

Annual Report

ACTON WATER DISTRICT

For the year ending December 31, 2018



Warrant Articles for the Annual Meeting

March 20, 2019

In Memorial

The 107 year history of the Acton Water District is distinctively marked by the services of exceptional leaders and citizens. In March of 2018, sadly, long time Acton resident Brewster Conant passed away. This was a great loss to Acton and humanity!

Brewster was the sole recipient of the District's Distinguished Steward for Acton's Water award to date, and his land management practices and respect for the environment is a model for all to emulate. Although Brewster did not hold an elected office with the District, he served as a trusted advisor on both financial and resource management issues. Additionally, he and his late wife Betsy made possible the development of our Conant 2 wells in the late 1990's.

On behalf of all members of the Acton Water District, past and present, we extend condolences and warmest thanks to the Conant Family for Brewster's distinguished service.

Index

Auditor's Report.....	14
Budget FY 2020.....	4
Collector's Report.....	5
Commissioner's Report.....	6
District Manager's Report.....	11
District Meetings:	
Annual Meeting (March 27, 2018).....	37
Special Meeting (October 10, 2018).....	39
District Organization.....	40
Environmental Manager's Report	12
Finance Committee's Report	9
MIS Coordinator's Report	13
Treasurer's Report	5
Warrant	1

The Acton Water District welcomes you to visit our Website at:

www.actonwater.com

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COMMONWEALTH OF MASSACHUSETTS
Middlesex, ss.



To the Clerk of the Water Supply District of Acton, GREETINGS:

You are directed to notify the inhabitants of the Town of Acton who are qualified to vote in elections and town affairs, to assemble at their precinct:

Precinct 1, 2 & 6 - Conant School, 80 Taylor Rd.
Precinct 3, 4 & 5 - Blanchard Auditorium, Junior High School, 16 Charter Rd.
Acton, Massachusetts

On Tuesday, March 26, 2019
Between 7:00 A.M. and 8:00 P.M.

Then and there to bring their votes on one ballot for the following officers:

Commissioner for three years

You are further directed to notify the legal voters of the Town of Acton, as aforesaid, to assemble at:

Acton Public Safety Facility
371 Main Street
Acton, Massachusetts

On Wednesday, March 20, 2019
7:00 P.M.

Then and there to Act on the following Articles:

Article 1. To fix salaries of the elected officials.

Article 2. To act on the reports of the Commissioners, the Treasurer and other officers and committees of the District.

Article 3. To see if the District will vote to authorize the Treasurer, with the approval of the Commissioners, to borrow in anticipation of the revenue of the fiscal year beginning July 1, 2019 in accordance with the provisions of General Laws, Chapter 44, Section 4, and to renew any note or notes as may be given for a period of less than one year, in accordance with the provisions of the General Laws, Chapter 44, Section 17, or to take any other action relative thereto.

Article 4. To see what sums of money the District will vote to raise and appropriate to defray the usual expenses of the District.

Article 5. To see if the District will vote, pursuant to Massachusetts General Laws c.44, §53E½ as most recently amended by §86 of Chapter 218 of the Acts of 2016, to establish a \$100,000 limitation on expenditures from the revolving fund, captioned, "District Revolving Fund for Mitigation," or to take any other action relative thereto.

Article 6. To see if the District will vote to transfer from Surplus Revenue the sum of \$100,000 for the maintenance and repair of the various treatment facilities including, but not limited to, media replacement in the filtration tanks, aeration tower repair, and replacement of packing material, or to take any other action relative thereto.

Article 7. To see if the District will vote to transfer from Surplus Revenue the sum of \$90,000 to clean and rehabilitate existing wells throughout the District or to take any other action relative thereto.

Article 8. To see if the District will vote to transfer from Surplus Revenue the sum of \$30,000 for the purpose of replacing old water mains, renewing old water services, replacing old fire hydrants or to take any other action relative thereto.

Article 9. To see if the District will vote to transfer from Surplus Revenue the sum of \$45,000 for the storage tank improvements or to take any other action relative thereto.

Article 10. To see if the District will vote to transfer from Surplus Revenue the sum of \$500,000 to pay down short-term debt related to the Indian Village and Littlefield Road water main improvement project or to take any other action relative thereto.

Article 11. To see if the District will vote to transfer from Surplus Revenue the sum of \$35,000 for the purpose of repairing emergency water main breaks or to take any other action relative thereto.

Article 12. To see if the District will vote to transfer from Surplus Revenue the sum of \$85,000 for the replacement of filter cartridges at the North Acton Water Treatment Plant to take any other action relative thereto.

Article 13. To see if the District will vote to transfer from Surplus Revenue the sum of \$100,000 for the removal of filtration residuals at the North Acton Water Treatment Plant or to take any other action relative thereto.

Article 14. To see if the District will vote to appropriate \$9,242,000 for the construction and all related costs of a water treatment facility at the Acton Center site off Post Office Square in Acton, including without limitation all costs thereof as defined in Section 1 of Chapter 29C of the General Laws, as most recently amended by St. 1998, c.78; that to meet this appropriation the Treasurer with the approval of the Board of Water Commissioners be authorized to borrow \$9,242,000 and to issue bonds or notes therefore under Chapter 44 of the General Laws and/or Chapter 29C of the General Laws, as most recently amended by St. 1998, c.78; and that such bonds or notes shall be general obligations of the District unless the Treasurer with the approval of the Board of Water Commissioners determines that they should be issued as limited obligations and may be secured by local system revenues as defined in Section 1 of Chapter 29C, as most recently amended by St. 1998, c.78; and that the Treasurer with the approval of the Board of Water Commissioners be authorized to borrow all or a portion of such amount from the Massachusetts Clean Water Trust established pursuant to Chapter 29C, as most recently amended by St. 1998, c.78 and in connection therewith to enter into a loan agreement and/or security agreement with the Massachusetts Clean Water Trust and otherwise to contract with the Massachusetts Clean Water Trust and the Department of Environmental Protection with respect to such loan and for any federal or state aid available for the project or for the financing thereof and that the Board of Water Commissioners be authorized to enter into a project regulatory agreement with the Department of Environmental Protection, to expend all funds available for the project and to take any other action necessary to carry out the project or to take any other action relative thereto.

Article 15. To see if the District will vote to appropriate the sum of \$200,000 from the WR Grace Receipt Reserved for Appropriation Account (WR Grace Fund) for engineering work on the Acton Center Water Treatment Plant or take any other action relative thereto.

Article 16. To see if the District will vote to appropriate the sum of \$450,000 for engineering work on the Acton Center water treatment facility and that to meet this appropriation, the Treasurer, with the approval of the Water Commissioners, is authorized to borrow the sum of \$450,000 under General Laws, Chapter 44, Sec. 8, or other enabling authority and the Board of Water Commissioners is authorized to take any other action necessary to carry out this project or to take any other action relative thereto.

Article 17. To see if the District will vote to authorize the Treasurer, with the approval of the Commissioners to transfer to Surplus Revenue the following unexpended balances remaining after the completion of projects authorized by vote of the District or to take any other action relative thereto

- A. Unissued balance in the sum of \$160.22, Article 12 of the Annual Meeting of March 16, 2016, for new vehicles purchase.
- B. Unissued balance in the sum of \$1,476.15, Article 12 of the Annual Meeting of March 15, 2017, for new vehicles purchase.
- C. Unissued balance in the sum of \$10,106.00, Article 13 of the Annual Meeting of March 27, 2018, for new vehicles purchase.
- D. Unissued balance in the sum of \$505.09, Article 14 of the Annual Meeting of March 15, 2017, for Master Plan update.
- E. Unissued balance in the sum of \$1,810.00, Article 8 of the Annual Meeting of March 15, 2017, for leak detection survey.

Article 18. To see if the District will vote to authorize the Treasurer, with the approval of the Commissioners to transfer to the WR Grace Receipt Reserved for Appropriation Account (WR Grace Fund) the unexpended balance of \$80,000, Article 8 of the Annual Meeting of March 27, 2018 for the piloting of treatment technologies for the Conant I & II wells after the completion of project authorized by vote of the District or to take any other action relative thereto. Hereof fail not and make due returns of this Warrant with your doings thereon to the Water Commissioners on or before the time of holding of said meeting.

Given under our hand this 28th day of January in the year two thousand and nineteen.

Ronald R. Parenti
Stephen C. Stuntz
Erika Amir-Lin, Water Commissioners

A true copy. ATTEST:

William T. Stanford
District Clerk

FY 2020 Budget and Estimated Revenue

	Actual FY 2018	Budget FY 2019	6 month actual	Budget FY 2020
EXPENSES				
Accounting	0	2,000	1,800	2,000
Audit	15,000	16,000	16,000	16,000
Auto Maint & Fuel	46,957	50,000	28,862	50,000
Backflow/Cross Conn	0	1,000	-	1,000
Short Term Debt		100,000	-	350,000
Long Term Debt	1,527,860	1,514,128	938,053	1,512,816
Chemicals	60,200	75,000	37,542	75,000
Computer Maintenance	13,080	16,000	4,544	16,000
DEP Withdrawal	598	6,500	5,066	6,500
Employee Education	13,683	17,500	5,196	17,500
Engineering	30,562	55,000	914	55,000
Health/Life Insurance	335,482	385,000	173,418	397,000
Hydrants	10,000	10,000	400	10,000
Information Reports	44,632	45,000	26,616	45,000
Insurance	77,221	82,000	82,000	86,000
Laboratory Analysis	40,907	50,000	17,870	50,000
Legal	37,483	40,000	19,148	40,000
Lights/Power/Fuel	350,000	375,000	193,987	375,000
Maintenance & Operations	456,381	325,500	149,438	325,500
Middlesex Retirement	203,213	222,170	218,063	247,600
Meters	39,912	60,000	48,934	75,000
Office Supplies	16,438	20,000	7,037	20,000
OPEB Expense	100,000	100,000	-	100,000
Paving	37,844	50,000	40,966	50,000
Petty Cash	600	1,000	300	1,000
Postage	16,948	20,000	6,854	20,000
Reserve Fund	0	100,000	60,000	100,000
Salaries & Wages	1,262,056	1,404,000	667,341	1,460,000
Telephone	16,000	20,000	7,776	20,000
Total	4,753,057	5,162,798	2,758,125	5,523,916
REVENUE				
Water Revenue	2,778,178	2,707,074	1,569,259	2,747,932
Service Fee	517,500	516,540	259,410	518,820
Debt Fee	1,552,500	1,515,184	760,936	1,833,164
Total Water Revenue	4,848,178	4,738,798	2,589,605	5,099,916
Fire Protection Sprinklers	40,140	40,000	39,276	40,000
Rent/Lease	121,449	102,000	54,045	112,000
Repairs/Installation	55,155	60,000	26,383	50,000
Cross Connection	23,560	22,000	13,076	22,000
Demand Fees	281,200	200,000	92,900	200,000
Total Other Revenue	521,504	424,000	225,680	424,000
Total	5,369,682	5,162,798	2,815,285	5,523,916

