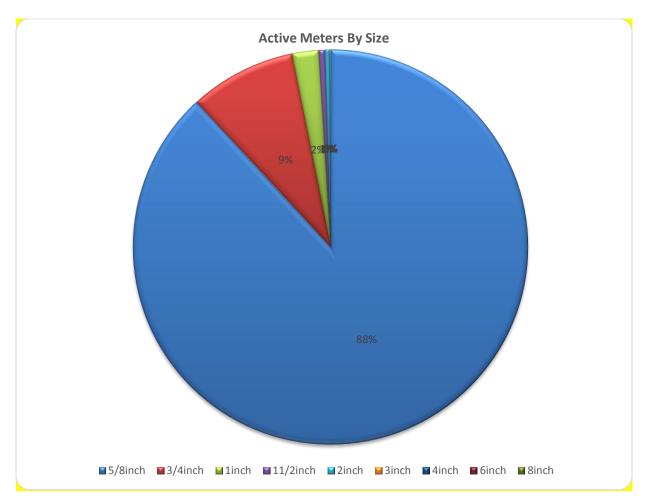




## WATER AUTHORITY OF WESTERN NASSAU COUNTY ACTIVE METERS BY SIZE MAY 31, 2017

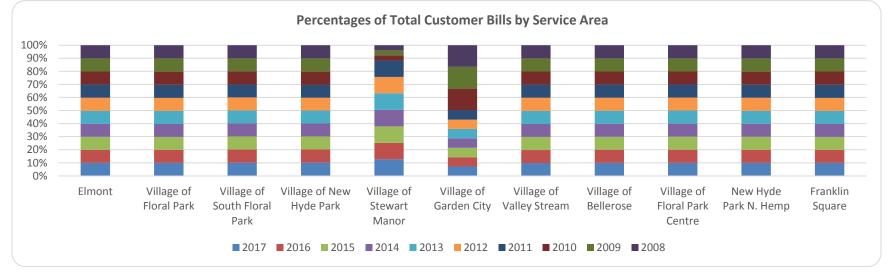
Size	Total	Residential	Commercial	Municipal	Large Users
5/8inch	24,437	23,897	531	9	-
3/4inch	2,437	2,047	384	5	1
1inch	606	408	183	14	1
11/2inch	143	-	132	9	2
2inch	95	-	70	22	3
3inch	7	-	3	4	-
4inch	6	-	2	3	1
6inch	8	-	5	-	3
8inch	3	-	-	-	3
Total	27,742	26,352	1,310	66	14

Source: Accounting Department



		CUSTO	MER BILLS	<b>BY SERVIC</b>	E AREA					
		L	AST TEN FI	SCAL YEAR	S					
Service Area	2017	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008
Elmont	8,972	8,959	8,926	8,928	8,940	8,971	9,022	9,048	9,025	9,061
Village of Floral Park	4,319	4,328	4,308	4,315	4,317	4,328	4,341	4,384	4,380	4,383
Village of South Floral Park	411	408	407	407	405	400	404	404	406	408
Village of New Hyde Park	1,312	1,311	1,290	1,284	1,288	1,268	1,265	1,313	1,314	1,309
Village of Stewart Manor	664	663	664	662	664	661	657	205	205	205
Village of Garden City	357	354	356	356	358	357	359	816	824	825
Village of Valley Stream	3,644	3,702	3,695	3,699	3,704	3,717	3,732	3,731	3,725	3,738
Village of Bellerose	1,033	1,032	1,026	1,025	1,029	1,028	1,031	1,039	1,038	1,038
Village of Floral Park Centre	832	833	830	825	828	825	829	826	832	837
New Hyde Park N. Hemp	5,051	5,061	5,057	5,049	5,056	5,067	5,066	5,111	5,118	5,124
Franklin Square	1,525	1,526	1,521	1,523	1,524	1,531	1,534	1,545	1,542	1,546
Total	28,120	28,177	28,080	28,073	28,113	28,153	28,240	28,422	28,409	28,474