Report of the Treasurer
Audited Account Balances
June 30, 2018

Sovereign Bank	293,821
Enterprise Bank	986,388
MMDT	1,339,735
Citizens Bank	6,694
Radius Bank	28,605
UniBank	393,340
Total	3,048,584

Report of the Collector
Audited Account Balances
June 30, 2018

Accounts Receivable June 30, 2017	161,459
Charges	5,608,960
Interest Charges	33,484
Refunds	4,530
	5,808,433
Payments	5,497,111
Abatements	158,831
Adjustments	-
Outstanding June 30, 2018	152,490
	5,808,433

Outstanding Debt
June 30, 2018

Description	Original Amount	Interest rate	Date of Issue	Date of Maturity	Balance
Treatment Plant	6,000,000	3.57%	2/15/2009	2/15/2029	3,300,000
Water Mains	2,135,000	2.03%	8/15/2013	8/15/2023	1,275,000
SA Treatment Plant	13,470,767	2.00%	1/17/2015	1/7/2035	11,800,263

Mitigation Revolving Fund
June 30, 2018

	6/30/17 Balance	Receipts	Expenditures	Balance
Mitigation Revolving Fund	\$ -	\$ 137,020	\$ -	\$ 137,020

Respectfully submitted,
Mary J. Bates
Treasurer/Collector

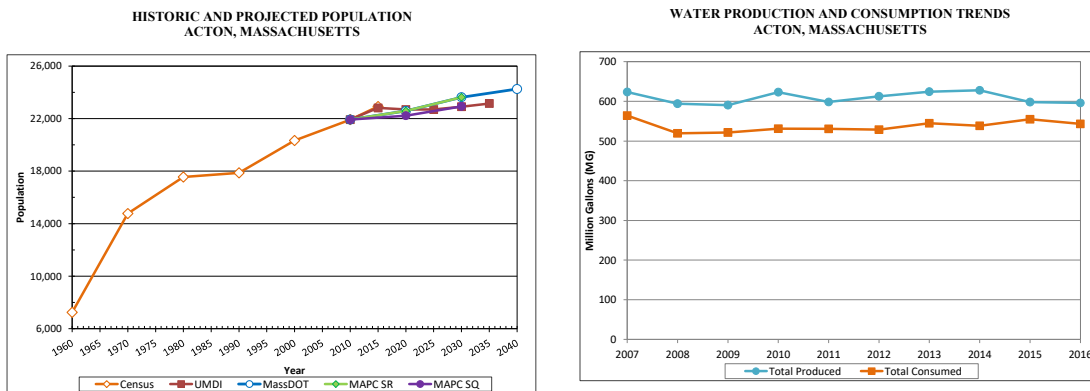
Report of the Commissioners for 2018

The Commissioners are pleased to make the following report for calendar year 2018 to the members of the Acton Water District. As in past years, the District has systematically repaired and improved the water distribution system, has increased the efficiency of existing well fields, and steadily expanded the use of sophisticated water treatment technologies. The associated expenditures have been carefully monitored by the District's Finance Committee to ensure that it is consistent with projected revenue. Additional information regarding these recent infrastructure improvements can be found in separate reports provided by the District Manager, Environmental Manager, and Finance Committee.

In the following sections the Commissioners provide a brief assessment of the current and projected status of the District's resources, and address areas of potential concern.

Water Supply Projections

The District maintains a robust network of 22 wells that are widely distributed within the Town's boundaries. The amount that can be withdrawn on an annual daily average is currently limited to 1.94 million gallons per day by the Massachusetts Department of Environmental Protection, although the cumulative delivery capacity of the well fields is considerably larger. While the Town's population continues to grow, the rate of growth has slowed significantly in recent years and the expectation is that the population will increase by no more than 10% over the next 20 years. It is also notable that in the last 10 years there has been essentially no growth in the annual water use due to aggressive leak detection efforts and education aimed at water conservation and efficiency. These conclusions are based on the data shown below, which are extracted from the 2018 Master Plan prepared by Wright-Pierce Engineers.



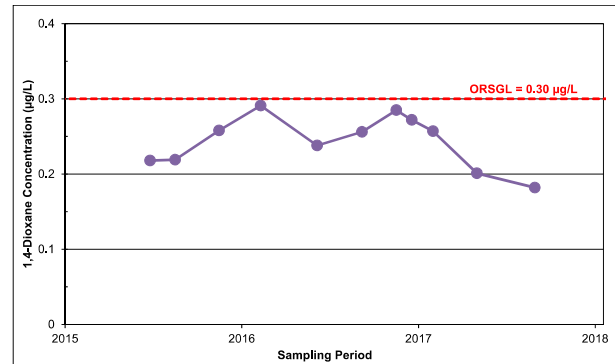
Based on this information, and the fact that the District has identified several prospects for additional supply sources, the Commissioners are confident that Acton's needs will be adequately supplied for the foreseeable future.

Water Quality

Water quality reports are routinely prepared by the District and are posted on the District's website. Additionally, the 2018 Master Plan includes an extensive discussion of the applicable regulations and recent test results. These reports demonstrate that the District is in compliance with all current regulations and guidelines established by the United States Environmental Protection Agency and the Massachusetts Department of Environmental Protection.

There are, however, ongoing concerns about potential pollution sources, and since 2015 the status of the 1,4-dioxane plume from the old Nuclear Metals site has been closely monitored. An extraction and treatment system has been in operation since 2017 to intercept this plume before it reaches the Assabet wells, and since the installation of this system dioxane levels have dropped. Levels measured at the output of the South Acton Treatment Plant are currently well below the 0.3 µg/l guideline. As a precaution, the District has also investigated treatment methodologies that could be applied at the South Acton Treatment Plant in the event that further remediation becomes necessary in the future.

1,4-DIOXANE CONCENTRATIONS AT SOUTH ACTON WTP
ACTON, MASSACHUSETTS



From a budgetary perspective, expenses related to treatment are expected to grow in future years as the list of regulated contaminants grows and standards become increasingly strict. It is expected that all of the District’s wells will eventually require various types of additional treatment. To meet this need, the District will continue to pursue remediation methodologies that are well-engineered and cost-effective.

Source Protection Measures

At the Special District Meeting held on October 10, 2018, the voters approved the purchase of an undeveloped 11-acre parcel at 585 Main Street. This property is comprised entirely of Groundwater Protection District Zones 1 and 2 that protect the Conant 1 and 2 wells, and would add to the approximately 440 acres currently owned by the District. The land is heavily wooded, and will be maintained in this condition for the protection of the existing wells.

Solar Photovoltaic Project

Plans have been underway for several years to construct photovoltaic installations on properties owned by the District near the Lawsbrook Road and Assabet well fields. These projects have been moving forward more slowly than the Commissioners had hoped, but it is anticipated that these installations will be in operation within the next two years and will provide a combined output capacity in excess of 6 megawatts.

Completion of the Smart Meter Installation Program

This year marks the completion of the District’s transition to automated remote-read meters, which allow water use surveys to be performed monthly rather than quarterly and completed in just a few days. This upgrade has greatly reduced the cost of this data collection process, and has allowed the District to more rapidly identify leaks in the water distribution system and customer service lines.

Senior Citizen Discount Policy

In response to a request from an Acton citizen’s group, the Commissioners approved a revised policy that permits low and moderate-income seniors aged 65 or over to apply for a substantial discount on their water bills. The income requirements match those used by the Town, and the plan is available to customers who have received approval for the Senior Citizen Property Tax Exemption offered by the Town of Acton.

Nagog Pond

At the 2017 Annual Town meeting voters passed a non-binding article that asked the officials of Acton, Concord, and Littleton to establish a path toward sharing the waters of Nagog Pond. Unfortunately, the Town of Concord has not been responsive to these efforts, and has instead initiated litigation to prevent Littleton from drilling a deep rock well that is needed to satisfy the growing water needs of that town.

To protect its rights, Littleton has also initiated legal action. The Commissioners find it regrettable that efforts to discuss resource regionalization between neighboring towns has led to this outcome, but are taking the necessary steps to protect Acton's interests as these legal actions move forward.

Recognition of Outstanding Performance

The Commissioners would like to thank the District Manager, Chris Allen, and his staff for another highly successful year. Their outstanding work was formally recognized in 2017 when the Acton Water District was selected for the Executive Director Award by the Massachusetts Water Works Association, and in 2018 it was named Utility of the Year by the New England Water Works Association. These prestigious awards are well deserved.

Many Thanks to a Retiring Commissioner

Following more than 30 years of continuous service to the Acton Water District, Commissioner Leonard Phillips relinquished his position on the Board last March. His fellow Commissioners wish to thank Len for his friendship, and his insightful leadership through the many challenges that have arisen over the last three decades.

The Commissioners would also like to welcome the Board's newest member, Erika Amir-Lin, who is a licensed professional geologist with extensive experience in the earth sciences. Erika's election to this position is notable, since she is the first female Commissioner in the 106-year history of the Acton Water District.

Respectfully submitted,
Ronald R. Parenti, Chair
Stephen C. Stuntz
Erika Amir-Lin

Report of the Finance Committee for 2018

The financial condition of the District continues to be very strong. We are careful to ensure that revenue is sufficient to cover operations and that there is sufficient short-term borrowing capacity to deal with large unplanned expenditures. Moreover, the District holds a \$2.1 million fund which is available to fund a wide range of District needs and the District has almost fully funded its retiree medical obligations (about \$1 million). The District also has substantial long term borrowing capacity with a AA+ Standard & Poors bond rating.

Looking forward, we anticipate increased spending in the near-term and long-term. Following are the areas we have identified which have the potential of increasing the District's cash needs and would have to be paid for by increasing water rates. Some are certain to occur; others are contingencies.

The Massachusetts Department of Environmental Protection has determined that all of the District's wells are highly susceptible to contamination due to land uses and activities within its recharge area. This is a continuing concern of the District. In October voters approved a \$1.1 million land purchase of 585 Main Street to provide an additional 11 acres of source protection to the Conant wells. This transaction will increase water rates by about 6.5% for the next four years until the debt incurred is repaid. We believe that the District may wish to make other land purchases to protect its water sources.

The District is proposing the construction of a treatment plant to improve the water quality of the Conant wells in Acton Center. The expected cost is \$9 - \$10 million and would likely be financed with 20-year bond debt. This new plant would increase water bills by about \$500,000 per year commencing 2020-2021. That's about a 10% increase from the 2018 bills.

A related concern is the possibility the District will have to address contamination of its water sources in the future. The District has faced risks to its water supply in the past (W.R. Grace and Nuclear Metals) and the potential of bearing substantial cleanup costs to protect our water sources from yet to be determined polluters is real.

The District's aging distribution infrastructure of about 135 miles of water mains may require substantial capital in the future. Older mains are susceptible to breaks and leakage. Engineering firm Wright-Pierce reported in August "Approximately 25% of the Acton water system was installed prior to 1950 and is at or nearing its end of useful life." The District budgets about \$500,000 per year for water main improvements but substantially more may be necessary in the future.

Acton's annual water use is fairly predictable but can experience declines during weather extremes such as a wet summer (customers need and use less) or a drought (state mandated restrictions). Both of these weather extremes have impacted the District in the last several years. Water pumped has declined each year since 2015. Water pumped declined 4.5% (2015 to 2016), 8.8% (2016 to 2017), and 1.2% (2017 to 2018). Of course, revenue is negatively impacted during such periods.

The District has a \$3.4 million liability to its pension plan managed by the Middlesex County Retirement System. That's the estimated additional amount necessary above and beyond investment assets already in the System to pay for retirement benefits promised to and earned by District employees. The District's pension funded ratio is about 50% (the pension funded ratio is investment assets / estimated present value of liabilities). Rating agencies Standard & Poors and Fitch classify a state pension plan ratio below 60% as poorly funded. We believe it is more likely that the liability will be greater than the \$3.4 million but at that level it represents about 60% of the District's annual water revenue.

The District is exploring ways to create a fund which can be used to reduce the need to raise rates when faced with a material contingency. In 2019 customers will see their water bills increase by about 14% due to the combined impact of the land purchase mentioned earlier and an increase in operating expenses. We believe a stabilization fund would moderate year-to-year water rate increases. However, we are reluctant to create such a fund if state regulations limit investments such that returns are expected to be below market. The District's current \$2.1 million fund's investments are limited to a state Legal List. Our investment advisor's index portfolio of stocks and bonds earned 7.00% annualized over the last five years. The District's fund earned 3.95% over the same period. Arguably the cost to the District of the state investment restrictions is \$64,000 per year (3.05% investment yield difference x \$2.1MM).

Finally thank you to the District staff, the Commissioners, and others the Finance Committee works with throughout the year for your help in carrying out the Committee's responsibilities. We members of the Finance Committee pledge to you that we will do our best to ensure continued sound financial management and to seek ways to improve performance in the future.

Respectfully submitted,

William Guthlein, Chair
Charles Bradley, Member
David A. Butler, Member
William Mullin, Associate Member

Report of the District Manager 2018

As in recent past years, 2018 had its ups and downs, and individual challenges. We strive to maintain year-to-year continuity in every aspect of our operation, but must adjust to changing priorities when we are thrown a “Curve ball”; 2018 was such a year; unfolding and developing as the year passed.

Legal Proceedings Related to Nagog Pond

The legal challenge before the Acton Selectmen related to the Town of Concord’s Site Plan Special Permit application to site a new filtration plant on the site of their existing Ozonation facility at Nagog Pond was settled early in 2018. Thereafter, new legal challenges came to be, and are now ongoing. The Town of Concord filed a complaint against the Town of Littleton in Suffolk County Land Court seeking Declaratory Judgement that the Water Management Act of 1985 repealed the Act of 1884 that allows Littleton and Acton access to Nagog Pond, thus cancelling these rights. The Town of Acton, jointly with the District, filed a Motion to intervene in the case to preserve Acton’s right to Nagog Pond’s waters. In turn, Littleton filed in Massachusetts Supreme Judicial Court, as the 1884 statute states, to be awarded rights to immediately withdraw water from the Nagog Pond to satisfy their community’s demand for water. These multiple proceedings are ongoing and the outcome is yet to be determined.

Land Acquisition - 585 Main Street

Thanks to the family of Brewster Conant, the District had the ability to discuss and bring to fruition the purchase of an 11-acre parcel of land at 585 Main Street after his passing in March. This land is an integral piece of source protection for the Conant 1 and 2 production wells. We greatly thank the Conant family, and the District’s voters for unanimously passing an article on the October 10th at the Special District Meeting that authorized the borrowing of the funds necessary to complete this purchase. This short-term debt’s impact will be paid off in four years. Ratepayers have seen an increase of \$9 per quarter in the Debt Fee on their water bill.

Pilot Study for Treatment Technologies at the Conant 1 & 2 Wells

Back in 2015, the Massachusetts Department of Environmental Protection issued to the District a request for a Written Corrective Action Plan for the elevated levels of manganese in the Conant 1 well, given the current levels in the source consistently above state guidance value of 0.3 Parts-per-Million. Conant 1 has been minimally utilized in the last decade due to the water quality, as such, the well is typically used mid-summer (peak demand) to satisfy the high demand for water during that season. In response to the regulator’s request, among other steps, we completed a pilot study of filtration technologies designed for the removal of iron & manganese from the Conant 1 and 2 wells located in Acton Center, as Conant 2 was also exhibiting similar levels of minerals. This study was completed in November of 2018, and the report was issued in early January of 2019. At the 2019 Annual Meeting, District ratepayers will vote on an Article to fund the plant construction utilizing funds from a low interest loan from the MA Clean Water Trust through the MA Drinking Water State Revolving Fund. This 2% interest rate loan provides a significant savings to ratepayers on a 20-year bond. The impacts will be seen in Debt Fee on the water bill projected in 2022, after plant commissioning and when the loan is processed for long-term debt. With a projected price tag of \$9.24-million, this will raise the debt fee about \$17 per quarter per unit.

2018 saw the first turnover in our Board of Water Commissioners in over three decades. I would like to wish outgoing Commissioner Len Phillips “Fair winds and following seas” and, warmly welcome Erika Amir-Lin to the Board. Erika has been serving since April, and has hit the ground running and quickly proven her worth! I would also like to extend my sincere gratitude to the Board of Commissioners for their wisdom and insightful guidance, the Finance Committee for their incisive management in challenging financial times. Last, but certainly not least, I would like to thank the staff of the District for maintaining an extremely high level of performance and working tirelessly to maintain our impeccable reputation and public image in Acton and the water supply industry.

Respectfully submitted,
Chris Allen

Report of the Environmental Manager for 2018

Environmental Compliance

We completed the drinking water monitoring and notification requirements under the Safe Drinking Water Act (SDWA). We continued our second round of monitoring under the Long Term 2 Surface Water Treatment Rule. Additional sampling was completed at our sources, throughout our treatment plants, and in the distribution system to better improve the quality of your drinking water. This included arsenic, iron and manganese, 1,4-dioxane, and disinfection byproducts. We completed our Sanitary Survey of the system with the Massachusetts Department of Environmental Protection (MassDEP).

Water Conservation

In 2018, we approved conservation rebates resulting in 13 washing machines and 48 toilets being replaced with more water efficient models. Customers also received 35 subsidized rainbarrels through our partnership with the Great American Rainbarrel Company. In addition, Krish Midha, an Eagle Scout from Acton assembled and donated an additional 25 rainbarrels for distribution to our customers. The District continued to partner with the WaterSense program and the Alliance for Water Efficiency to provide tools for our customers to make better water use decisions. I continued my work as the Chair of the New England Water Works Association (NEWWA) Conservation Committee. We received our fourth grant from MassDEP to perform a third party audit of our water use. This helps us to determine if real or paper losses are occurring between when the water is treated and when it reaches our customers. The Massachusetts Water Conservation Standards, which I participated in developing, were formally adopted in July by the Commonwealth of Massachusetts.

Source Water Protection

This was another busy year for source protection activities. The highlight of the year was the successful acquisition of 585 Main Street for source protection of the Conant wells. I continued my participation on the Town of Acton Open Space Committee and Water Resources Advisory Committee (WRAC). The WRAC spent most of 2018 working on a water workshop that was held during September. It included a broad spectrum of Town and District participants with the goal of discussing and identifying issues and concerns related to water resource management and planning in the community. We continued to participate in the activities at the Acton-W.R. Grace and Nuclear Metals, Inc. (NMI) Superfund Sites. Construction of a groundwater pump and treat system for the NMI plume was initiated on our 16 Knox Trail property as part of the Superfund cleanup process. Efforts to monitor potential impacts to water quality continued in areas surrounding all of our sources. The District worked with our selected solar developer to review site constraints and prepare for the design and installation of solar arrays at our well fields in South Acton. I participated on the MassDEP Waste Site Cleanup Advisory Committee, representing the interests of water suppliers on hazardous waste site issues. The District participated in Hazard Mitigation Planning and the Municipal Vulnerability Program with the Town of Acton.

Education and Outreach Programs

We taught approximately 300 Acton students involved in water-related curriculum. This included classroom visits to 5th and 6th grade classrooms and field trips for 5th grade and the high school Environmental Science class. As part of the first anniversary celebration at the Acton Senior Center, District employees were on hand to answer water related questions and offer information on water use and billing questions. Green Acton became a regular attendee of District meetings and I attended one of their monthly meetings to discuss drinking water in Acton. They also hosted a well-attended forum on 1,4-dioxane in October, on which I served as one of the panelists. Due to the success of the WaterSmart software program, we continued to expand our use of its features and began to explore opportunities to continue our partnership. In August, the New England Association of Chemistry Teachers held a conference in Concord and chose our South Acton Water Treatment Plant to feature as its local field trip. This afforded us an opportunity to showcase the great work that Acton is doing related to water resources management and treatment.

Respectfully submitted,

Matthew Mostoller

Report of the M.I.S. Coordinator for 2018

This document summarizes the main achievements of the Management Information Systems Coordinator. I continue to support, program and implement all mission critical applications.

Software/Hardware/Technology

"In the Cloud", sometimes used as a joke, 'I don't know it must be in the cloud', funny as the term is, the true use of cloud computing has become an important part of the daily routines of the District. Our paperless environment using JotForm, relies solely on it, as we continue to build upon our real-time reports and forms for operations and management. I built a new emergency contact application using Twilio, allowing the operations staff an easier way of managing on-call support. Our email system was converted many years ago but we continue to build upon SharePoint as well as multiple calendars online to coordinate daily rounds while creating a permanent archive of all events for our treatment plants. Our offsite backup using Carbonite requires cloud archiving for redundancy. I look forward to discovering the next inexpensive yet highly effective way to help better manage the Water District.

Every year we continue to build upon our security, this year we had the Department of Homeland Security onsite to do an evaluation. The report is still pending but the immediate takeaways from that meeting are being implemented with the understanding that higher security measures comes at a higher cost.

Did you know that we utilize the ConnectCTY system to contact our customers in an emergency or general outreach? If you have not registered your phone number with this system, we strongly encourage you to visit our website and follow the links to register. The more information you provide us, the more informed we can keep you. Please take the time to review the phone number and email listed on your quarterly bill and update with any needed changes. We also reach out to our customers via Twitter, please follow us @ActonWater.

Cross Connection Control Program

A cross connection is any actual or potential connection between a distribution pipe of potable water supplied by the public water system and any waste pipe, soil pipe, sewer, drain or other unapproved source. If not properly protected or eliminated, a cross connection can cause health problems and spread disease. There are two methods by which contamination can enter the drinking water, backpressure and backsiphonage. Backpressure occurs when the pressure in the property exceeds the drinking water pressure. Backsiphonage occurs when the drinking water pressure drops off and a vacuum pulls the water from a building. The property owner is responsible for the elimination or protection of all cross-connections on his premises. The water district routinely surveys and tests all non-residential properties. Residential owners are required to have backflow protection on their irrigation systems as well as any other possible cross connections. All services are installed with a dual check backflow preventer at the meter.

Meters and Billing

We have continued our partnership with WaterSmart to provide improved customer service, timely leak alerts and paperless billing. To date all older meters have been retrofitted with the newest Orion reading technology transponders. The Orion system detected more than 3,755 potential leaks in 2018, saving our water and our customer's money.