### WATER AUTHORITY OF WESTERN NASSAU COUNTY CUSTOMER BILLS BY SERVICE AREA

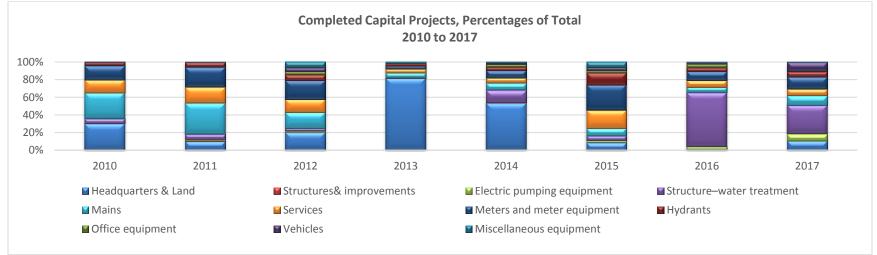


#### WATER AUTHORITY OF WESTERN NASSAU COUNTY

COMPLETED CAPITAL PROJECTS LAST EIGHT FISCAL YEARS

Description	2017		2016	2015		2014		2013		2012		2011	2010
Headquarters	\$ 6,030	\$	20,815	\$ 167,229	\$	3,700,094	\$	7,665,384	\$	662,933	\$	473,030	\$ 1,939,587
Structures & improvements			-	-		19,290		48,315		-		30,038	11,032
Electric pumping equipment	319,143		169,745	44,898		44,072		705		45,655		54,560	4,120
Structure-water treatment	1,762,423		2,995,594	107,218		947,979		2,843		106,720		267,427	347,877
Mains	445,125		290,893	164,493		531,361		533,633		581,324		1,632,282	1,895,264
Services	308,497		380,295	398,334		419,587		405,336		483,645		821,815	949,382
Meters and meter equipment	563,481		509,061	555,573		594,671		344,052		703,616		1,037,351	1,035,500
Hydrants	238,264		199,062	265,416		236,956		218,381		206,745		243,462	234,412
Office equipment	7,774		191,452	49,496		235,288		15,620		113,063		7,084	18,305
Vehicles	434,501		101,720	68,496		101,451		43,411		146,640		-	2,039
Miscellaneous equipment	3,484	-	14,134	115,012	-	63,390	_	126,062	-	207,079	-	6,681	 795
Total additions	\$ 4,088,722	\$	4,872,771	\$ 1,936,165	\$	6,894,139	\$	9,403,742	\$	3,257,420	\$	4,573,730	\$ 6,438,313

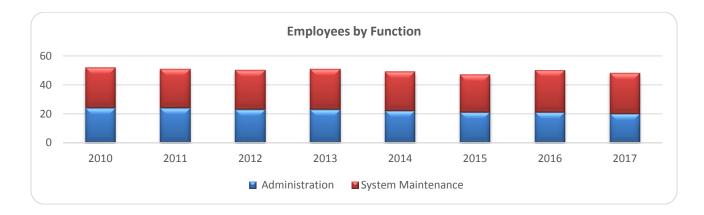
Data available for 2010 to 2017



## WATER AUTHORITY OF WESTERN NASSAU COUNTY NUMBER OF EMPLOYEES BY FUNCTION LAST EIGHT FISCAL YEARS

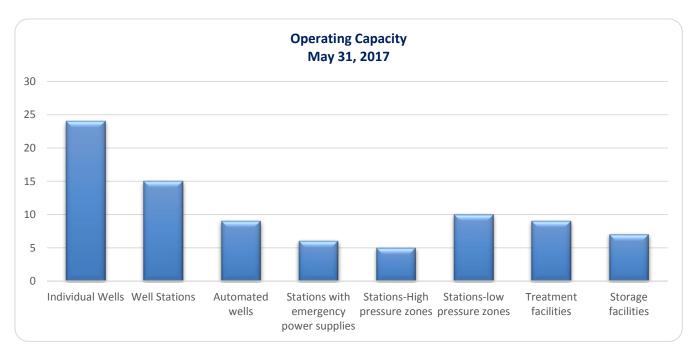
	2017	2016	2015	2014	2013	2012	2011	2010
Administration								
Chairman (P/T)	1	1	1	1	1	1	1	1
Executive Director	1	1	1	1	1	1	1	1
Treasurer (P/T)	-	1	1	1	1	1	1	1
Personnel Director	1	1	1	1	1	1	1	1
Customer Service	7	7	7	8	8	7	8	8
Meter Reading/Repairs	4	4	4	3	4	5	5	5
Information Technology	1	1	1	1	2	2	2	2
Accounting/Billing	3	3	3	3	3	3	3	3
Support Staff	2	2	2	3	2	2	2	2
Subtotal Administration	20	21	21	22	23	23	24	24
System Maintenance								
Water system maintenance								
	1	1	1	1	1	1	1	1
Inspectors	2	2	2	2	2	2	2	2
Water distribution	12	13	12	13	14	13	13	14
Water treatment	12	12	10	10	9	9	9	9
Maintenance Support	1	1	1	1	2	2	2	2
Subtotal Maintenance	28	29	26	27	28	27	27	28
Total Employees	48	50	47	49	51	50	51	52

Data available for since 2010 Source: Accounting Department



# WATER AUTHORITY OF WESTERN NASSAU COUNTY OPERATING CAPACITY LAST TEN FISCAL YEARS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Water Supply										
Well Stations	15	15	15	15	15	15	15	15	15	15
Individual Wells	24	24	24	24	24	24	24	24	24	24
Automated wells	9	9	9	9	9	9	9	9	9	9
Stations with emergency power supplies	5	5	5	5	5	5	5	5	4	4
Stations-High pressure zones	5	5	5	5	5	5	5	5	5	5
Stations-low pressure zones	10	10	10	10	10	10	10	10	10	10
<u>Treatment</u>										
Treatment facilities	9	9	9	9	9	9	7	7	5	5
<u>Storage</u>										
Storage facilities	7	7	7	7	7	7	7	7	7	7
Storage capacity (Million Gallons)	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Transmission and Distribution										
Water mains (2 to 16 inches diameter),										
Thousand linear feet	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235
Fire Hydrants	2,432	2,432	2,432	2,432	2,432	2,432	2,432	2,432	2,432	2,432
Interconnections										
Interconnections to Nassau County	11	11	11	11	11	11	11	11	11	11
Interconnections to NYC system	6	6	13	13	13	13	13	13	13	13



# WATER AUTHORITY OF WESTERN NASSAU COUNTY WELL-STATION DESCRIPTION FISCAL YEAR ENDED MAY 31, 2017

			Storage Tank		
	Pressure		(Million	Treatment	Emergency
Well Station	Zone	Well No.	Gallons)	Туре	Power
Bryant Ave. W. of North 5 <sup>th</sup> Street, New Hyde Park	High	9		1,2	-
Hempstead Tpke. West of Plainfield Ave., Elmont	Low	15D	5.00	-	-
Elmont Rd., South of Atherton Ave, Elmont	Low	15A	_	1,2	-
Elmont Rd., South of Belpark Ave, Elmont	Low	15B	_	1,2,5	Yes
Elmont Rd., South of Joan Court, Elmont	Low	15C,15E	_	1,2	-
North 4 <sup>th</sup> St., South of Hillside Ave, North					
Hempstead (New Hyde Park)	High	16A	_	1,2	-
Evergreen Ave., West of Denton Ave., North					
Hempstead (New Hyde Park)	High	20	0.50	1,2,4	-
Elmont Rd. North of Oliver Ave, North Valley Stream	Low	25A	_	1,2,3	-
Miriam Pkwy. North of Stuyvesant St., Elmont	Low	28,28A,28B	1.50	1,2,3, 6	Yes
Swale Rd. East of Park Lane South, Franklin Square	Low	30,30-1	0.60	1,2,3, 6	-
Franklin Ave. North of Southern State Parkway,					
North Valley Stream	Low	34	_	1,2,3	-
Cisney Ave. West of Gilbert Ct, Floral Park	Low	35,35A	1.00	1,2,4	Yes
Union Tpke. West of N.H.P. Rd, North					
Hempstead (New Hyde Park)	High	40,40A	_	1,2,4	Yes
		44,44A,44B,			
Makofske Ave. and Chelsea St. Elmont	Low	44C	2.00	1,2,4	
2 <sup>nd</sup> Ave. & South 6 <sup>th</sup> St., New Hyde Park	High	57,57A	1.30	1,2,4	Yes

Treatment type are as follows:

- 1. Chlorination
- 2. Corrosion Control
- 3. Zinc Metaphosphate Sequestration (iron removal)
- 4. Air Stripper VOC Removal
- 5. GAC Treatment
- 6. Iron removal plant