Respectfully submitted,

Robert Murch

WATER SUPPLY DISTRICT OF ACTON

REPORT ON EXAMINATION OF
BASIC FINANCIAL STATEMENTS

JUNE 30, 2018

WATER SUPPLY DISTRICT OF ACTON

REPORT ON EXAMINATION OF
BASIC FINANCIAL STATEMENTS

JUNE 30, 2018

TABLE OF CONTENTS

Description	Page(s)
Independent Auditor's Report	1
Management's Discussion and Analysis	2-3
Basic Financial Statements	
Statement of Net Position	4
Statement of Activities	5
Governmental Funds - Balance Sheet	6
Governmental Funds - Statement of Revenues, Expenditures and Changes in Fund Balances	7
Reconciliation of the Governmental Funds Balance Sheet Total Fund Balances to the Statement of Net Position	8
Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances of Governmental Funds to the Statement of Activities	8
General Fund - Statement of Revenues, Expenditures and Changes in Fund Balance – Budget and Actual	9
Statement of Fiduciary Net Position	10
Statement of Changes in Fiduciary Net Position	10
Notes to the Basic Financial Statements	11 – 18
Required Supplemental Information and Notes	
Pension Plan Schedules and Note	19
Other Post-Employment Benefits Schedules and Note	20
Other Supplemental Information	
Supplemental Schedule of Governmental Fund Balance-Capital Projects Activity	21

Independent Auditor's Report

Page 1

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, and the aggregate remaining fund information of the Water Supply District of Acton, as of and for the year ended June 30, 2018 and the related notes to the financial statements, which collectively comprise the District'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 the 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of 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.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and the aggregate remaining fund information of the Water Supply District of Acton, as of June 30, 2018, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters - Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information, as listed in the table of contents, 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 financial statements, and other knowledge we obtained during our audit of the basic 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.

Management's Discussion and Analysis

As Management of The Water Supply District of Acton, we offer readers of the Water Supply District of Acton's financial statements this narrative overview and analysis of financial activities for the year ended June 30, 2018. The District complies with Governmental Accounting Standards Board (GASB) reporting requirements.

Financial Highlights

The assets and deferred outflows of the Water Supply District of Acton exceeded its liabilities and deferred inflows at the close of the fiscal year by \$23,204,912 (net position). Unrestricted net position at year end is currently a deficit of (\$810,074), primarily due to the District having recognized the Net Pension Liability in full as of June 30, 2015.

The total assets of the District are \$44,536,256. Of this amount, \$4,461,906 represents current assets and \$40,074,350 represents capital assets.

The total liabilities of the District are \$21,617,624. Of this amount, \$2,284,212 represents current liabilities and \$19,333,412 represents long term liabilities.

Total net position of the District is \$23,204,912. This includes \$22,643,138 invested in capital assets, net of related debt, \$1,371,818 which is restricted for capital projects, \$219,771 which is appropriated for maintenance & operations, \$137,020 restricted for mitigation and (\$1,166,865) which is unrestricted.

During the fiscal year ended June 30, 2015, the District reported the total Net Pension Liability of \$2,562,079, as required by GASB Statement #68. The Net Pension Liability is \$3,370,594 as of June 30, 2018. The District incurred a current period expense for the unfunded actuarial liability of \$413,458, as well as deferred outflows and inflows of resources in the amounts of \$514,129 and \$227,850, respectively.

During the fiscal year ended June 30, 2016, the District updated the actuarial valuation for Other Post Employment Benefits (OPEB), as required by GASB Statement #45. The District incurred a current period negative expense for the unfunded actuarial liability of (\$39,570) in addition to funding \$100,000. The current OPEB Liability is \$398,818. The actuarial valuation will be updated during this fiscal year.

Overview of Financial Statements

The Water Supply District of Acton's financial statements are comprised of the following: Government Wide Financial Statement, Fiduciary Fund Financial Statement, Governmental Funds Financial Statement, Reconciliations of the Financial Statements and a Comparison of Actual to Budget. These statements provide different views of the District. One includes assets and liabilities of the District and the other focuses on the governmental funds.

The District adopts an annual appropriated budget for its government wide activities. A budgetary comparison has been included. Actual revenues for the year were greater than budgeted revenues by \$488,661. Actual expenditures were less than budgeted expenditures by \$276,293.

The Fiduciary Fund Financial Statements contain revenues and expenses relating to the W.R. Grace Fund, restricted funds which can only be used for expenditures relating to improving water quality, and the OPEB Trust Fund, restricted funds which can only be used to fund the District's OPEB obligations.

Comparison of current year to prior year (Governmental Funds)

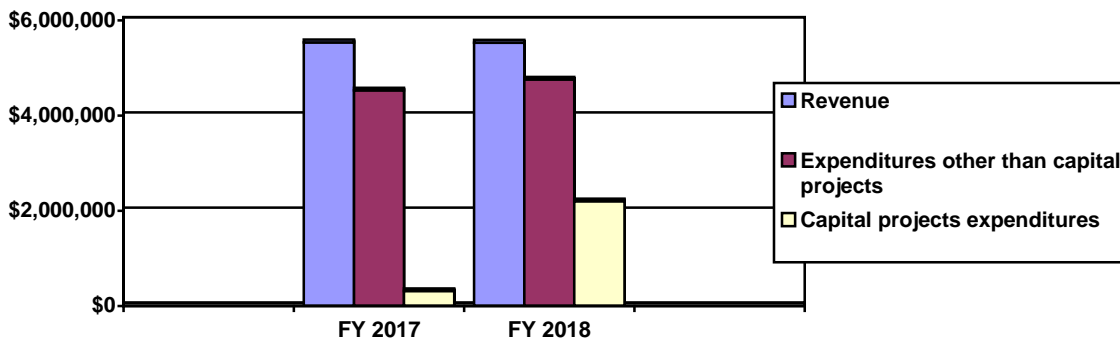
The total revenue for the District was \$5,526,512. Income for the Water Supply District of Acton is generated from water rates, mitigation fees, installation of new services and investment income. Income from water rates, mitigation fees and new services was \$20,491 less than last year. Investment income was \$9,804 greater than last year.

Total expenditures for the year amounted to \$6,945,268. This includes the expenditure of \$2,192,210 for capital projects. Expenditures for the current fiscal year increased from the previous fiscal year by \$2,110,730.

At the close of the fiscal year the Unreserved Fund Balance for the General Fund (Free Cash) was \$1,319,945. This represents a decrease of \$288,331.

At the close of the fiscal year there was a balance of \$1,371,848 restricted for capital projects. This represents a decrease of \$356,710 from the previous fiscal year.

Below is a graph comparing revenues and expenditures for fiscal years 2017 and 2018.



Capital Assets

The Water Supply District of Acton's investment in capital assets as of June 30, 2018 amounts to \$40,074,350 (net of accumulated depreciation). This investment includes land, buildings and improvements, pumping stations and tanks, infrastructure and improvements, machinery and equipment.

Property and equipment is depreciated utilizing the straight line depreciation method and estimated useful lives as recommended by the Commonwealth of Massachusetts Department of Revenue Bureau of Accounts. The depreciation expense for this fiscal year was \$1,225,029.

Capital Assets are replaced following a replacement schedule prepared by the District. This schedule is updated every 5 years.

Fiscal Year 2019

The District has appropriated a balanced annual budget for FY 2019 of \$5,162,798.

WATER SUPPLY DISTRICT OF ACTON				Page 4
Statement of Net Position				
June 30, 2018		<i>Capital</i>	<i>Invested in</i>	
	<i>General</i>	<i>Projects</i>	<i>Capital</i>	
	<i>Fund</i>	<i>Fund</i>	<i>Assets</i>	<i>Total</i>
ASSETS				
<i>Current Assets</i>				
Cash and Cash Equivalents	\$3,048,584			\$3,048,584
Due to Capital Projects Fund	(1,371,848)	\$1,371,848		0
Accounts Receivable	153,122			153,122
Unbilled Accounts Receivable	1,260,200			1,260,200
Total Current Assets	3,090,058	1,371,848	0	4,461,906
<i>Non Current Assets</i>				
Capital Assets				
Land			\$1,578,725	1,578,725
Depreciable Capital Assets, net			38,495,625	38,495,625
Total Non Current Assets	0	0	40,074,350	40,074,350
Total Assets	3,090,058	1,371,848	40,074,350	44,536,256
<i>Deferred Outflow of Resources</i>				
Pension	514,129			514,129
LIABILITIES				
<i>Current Liabilities</i>				
Notes Payable			1,000,000	1,000,000
Current Portion Long Term Debt			1,096,212	1,096,212
Accrued Interest Payable	188,000			188,000
Total Current Liabilities	188,000	0	2,096,212	2,284,212
<i>Non-Current Liabilities</i>				
Long Term Debt, net of current portion			15,335,000	15,335,000
Accrued Compensated Absences	229,000			229,000
Other Post Employment Benefits	398,818			398,818
Net Pension Liability	3,370,594			3,370,594
Total Non-Current Liabilities	3,998,412			19,333,412
Total Liabilities	4,186,412	0	17,431,212	21,617,624
<i>Deferred Inflow of Resources</i>				
Pension	227,850			227,850
NET POSITION				
Unappropriated Net Assets	(1,166,865)			(1,166,865)
Appropriated for Maintenance & Operations	219,771			219,771
Restricted for Mitigation	137,020			137,020
Appropriated for Capital Projects		1,371,848		1,371,848
Net Investment in Capital Assets			22,643,138	22,643,138
Total Net Position	(\$810,074)	\$1,371,848	\$22,643,138	\$23,204,912

SEE ACCOMPANYING NOTES AND INDEPENDENT AUDITOR'S REPORT

WATER SUPPLY DISTRICT OF ACTON				Page 5
Statement of Activities		<i>Capital</i>	<i>Invested in</i>	
For the Year Ended June 30, 2018	<i>General</i>	<i>Projects</i>	<i>Capital</i>	
	<i>Fund</i>	<i>Fund</i>	<i>Assets</i>	<i>Total</i>
REVENUES				
Water Rates and Services	\$5,398,433			\$5,398,433
Mitigation Fees	127,430			127,430
Interest Income	25,857			25,857
Grant Funds Received		\$8,500		8,500
Total Revenues	5,551,720	8,500	0	5,560,220
EXPENDITURES				
Salaries and Wages	1,296,056			1,296,056
Other Post Employment Benefits Expense	(39,570)			(39,570)
Interest and Fees	437,011		(\$11,189)	425,822
Depreciation Expense			1,225,029	1,225,029
Lights, Power and Fuel	350,000			350,000
Health and Life Insurance	335,482			335,482
Maintenance & Operations	357,557			357,557
Middlesex Retirement	413,458			413,458
Insurance	77,221			77,221
Auto Maintenance and Fuel	46,957			46,957
Chemicals	60,200			60,200
Legal	37,483			37,483
Laboratory Analysis	40,907			40,907
Education	13,683			13,683
Audit	15,000			15,000
Computer Maintenance	13,080			13,080
Information Reports	44,632			44,632
Office Supplies	16,438			16,438
Paving	37,844			37,844
Engineering	30,562			30,562
Postage	16,948			16,948
Telephone	16,000			16,000
D.E.P. Withdrawal and Fees	598			598
Petty Cash	600			600
Hydrants	10,000			10,000
Backflow/Cross Connection	0			0
Total Expenditures	3,628,148	0	1,213,840	4,841,988
REVENUES OVER (UNDER) EXPENDITURES	1,923,572	8,500	(1,213,840)	718,232
Capital Project Payments Made		(2,192,210)	2,192,210	0
Transfers from Unrestricted to Capital Projects	(827,000)	827,000		0
Bonds Repaid	(1,083,849)		1,083,849	0
Bond Proceeds Received		1,000,000	(1,000,000)	0
Expenditures Capitalized	(138,736)		138,736	0
Net Change in Fund Balances	(126,013)	(356,710)	1,200,955	718,232
Net Position - Beginning of Year	(684,061)	1,728,558	21,442,183	22,486,680
Net Position - End of Year	(\$810,074)	\$1,371,848	\$22,643,138	\$23,204,912