#### WATER AUTHORITY OF WESTERN NASSAU COUNTY SCHEDULE OF INSURANCE IN FORCE FOR FISCAL YEAR ENDED MAY 31, 2017

				COVERAGE	
ТҮРЕ	PREMIUM	TERM	COVERAGE	LIMITS	DEDUCTIBLE
Property and Liability Protection					
General Liability	<b>†</b> 00 040			** *** ***	
St. Paul Travelers Insurance Co.	\$ 88,319	3/1/17-3/1/18	General Aggregate	\$2,000,000	
		3/1/17-3/1/18	Products	2,000,000	
		3/1/17-3/1/18	Terrorism	2,000,000	
		3/1/17-3/1/18	Boiler & Machinery	2,000,000	
		3/1/17-3/1/18	Personal Injury	1,000,000	
		3/1/17-3/1/18	Advertising Injury	1,000,000	
		3/1/17-3/1/18	Premises Damage	1,000,000	
		n/a	Medical Expense	Excluded	
		n/a	Sewer Back-up	Excluded	
		3/1/17-3/1/18	Failure to Supply	1,000,000	
Boiler & Machinery	¢6 200	2/1/17 2/1/10			
St. Paul Travelers Insurance Co.	\$6,300	3/1/17-3/1/18			
Inland Marine	644.000	3/1/17-3/1/18			605 00V
St. Paul Travelers Insurance Co.	\$11,006	3/1/17-3/1/18	Equipment Floater	Replacement cost	\$25,000
		3/1/17-3/1/18	Unscheduled Limit	\$112,000	2,500
Property	4	3/1/17-3/1/18			
St. Paul Travelers Insurance Co.	\$81,420	3/1/17-3/1/18	Blanket basis	\$31,934,956	
Casualty					
Automobile	4 4 9 9 9 9			** *** ***	
St. Paul Travelers Insurance Co.	\$43,096	3/1/17-3/1/18	Liability	\$1,000,000	
		3/1/17-3/1/18	PIP Deductible	Included	
		3/1/17-3/1/18	Additional PIP	175,000	
		3/1/17-3/1/18	Uninsured Motorist	1,000,000	
		3/1/17-3/1/18	Under insured Motorist	1,000,000	
		3/1/17-3/1/18	Physical Damage	Perve	hicle schedule
Excess Catastrophe	¢20.222	2/4/47 2/4/40	the billion of the	¢10,000,000	
(Umbrella)	\$30,332	3/1/17-3/1/18	Liability, each	\$10,000,000	
St. Paul Travelers Insurance Co.		3/1/17-3/1/18	Liability, aggregate	10,000,000	
Crume and Faster	¢51.000	3/1/17-3/1/18	Retained Limit	10,000	
Crum and Foster	\$51,000	3/1/17-3/1/18	Liability, each	25,000,000	
Trevelore	¢12.000	3/1/17-3/1/18	Liability, aggregate	25,000,000	
Travelers	\$13,000	3/1/17-3/1/18	Liability, each	5,000,000	
		3/1/17-3/1/18	Liability, aggregate	5,000,000	
Employee Protection					
Public Officials' Liability	ć22.200	2/4/47 2/4/40		¢10,000,000	¢45.000
Scottsdale Indemnity Co,	\$23,289	3/1/17-3/1/18	Public Officials	\$10,000,000	\$15,000
Crime a			Employment Practices Liability	10,000,000	15,000
Crime	¢4.06F	2/1/17 2/1/10	Forgony/Altoration	¢1 000 000	¢10.000
Utica Mutual Insurance Co.	\$4,065	3/1/17-3/1/18	Forgery/Alteration	\$1,000,000	\$10,000
		3/1/17-3/1/18	Computer Fraud	1,000,000	10,000
Employee Benefit Plans Liability	¢4.00	2/4/47 2/4/42		¢4,000,000	A4 000
St. Paul Travelers Insurance Co.	\$192	3/1/17-3/1/18	Wrongful Act, each	\$1,000,000	\$1,000
		3/1/17-3/1/18	Wrongful Act, aggregate	1,000,000	1,000

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#### **SECTION D: COMPLIANCE SECTION**





Members of AICPA Registered with PCAOB

#### REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Directors Water Authority of Western Nassau County New Hyde Park, New York

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Water Authority of Western Nassau County as of and for the year ended May 31, 2017, and the related notes to the financial statements, which collectively comprise the Water Authority of Western Nassau County's basic financial statements, and have issued our report thereon dated August 30, 2017.

#### **Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Water Authority of Western Nassau County's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Water Authority of Western Nassau County's internal control. Accordingly, we do not express an opinion on the effectiveness of the Water Authority of Western Nassau County's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

#### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Water Authority of Western Nassau County's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

#### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

TABRIZTCHI & CO., CPA, P.C.

Astoria, NY August 30, 2017