WATER SUPPLY DISTRICT OF ACTON			Page 6
Governmental Funds - Balance Sheet			
June 30, 2018			
		<i>Capital</i>	<i>Total</i>
	<i>General</i>	<i>Projects</i>	<i>Governmental</i>
	<i>Fund</i>	<i>Fund</i>	<i>Funds</i>
<i>ASSETS</i>			
Cash and Cash Equivalents	\$3,048,584		\$3,048,584
Accounts Receivable	153,122		153,122
Less Reserve for Uncollectible	(153,122)		(153,122)
Due to Capital Projects Fund	(1,371,848)	\$1,371,848	0
Total Assets	\$1,676,736	\$1,371,848	\$3,048,584
<i>LIABILITIES AND FUND BALANCES</i>			
<i>LIABILITIES</i>			
<i>FUND BALANCES</i>			
Unappropriated Fund Balance	\$1,319,945		\$1,319,945
Appropriated for Maintenance & Operations	219,771		219,771
Restricted for Mitigation	137,020		\$137,020
Appropriated for Capital Projects		\$1,371,848	\$1,371,848
Total Fund Balances	1,676,736	1,371,848	3,048,584
Total Liabilities and Fund Balances	\$1,676,736	\$1,371,848	\$3,048,584

SEE ACCOMPANYING NOTES AND INDEPENDENT AUDITOR'S REPORT

WATER SUPPLY DISTRICT OF ACTON			Page 7
Governmental Funds - Statement of Revenues, Expenditures and			
Changes in Fund Balances			
		<i>Capital</i>	<i>Total</i>
For the Year Ended June 30, 2018	<i>General</i>	<i>Projects</i>	<i>Governmental</i>
	<i>Fund</i>	<i>Fund</i>	<i>Funds</i>
REVENUES			
Water Rates and Services	\$5,364,725		\$5,364,725
Mitigation Fees	127,430		127,430
Interest Income	25,857		25,857
Grant Funds Received		\$8,500	8,500
Total Revenues	5,518,012	8,500	5,526,512
EXPENDITURES			
Salaries and Wages	1,262,056		1,262,056
Other Post Employment Benefits Expense	100,000		100,000
Capital Project Payments Made		2,192,210	2,192,210
Bonds Interest and Fees	1,527,860		1,527,860
Lights, Power and Fuel	350,000		350,000
Health and Life Insurance	335,482		335,482
Maintenance & Operations	456,381		456,381
Middlesex Retirement	203,213		203,213
Meters	39,912		39,912
Insurance	77,221		77,221
Chemicals	60,200		60,200
Auto Maintenance and Fuel	46,957		46,957
Legal	37,483		37,483
Laboratory Analysis	40,907		40,907
Information Reports	44,632		44,632
Office Supplies	16,438		16,438
Audit	15,000		15,000
Education	13,683		13,683
Paving	37,844		37,844
Engineering	30,562		30,562
Postage	16,948		16,948
Telephone	16,000		16,000
D.E.P. Withdrawal and Fees	598		598
Computer Maintenance	13,080		13,080
Hydrants	10,000		10,000
Petty Cash	600		600
Backflow/Cross Connection	0		0
Total Expenditures	4,753,058	2,192,210	6,945,268
REVENUES OVER (UNDER) EXPENDITURES	764,955	(2,183,710)	(1,418,755)
OTHER FINANCING SOURCES (USES)			
Transfers from General Fund to Capital Projects	(827,000)	827,000	0
Bond Proceeds Received		1,000,000	1,000,000
Net Change in Fund Balances	(62,045)	(356,710)	(418,755)
Fund Balances - Beginning of Year	1,738,781	1,728,558	3,467,339
Fund Balances - End of Year	\$1,676,736	\$1,371,848	\$3,048,584

SEE ACCOMPANYING NOTES AND INDEPENDENT AUDITOR'S REPORT

WATER SUPPLY DISTRICT OF ACTON	Page 8
Reconciliation of the Governmental Funds Balance Sheet Total Fund Balances to the Statement of Net Position- June 30, 2018	
Total Governmental Fund Balances	\$3,048,584
Capital assets used in governmental activities are not financial resources, and therefore are not reported in the funds.	40,074,350
The Statement of Activities accrues accounts receivable on billed and unbilled water pumped, whereas in the governmental funds, revenue is not reported until collected.	
Accounts Receivable	153,122
Unbilled Accounts Receivable	1,260,200
The Statement of Activities includes accounts payable and debts, whereas in governmental funds these are not reported until paid.	
Accrued Compensated Absences	(229,000)
Accrued Interest Payable	(188,000)
Current Portion Long Term Debt	(1,096,212)
Notes Payable	(1,000,000)
Long Term Debt	(15,335,000)
Other Post Employment Benefits Liability	(398,818)
Net Pension Liability	(3,370,594)
Deferred Pension Outflow	514,129
Deferred Pension Inflow	(227,850)
Net Position of Governmental Activities	\$23,204,912
WATER SUPPLY DISTRICT OF ACTON	
Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances of Governmental Funds to the Statement of Activities For the Year Ended June 30, 2018	
Net Change in Fund Balances - Total Governmental Funds	(\$418,755)
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities, the cost is allocated over the estimated useful lives and is depreciated.	
Capital Project Payments Made	2,192,210
Bond Principal Received	(1,000,000)
Expenditures Capitalized	138,736
Bond Principal Repayment	1,083,849
Depreciation Expense	(1,225,029)
Some revenue/expenses reported in the Statement of Activities do not provide (use) current financial resources and therefore are not reported as revenue or expense in the governmental funds.	
Water Revenue Accrual Increase	33,708
Other Post Employment Benefits (OPEB) Expense	139,570
Bond Premium Amortization	11,189
Interest Accrual Reduction	7,000
Compensated Absences Reported as Salaries and Wages	(34,000)
Retirement Accrual	(210,245)
Change in Net Position of Governmental Activities	\$718,232

WATER SUPPLY DISTRICT OF ACTON			Page 9
General Fund - Statement of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual For the Year Ended June 30, 2018			
			<i>Variance</i>
			<i>Positive</i>
	<i>Budget</i>	<i>Actual</i>	<i>(Negative)</i>
<i>REVENUES</i>			
Water Rates and Services	\$5,029,351	\$5,364,725	\$335,374
Mitigation Fees	0	127,430	127,430
Interest Income	0	25,857	25,857
Total Revenues	5,029,351	5,518,012	488,661
<i>EXPENDITURES</i>			
Salaries and Wages	1,350,000	1,262,056	87,944
Bonds, Interest and Fees	1,629,310	1,527,860	101,450
Lights, Power and Fuel	350,000	350,000	0
Health and Life Insurance	350,000	335,482	14,518
Maintenance & Operations	325,000	456,381	(131,381)
Middlesex Retirement	207,041	203,213	3,828
Insurance	80,000	77,221	2,779
Chemicals	75,000	60,200	14,800
Reserve Fund	100,000	0	100,000
Laboratory Analysis	50,000	40,907	9,093
Auto Maintenance and Fuel	50,000	46,957	3,043
Information Reports	45,000	44,632	368
Telephone	16,000	16,000	0
Legal	40,000	37,483	2,517
Computer Maintenance	15,000	13,080	1,920
Office Supplies	20,000	16,438	3,562
Education	17,500	13,683	3,817
Audit	15,000	15,000	0
Paving	60,000	37,844	22,156
Engineering	55,000	30,562	24,438
Hydrants	10,000	10,000	0
Postage	20,000	16,948	3,052
D.E.P. Withdrawal and Fees	6,500	598	5,902
Bank Fees	500	0	500
Cross Connection	1,000	0	1,000
Accounting	500	0	500
Meters	40,000	39,912	88
Petty Cash	1,000	600	400
OPEB Expense	100,000	100,000	0
Total Expenditures	5,029,351	4,753,058	276,293
<i>REVENUES OVER (UNDER) EXPENDITURES</i>	0	764,955	764,955
<i>OTHER FINANCING SOURCES (USES)</i>			
Transfers from General to Capital Projects Fund		(827,000)	(827,000)
Net Change in Fund Balance	0	(62,045)	(62,045)
Budgetary Fund Balance - Beginning of Year	1,603,793	1,738,781	134,988
Budgetary Fund Balance - End of Year	\$1,603,793	\$1,676,736	\$72,943

SEE ACCOMPANYING NOTES AND INDEPENDENT AUDITOR'S REPORT

WATER SUPPLY DISTRICT OF ACTON		Page 10
Statement of Fiduciary Net Position		
June 30, 2018		
	<i>WR GRACE</i>	<i>OPEB</i>
	<i>FUND</i>	<i>FUND</i>
ASSETS		
<i>Current Assets</i>		
Cash and Cash Equivalents	\$339,278	
Investments	2,061,216	\$974,780
Total Assets	\$2,400,494	\$974,780
LIABILITIES		
NET POSITION		
Restricted for W.R Grace activity	\$2,100,494	
Appropriated for Conant Pilot	300,000	
Held in trust for OPEB benefits		\$974,780
Total Net Position	\$2,400,494	\$974,780
WATER SUPPLY DISTRICT OF ACTON		
Statement of Changes in Fiduciary Net Position		
For the Year Ended June 30, 2018		
ADDITIONS		
Employer Contributions		\$100,000
Dividend and Interest Income	\$61,955	17,353
Net Change in Fair Value of Investments	(57,895)	42,053
Total Additions	4,060	159,406
DEDUCTIONS		
Investment Management Fees	12,133	4,517
Total Deductions	12,133	4,517
Change in Net Position	(8,074)	154,889
Net Position - Beginning of Year	2,408,568	819,891
Net Position - End of Year	\$2,400,494	\$974,780

SEE ACCOMPANYING NOTES AND INDEPENDENT AUDITOR'S REPORT

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 1 – GENERAL STATEMENT AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity - The Water Supply District of Acton (the District) is a municipality incorporated in the Commonwealth of Massachusetts with the purpose of providing water and related services to the residents and businesses of Acton. The District is a separate municipality, distinct from the Town of Acton. There are no component units included within the reporting entity. The basic operations of the District are financed by water rate and services charges. The District's financial statements include the accounts of all District operations. Inhabitants of the Town of Acton who are qualified to vote in elections and town affairs are eligible to vote on matters concerning the District and to act on articles of the District.

Summary of Significant Accounting Policies - The following significant accounting policies were applied in the preparation of the accompanying financial statements:

Basis of Accounting and Presentation - The District reports its financial statements in accordance with both the Governmental Accounting Standards Board requirements (accrual basis) and with the Commonwealth of Massachusetts uniform reporting system (cash basis). The financial statements include reconciliations that identify the differences between the accrual basis and cash basis financial statements.

The two reporting standards are briefly described here.

GOVERNMENT WIDE FINANCIAL STATEMENTS - This financial model includes the presentation of Management's Discussion and Analysis as well as Government Wide financial statements that are prepared on the accrual method of accounting. Revenues are reported when earned and expenses are reported when incurred, regardless of when payments are either received or made. The accrual basis financial statements report capital assets and the related depreciation expense and accumulated depreciation. All liabilities are reported, including compensated absences, short and long term debt, net pension liability and other post employment benefits liability. The net positions of the District are reported in three components: invested in capital assets net of related debt, restricted for capital projects, and unrestricted.

GOVERNMENTAL FUNDS – This financial model presents the District's governmental funds. Under this method, revenues are recorded when received and expenditures are recorded when they are paid. Accounts receivable are fully reserved until they are collected and recorded as income.

Capital assets and infrastructure are not recorded in the governmental funds. Funds used to acquire capital assets are accounted for as expenditures in the Capital Projects Fund in the fiscal year payment is made. Appropriation balances of capital projects are carried forward in the Capital Projects Fund until completion of the project or until unexpended balances are transferred to the General Fund by approval of the Annual Meeting. The governmental funds report the unreserved fund balance, commonly referred to as Free Cash.

Budgets and Budgetary Accounting - The District's annual budget is a legally adopted budget that is approved at the District's Annual Meeting. Appropriations for the Capital Projects Fund and the W.R. Grace Fiduciary Fund are also approved at the Annual Meeting. Any budget overrides or additional appropriations must be approved at a specially called District Meeting.

Capital Assets - Capital assets, which include land, infrastructure, buildings, vehicles, machinery and equipment, are reported in the Government Wide financial statements at historical cost or estimated historical cost. Depreciation is provided using the straight-line method over the estimated useful lives recommended by the Massachusetts Department of Revenue, Division of Local Services, Bureau of Accounts.

Compensated Absences - The District has a policy of buying back 50% of a retiring employee's unused sick time, up to a maximum of 85 days sick time.

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 1 – GENERAL STATEMENT AND SIGNIFICANT ACCOUNTING POLICIES - continued

District Funds - The District categorizes its funds into governmental and fiduciary funds.

The following *governmental funds* are reported:

Unappropriated Net Assets (Fund Balance) - This primary operating fund is used for financial resources other than those that are required to be accounted for in another fund.

Appropriated for Maintenance & Operations - This fund reports the net assets that were appropriated for Maintenance & Operations expense, less amounts spent for this activity.

Restricted for Mitigation - This is a revolving fund that reports the net assets collected from new service installations for mitigating costs incurred to comply with the District's Water Management Act Permit renewals.

Appropriated for Capital Projects - This fund reports the activity for the appropriations and spending for construction projects or for acquiring assets.

Net Investment in Capital Assets - This fund reports the historical cost of fixed assets less accumulated depreciation.

The following *fiduciary funds* are reported:

W.R. Grace Fund - This fund is to maintain the purity of the District's water sources upon approval of District meeting. This fund was established with proceeds from the W.R. Grace lawsuit settlement.

Other Post Employment Benefits (OPEB) Fund - This fund is an irrevocable trust fund established by the District in 2011 pursuant to Massachusetts General Laws. The fund can only be used to fund the District's OPEB obligations.

NOTE 2 - CASH AND CASH EQUIVALENTS

The District considers all highly liquid investments with a maturity date of less than one year to be cash equivalents. The District maintains a significant portion of its cash in the Massachusetts Municipal Depository Trust's Cash Portfolio, an investment account that offers participation in a diversified portfolio of high-quality money-market instruments that seek the highest possible level of current income consistent with preservation of capital and liquidity. The account is neither insured nor guaranteed by the Commonwealth of Massachusetts or the U.S. government, the Federal Deposit Insurance Corporation (FDIC) or any other government agency. The District has not experienced any loss in the account, and believes it is not exposed to any significant credit risk on cash and cash equivalents.

NOTE 3 - INVESTMENTS

The District's investments are managed pursuant to Massachusetts General Laws by Boston Financial Management with the guideline that there is low risk to principal while providing a continuing revenue stream. The investments are carried at fair value. As of June 30, 2018, the District had the following investments:

Description	W.R. Grace Fiduciary Fund	OPEB Trust Fiduciary Fund
Cash and equivalents	\$55,888	\$103,966
Bonds (corporate & government)	1,036,552	332,047
Equities	968,775	203,127
Exchange Traded Funds and Other	0	335,640
Total	\$2,061,216	\$974,780

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 4 - INTERFUND RECEIVABLES/PAYABLES

As of June 30, 2018, the General Fund owed \$1,371,848 to the Capital Projects Fund.

NOTE 5 - RETIREMENT PLANS

Substantially all employees of the District are members of the Middlesex Retirement System. The retirement system is funded by both employer and employee contributions. The District's annual contributions to the retirement system are calculated to pay current normal cost as well as unfunded actuarially calculated liabilities from prior years. In addition, employees contribute 5 to 11% of their base pay depending on when they entered the system. The District's contributions for the year ended June 30, 2018 were \$203,213.

The District has a voluntary Section 457 retirement plan. Employees may make pre-tax contributions up to the amount allowed by the Internal Revenue Code, and the District matches contributions up to 3% of the participating employee's base salary. District match contributions for the year ended June 30, 2018 were \$29,714 which is included in Salaries and Wages.

NOTE 6 - CAPITAL ASSETS

Capital asset activity for the District for the year ended June 30, 2018 consisted of the following:

Description	Balance 6/30/17	Additions	Disposals	Balance 6/30/18
Land	\$1,578,725			\$1,578,725
Infrastructure	53,897,020	\$2,260,867		56,157,887
Buildings	1,177,963			1,177,963
Vehicles	652,368	30,167	(\$13,944)	668,591
Machinery & Equipment	2,934,032	39,912		2,973,944
Total at Historical Cost	60,240,108	2,330,946	(13,944)	62,557,110
Less Accumulated Depreciation	21,271,676	1,225,029	(13,944)	22,482,760
Capital Assets, Net	\$38,968,432			\$40,074,350

NOTE 7 - NOTES PAYABLE

The District has utilized short term debt to finance construction costs of water mains at Indian Village. The following is a summary of the changes in Notes Payable for the year ended June 30, 2018:

Description	Interest Rate	Due Date	Balance 6/30/17	Issued	(Retired)	Balance 6/30/18
Water Mains	1.3%	9/27/18	\$0	\$1,000,000	-	\$1,000,000

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 8 – BONDS PAYABLE

The District has general obligation bonds to finance the construction of the North Acton Water Treatment Plant, the South Acton Water Treatment Plant and water mains and land purchased. The following is a summary of the changes in Bonds Payable for the year ended June 30, 2018:

Description	Interest Rate	Issue Date	Due Date	Balance 6/30/17	(Paid Down) (or Amortized)	Balance 6/30/18
North Acton Water Treatment Plant	2.0% to 4.3%	2/15/09	2/15/29	\$3,600,000	(\$300,000)	\$3,300,000
South Acton WTP, Water Mains and Land	2.0% to 3.0%	8/15/13	8/15/23	1,490,000	(215,000)	1,275,000
South Acton Water Treatment Plant	2.0%	1/7/15	1/7/35	12,369,112	(568,849)	11,800,263
Subtotal				17,459,112		16,375,263
Bond Premium		8/15/13	8/15/23	67,138	(11,189)	55,949
Total Bonds Payable				\$17,526,250		\$16,431,212

The annual debt service requirements for Bonds Payable outstanding at June 30, 2018 are as follows:

Fiscal Years	Principal	Interest	Total
2019	\$1,096,212	\$415,781	\$1,511,993
2020	1,108,844	387,835	1,496,679
2021	1,121,750	359,017	1,480,767
2022	1,129,937	329,097	1,459,034
2023	1,143,411	298,368	1,441,779
2024-2028	5,089,631	1,055,349	6,144,980
2029-2033	4,063,205	433,500	4,496,705
2034-2035	1,622,273	52,506	1,674,779
Total	\$16,375,263	\$3,331,453	\$19,706,716

Principal of \$1,083,849 plus interest and fees of \$444,011 for a total of \$1,527,860 is reported as Bonds, Interest and Fees on the Governmental Funds - Statement of Revenues, Expenditures and Changes in Fund Balances for the year ended June 30, 2018.

Interest and Fees of \$437,011 less amortization of bond premium of \$11,189 for a total of \$425,822 is reported on the Statement of Activities to reflect the accrual basis calculation of interest incurred during the year ended June 30, 2018, regardless of when the actual interest payments were made by the District.

NOTE 9 – COMMITMENTS & CONTINGENCIES

The District has ongoing commitments for the construction of capital projects, most of which are for water main construction or repair. The District continues to be engaged in legal and environmental negotiations with the Massachusetts Department of Environmental Protection and the Federal Environmental Protection Agency regarding the Superfund cleanup projects. These efforts are intended to protect the Assabet well field.

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 10 – PENSION PLAN

Plan Description – The District contributes to the Middlesex County Retirement System (“the System”), a cost-sharing multiple-employer defined benefit pension plan administered by the Middlesex Retirement Board (“the Board”). Substantially all employees are members of the System. The System provides retirement, disability and death benefits to plan members and beneficiaries. Chapter 32 of the Commonwealth of Massachusetts General Laws assigns authority to establish and amend benefit provisions of the plan. Cost-of-living adjustments granted between 1981 and 1997 and any increase in other benefits imposed by the Commonwealth’s state law adjustments granted after 1997 must be approved by the Board and are borne by the System. The System issued an audited financial statement for the year ended December 31, 2017. That report may be obtained by contacting the System at 25 Linnell Circle, Billerica, MA 01821.

Funding Policy – Plan members are required to contribute to the System at rates ranging from 5% to 11% of gross regular compensation. The District is required to pay into the System its share of the system-wide actuarially determined contribution that is apportioned among the employers based on active current payroll. The contributions of plan members and the District are governed by Chapter 32 of the Commonwealth of Massachusetts General Laws. The District’s contribution to the System for the year ended June 30, 2018 was \$203,213, which equaled its required contribution.

At June 30, 2018, the District reported a liability of \$3,370,594 for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2018. The District’s proportionate share of the net pension liability was based on a projection of the District’s long-term share of contributions to the pension plan relative to the projected contributions of all participating members. At December 31, 2017, the District’s proportionate share was 0.237502%, which increased from its 0.234720% proportion measured at December 31, 2016.

For the year ended June 30, 2018, the District recognized a pension expense of \$413,458. At June 30, 2018, the District reported the following deferred outflows and inflows of resources related to pensions:

Deferred Outflows– difference between expected and actual experience	\$11,367
Deferred Outflows– changes of assumptions	322,188
Deferred Outflows– changes in proportion and differences between employer contributions and proportionate share of contributions	180,574
Deferred Inflows– difference between expected and actual experience	(17,213)
Deferred Inflows– net difference between projected and actual investment earnings on pension plan investments	(91,552)
Deferred Inflows– changes in proportion and differences between employer contributions and proportionate share of contributions	(119,085)
Net Deferred Outflows and Inflows of Resources	\$286,279

The deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Year ending June 30,		
	2019	\$111,706
	2020	109,295
	2021	75,650
	2022	(10,372)
Total		\$286,279

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 10 – PENSION PLAN– continued

Actuarial Assumptions – The total pension liability in the January 1, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement updated to December 31, 2017:

Valuation date	January 1, 2018
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Prior year's total contribution increased by 6.5% for fiscal 2018 through fiscal 2024, and thereafter the remaining unfunded liability will be amortized on a 4.0% annual increasing basis; Early Retirement Incentive (ERI) liability amortized in level payments.
Remaining amortization period	As of July 1, 2018, three years remained for 2003 ERI liability, and 17 years remained for remaining unfunded liability.
Asset valuation method	The difference between the expected return and the actual investment return on a market value basis is recognized over a five-year period. Asset value is adjusted as necessary to be within 20% of the market value.
Inflation rate	3.25%
Projected salary increases	Varies by length of service with ultimate rate of 4.0% for Group 1
Cost of living adjustments	3.00% of first \$14,000 of retirement income
Rates of retirement	Varies based upon age for general employees
Rates of disability	It is assumed that 45% of all disabilities are ordinary, and 55% of all disabilities are service connected.
Mortality rate pre-retirement	RP-2014 Blue Collar Employee Mortality Table projected generationally with Scale MP-2017
Mortality rate healthy retiree	RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale MP-2017
Mortality rate disabled retiree	RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year and projected generationally with Scale MP-2017
Investment rate of return/ Discount rate	7.50%, net of pension plan investment expense, including inflation. This was previously 7.75%.

Investment policy – The pension plan's policy in regard to the allocation of invested assets is established by Pension Reserve Investment Trust. Plan assets are managed on a total return basis with long-term objective of achieving a fully funded status for the benefits provided through the pension plan. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of January 1, 2018 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return	Long Term Expected Asset Allocation
Domestic equity	6.15%	17.50%
International developed markets equity	7.11%	15.50%
International emerging markets equity	9.41%	6.00%
Core fixed income	1.68%	12.00%
High-yield fixed income	4.13%	10.00%
Real estate	4.90%	10.00%
Commodities	4.71%	4.00%
Hedge funds, GTAA, risk parity	3.94%	13.00%
Private equity	10.28%	12.00%
		100.00%

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 10 – PENSION PLAN– continued

Discount rate – The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that contributions will be made at rates equal to the actuarially determined contributions rate. Based on those assumptions, the pension 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 net pension liability to changes in the discount rate – The following presents the net pension liability as of December 31, 2017, calculated using the discount rate of 7.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1% lower (6.50%) or 1% higher (8.50%) than the current rate:

	1% Decrease to 6.50%	Current Discount 7.50%	1% Increase to 8.50%
The District’s share of the net pension liability	\$4,136,830	\$3,370,594	\$2,724,544

Pension plan fiduciary net position – Detailed information about the pension plan’s fiduciary net position is available in the separately issued Middlesex County Retirement System financial report.

NOTE 11 – OTHER POST-EMPLOYMENT BENEFITS

The District implemented Governmental Accounting Standards Board Statement 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions (GASB 45) starting in the fiscal year ended June 30, 2010. As allowed by GASB 45, the District has established the net Other Post Employment Benefits (OPEB) obligation at zero at the beginning of that transition year and has applied the measurement and recognition requirements of GASB 45 on a prospective basis.

During fiscal year 2011 the District established the “Other Post Employment Benefits Trust Fund” and began funding its liability through this irrevocable trust. The OPEB Trust Fund is reported as a Fiduciary Fund in the accompanying financial statements.

Plan Description - The District administers a defined benefit healthcare plan through the Massachusetts Interlocal Insurance Association (MIIA) that provides lifetime healthcare insurance for eligible retirees and their spouses. Massachusetts General Laws Chapter 32B assigns authority for the District to establish and amend benefit provisions of the plan. The Retiree Health Plan does not issue a publicly available financial report.

Funding Policy - Contribution requirements are set by the Board of Water Commissioners and approved with a Special Meeting vote by the water takers of the District. The required contribution is based on a pay-as-you-go financing requirement. The District contributes 80 percent of the cost of current-year premiums for eligible retired plan members and their spouses. Plan members receiving benefits contribute the remaining 20 percent of their premium costs.

Annual OPEB Expense and Net OPEB Obligation - The District’s annual OPEB expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years.

WATER SUPPLY DISTRICT OF ACTON
Notes to the Basic Financial Statements - June 30, 2018

NOTE 11 – OTHER POST-EMPLOYMENT BENEFITS - continued

The components of the District's annual obligation are summarized in the following table:

Normal cost	\$21,914
Amortization of unfunded actuarially accrued liability	34,259
Annual OPEB expense	56,173
Contributions made	(195,743)
Decrease in net OPEB obligation	(139,570)
Net OPEB obligation - beginning of year	538,388
Net OPEB obligation - end of year	\$398,818

The District's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligations for 2018 and the two most recent preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost	% of Annual OPEB Cost Contributed	Net OPEB Obligation
6/30/2018	\$51,828	378%	\$398,818
6/30/2017	\$51,828	378%	\$538,388
6/30/2016	\$51,828	378%	\$677,958

Funded Status and Funding Process- The funded status of the Plan as of the most recent actuarial valuation dates is:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
7/1/2015	\$649,881	\$1,075,003	\$425,122	60%	\$1,100,000	39%
7/1/2012	\$200,501	\$2,403,921	\$2,203,420	8%	\$1,020,000	216%
7/1/2009	0	\$3,515,024	\$3,515,024	0%	\$1,057,000	333%

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 employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarially accrued liabilities of benefits.

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 the plan members) and include the types of benefits provided at the time of each valuation and historical pattern of sharing of benefit costs between the employer and plan members to that point. Since the District has fewer than 100 employees, it has elected to use the alternative measurement method to calculate the actuarial valuations of its OPEB. The actuarial method and assumptions used include techniques that are designed to reduce the effects of short term volatility in actuarially accrued liabilities and value of assets, consistent with the long term perspective of the calculations.

In the July 1, 2015 actuarial valuation, actuarial liabilities were determined using the projected unit credit method. The actuarial assumptions included a 7.0% investment return assumption, which is based on the expected yield on the District assets.

WATER SUPPLY DISTRICT OF ACTON
Required Supplemental Information and Notes to Required Supplemental Information - June 30, 2018

PENSION PLAN SCHEDULES

SCHEDULE OF THE DISTRICT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY OF MIDDLESEX COUNTY RETIREMENT (MCRS)	12/31/17	12/31/16	12/31/15	12/31/14
District's proportion of the MCRS Net Pension Liability	\$3,370,594	\$3,319,310	\$2,784,648	\$2,562,079
District's percentage share of the MCRS Net Pension Liability	0.237502%	0.234277%	0.215861%	0.213273%
District's covered employee payroll	\$1,141,452	\$1,136,133	\$1,013,745	\$974,755
District's Net Pension Liability as a % of covered payroll	295.29%	292.16%	274.69%	262.84%
MCRS fiduciary net position as a % of its total pension liability	49.27%	45.49%	46.13%	47.65%

SCHEDULE OF THE DISTRICT'S CONTRIBUTIONS TO THE MIDDLESEX COUNTY RETIREMENT SYSTEM	Year Ended 6/30/18	Year Ended 6/30/17	Year Ended 6/30/16	Year Ended 6/30/15
Date of actuarial valuation	1/1/2018	1/1/2016	1/1/2016	1/1/2014
Actuarially determined contribution	\$203,213	\$177,725	\$165,791	\$133,367
Contributions made	\$203,213	\$177,725	\$165,791	\$133,367
Contribution deficiency (excess)	----	----	----	----
Covered employee payroll	\$1,141,452	\$1,136,133	\$1,013,745	\$974,755
Contributions as a % of covered employee payroll	17.80%	15.64%	16.35%	13.68%

The two schedules above are intended to present information for ten years. Until a ten year period is available, information is presented for those years for which information is available. See notes to required supplementary information.

NOTE A – PENSION PLAN – CHANGES IN ASSUMPTIONS AND PLAN PROVISIONS

The following assumption changes were reflected in the January 1, 2018 actuarial valuation:

- The mortality tables for healthy participants were changed from the RP-2000 Employee and Healthy Annuitant Mortality Tables projected generationally using Scale BB2D from 2009 to the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2017.
- The mortality tables for disabled participants were changed from the RP-2000 Healthy Annuitant Mortality Table projected generationally using Scale BB2D from 2015 to the RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year projected generationally using Scale MP-2017.
- The long-term salary increase assumption was lowered by 0.25% to 4.00% for Group 1 participants.
- The investment rate of return assumption was reduced from 7.75% to 7.50%.

The following plan provision changes were reflected in the January 1, 2018 actuarial valuation:

- NONE

WATER SUPPLY DISTRICT OF ACTON
Required Supplemental Information and Notes to Required Supplemental Information - June 30, 2018

OTHER POST-EMPLOYMENT BENEFITS SCHEDULES

SCHEDULE OF FUNDING PROGRESS			
Actuarial valuation date	7/1/2015	7/1/2012	7/1/2009
Actuarial value of assets	\$649,881	\$200,501	0
Actuarial accrued liability (AAL)	\$1,075,003	\$2,403,901	\$3,515,024
Unfunded AAL (UAAL)	\$425,122	\$2,203,420	\$3,515,024
Funded ratio	60%	8%	0%
Covered payroll	\$1,100,000	\$1,020,000	\$1,057,000
UAAL as a percentage of covered payroll	39%	216%	333%
ACTUARIAL METHODS AND ASSUMPTIONS			
Actuarial cost method	Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Amortization method	Level Dollar	Level Dollar	Level Dollar
Remaining amortization period	24 years	27 years	30 years
Investment rate of return	7%	7%	3%
Health care trend rate	6.8% down to 5% after 10 years	7.9% down to 5% after 10 years	9.5% or 10%, graded to 5% after 10 years
Dental care trend rate	3.5% for all years	4.1% for all years	5.5% for all years

Year Ended	EMPLOYER CONTRIBUTIONS			PLAN MEMBERSHIP		
	Annual Required Contributions (ARC)	Actual Contributions Made	Percentage Contributed	Current retirees, beneficiaries & dependents	Current active members	Total Members
6/30/18	\$56,173	\$195,743	348%	10	16	26
6/30/17	\$56,173	\$195,743	348%	10	15	25
6/30/16	\$56,173	\$195,743	348%	10	14	24
6/30/15	212,479	268,054	126%	11	16	27
6/30/14	212,479	268,054	126%	12	15	27
6/30/13	212,479	118,054	53%	12	13	25
6/30/12	408,085	171,605	42%	10	13	23
6/30/11	408,085	171,605	42%	9	14	23
6/30/10	408,085	71,605	18%	8	15	23

NOTE B - OTHER POST-EMPLOYMENT BENEFITS

The District administers a defined benefit healthcare plan that provides lifetime healthcare insurance for eligible retirees and their spouses through the Massachusetts Interlocal Insurance Association (MIIA) health insurance plan, which covers both active and retired members. The District currently finances its other postemployment benefits (OPEB) on combined pre-funded and a pay-as-you-go basis whereby the funding schedule is designed to pay the normal cost currently and amortizes the unfunded liability over a period of 30 years. As a result, the funded ratio (actuarial value of assets expressed as a percentage of the actuarially accrued liability) as of the most recent valuation was 60%. In accordance with Governmental Accounting Standards, the District has recorded its OPEB cost equal to the actuarial determined annual required contribution (ARC) which includes the normal cost of providing benefits for the year and a component for the amortization of the total unfunded actuarial accrued liability of the plan.

The Schedule of Funding Progress presents multi-year trend information which compares, over time, the actuarially accrued liability for benefits with the actuarial value of accumulated plan assets. The Schedule of Actuarial Methods and Assumptions presents factors that significantly affect the identification of trends in the amounts reported. The Schedule of Employer Contributions presents multiyear trend information of contributions relating to the plan. Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefits costs between the employer and the plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

WATER SUPPLY DISTRICT OF ACTON				Page 21	
Supplemental Schedule of Governmental Fund Balance - Capital Projects Activity					
For the Year Ended June 30, 2018					
	<i>BEGINNING</i>	<i>TRANSFERS</i>	<i>BORROWED</i>	<i>PAYMENTS</i>	<i>ENDING</i>
	<i>BALANCE</i>	<i>FROM</i>	<i>FUNDS or</i>	<i>MADE</i>	<i>BALANCE</i>
	<i>06/30/17</i>	<i>GEN'L FUND</i>	<i>GRANT FUNDS</i>		<i>06/30/18</i>
Clean Rehab Wells 18	\$0	\$90,000		\$80,529	\$9,471
Eminent Domain Main Street	19,519				19,519
Flagg Hill Tank Repairs 12	3,504				3,504
Leak Detection 17	2,650				2,650
Marshall Well Replacement	54				54
Master Plan Update 17	48,854			38,800	10,054
Media Replacement 17	5,397			5,397	0
Media Replacement 18	0	60,000		54,185	5,815
NAWTP Engineering 12	532				532
NAWTP Filter Cartridge	0	85,000			85,000
Replace Old Mains 17	32,543			17,827	14,716
Replace Old Mains 18	0	30,000			30,000
Residuals Management 16	13,060			2,985	10,075
Residuals Management Tank 17	50,000				50,000
Solar META Grant 17	0		\$8,500	8,500	0
Storage Tank Repairs 16	150,000			20,690	129,310
Storage Tank Upgrades 13	55,000				55,000
Vehicles 16	160				160
Vehicles 17	1,730			254	1,476
Vehicles 18	0	62,000		29,913	32,087
Water Main Emergency 16	28,224			23,917	4,307
Water Main Emergency 17	30,000				30,000
Water Main Improvements 15	287,331			287,331	0
Water Main Improvements 16	500,000			500,000	0
Water Main Improvements 17	500,000			121,882	378,118
Water Main Improvements 18	0	500,000			500,000
Water Mains Indian Village 18	0		1,000,000	1,000,000	0
Totals	\$1,728,558	\$827,000	\$1,008,500	\$2,192,210	\$1,371,848

Minutes of March 27, 2018 Annual Meeting

Held at Acton Memorial Library
486 Main Street
Acton, Massachusetts
7:00 PM

Article 1. To fix the salaries of the elected officials.

Unanimously approved.

Article 2. To accept the reports of the Commissioners, the Treasurer and other officers of the District.

Unanimously approved.

Article 3. To see if the District will vote to authorize the Treasurer, with the approval of the Commissioners, to borrow in anticipation of the revenue of the fiscal year beginning July 1, 2018, in accordance with the provisions of General Laws, Chapter 44, Section 4, and to renew any note or notes as may be given for a period of less than one year, in accordance with the provisions of the General Laws, Chapter 44, Section 17.

Unanimously approved.

Article 4. To see if the District will vote to raise and appropriate to defray the usual expenses of the District.

Unanimously approved.

Article 5. To see if the District will vote to transfer from Surplus Revenue the sum of \$125,000.00 for the maintenance and repair of the various treatment facilities including, but not limited to, media replacement in the filtration tanks, aeration tower repair, and replacement of packing material.

Unanimously approved.

Article 6. To see if the District will vote to transfer from Surplus Revenue the sum of \$90,000 to clean and rehabilitate existing wells throughout the District.

Unanimously approved.

Article 7. To see if the District will vote to transfer from Surplus Revenue the sum of \$30,000 for the purpose of replacing old water mains, renewing old water services and replacing old fire hydrants.

Unanimously approved.

Article 8. To see if the District will vote to transfer from the Receipt Reserve for Appropriation Account (W.R. Grace settlement) the sum of \$300,000.00 for the piloting of treatment technologies for the Conant I and Conant II wells.

Unanimously approved.

Article 9. To see if the District will vote to transfer from Surplus Revenue the sum of \$500,000.00 to pay down short-term debt related to the Indian Village and Littlefield Road water main improvement project.

Unanimously approved.

Article 10. To see if the District will vote to transfer from Surplus Revenue \$100,000.00 for the

removal of filtration residuals at the North Acton Water Treatment Plant.

Unanimously approved.

Article 11. To see if the District will vote to transfer from Surplus Revenue the sum of \$85,000.00 for the replacement of filter cartridges at the North Acton Water Treatment Plant.

Unanimously approved.

Article 12. To see if the District will vote to transfer from Surplus Revenue the sum of \$60,000.00 for the replacement of the granular activated carbon media at the Clapp and Whitcomb well sites on Massachusetts Avenue in Acton.

Unanimously approved.

Article 13. To see if the District will vote to transfer from Surplus Revenue the sum of \$62,000.00 for purchase of two general service vehicles and for approval to sell or trade the District's 2003 Ford Econoline Van and 2008 Ford Ranger pick-up.

Unanimously approved.

Article 14. To see if the District will vote to amend the District Bylaws, pursuant to the provisions of Massachusetts General Laws Chapter 44, Section 53E½, Revolving Funds, as most recently amended by Section 86 of Chapter 218 of the Acts of 2016, the Municipal Modernization Act, by inserting the following section entitled "District Revolving Fund for Mitigation" or take any other action relative thereto.

1 Nay/Article passed.

Article 15. To see if the District will vote pursuant to Massachusetts General Laws c.44, §53E½ as most recently amended by §86 of Chapter 218 of the Acts of 2016, to establish a \$100,000 limitation for the 2019 fiscal year on expenditures from the District Revolving Fund for Mitigation.

Unanimously approved.

Article 16. To see if the District will vote to appropriate the sum of \$9,590.00 from free cash to fund the District Revolving Fund for Mitigation.

Unanimously approved.

Minutes of October 10, 2018 Special District Meeting

Held at Public Safety Building
371 Main Street
Acton, Massachusetts

The meeting was called to order by the District Clerk at 7:30pm with 80 voters in attendance.

Article 1. To see if the District will vote to appropriate the sum of \$1,095,000.00 to acquire by purchase, gift, eminent domain, or otherwise, a parcel of land at 585 Main Street, Acton, Massachusetts owned or formerly owned by Brewster Conant, containing 11.23 acres, more or less, being the land described in a deed recorded in the Middlesex County Registry of Deeds in Book 10678, Page 299; and that to meet this appropriation the Treasurer with the approval of the Board of Water Commissioners, is authorized to borrow said amount under and pursuant to M.G.L. c. 44, §7(1), or any other enabling authority, and to issue bonds or notes of the District therefor; said land being acquired for the purposes of protecting the groundwater aquifers and recharge areas for water supply wells, conserving the land for watershed protection purposes, and for all things pertinent to its rights and duties as a Massachusetts water district per its enabling act, Chapter 326 of the Acts of 1912, as amended, and under the provisions of M.G.L. c. 40 and c. 79. Any premium received upon the sale of any bonds or notes approved by this vote, less any such premium applied to the payment of the costs of issuance of such bonds or notes, may be applied to the payment of costs approved by this vote in accordance with M.G.L. c. 44, §20, thereby reducing the amount authorized to be borrowed to pay such costs by a like amount.

Unanimously Approved.

Article 2. To see if the District will vote to accept a transfer of real property from the Town of Acton of the property located at 3-33 Knox Trail in Acton, shown as Lot 12 on Land Court Plan No. 25398E, and shown as Parcel ID J3-21-2, containing 1.5 acres, more or less, for the purposes of protecting the groundwater aquifers and recharge areas for water supply wells, and conserving the land for watershed protection purposes, and for all things pertinent to its rights and duties as a Massachusetts water district per its enabling act, Chapter 326 of the Acts of 1912, as amended, and under the provisions of M.G.L. c. 40 and c. 79.

Unanimously Approved.

Mr. Parenti made a motion to adjourn the meeting at 8:00 PM. The motion was seconded and it was unanimously approved.

Water District Organization

ELECTED OFFICIALS

Commissioners	Ronald R. Parenti Stephen C. Stuntz Erika Amir-Lin	Term Expires 2019 Term Expires 2020 Term Expires 2021
District Clerk	William T. Stanford	Term Expires 2020
District Moderator	Richard P. O'Brien	Term Expires 2021

APPOINTED OFFICIALS

Finance Committee	David A. Butler Charles Bradley William Guthlein	Term Expires 2019 Term Expires 2020 Term Expires 2021
District Manager	Christopher D. Allen	Contract Expires 2020
Treasurer/Collector	Mary J. Bates	Term Expires 2019
District Counsel	Mary Bassett	Term Expires 2019
District Assistant Clerk	Helen F. Argento	Term Expires 2019
Commissioners Secretary	Lynn Protasowicki	Term Expires 2019
Auditor	Maureen Waters Mara, CPA, MST	Term Expires 2019

Water Land Management Advisory Committee

Paul Malchodi
Charles Olmstead
Barry Rosen
John Cipar

Water District Staff

Matthew L. Mostoller	Environmental Manager
Robert Murch	MIS Coordinator
Julia Hawkins	A/P Bookkeeper/Secretary
Elizabeth Secinaro	A/R Bookkeeper/Secretary
Stephen G. Peterson, Jr.	Superintendent
Charles Rouleau	Water Operations Administrator
Andrew Peterson	Foreman
Robert P. Dionne, Jr.	Assistant Foreman
James Trippier	Operator/Distribution
Keith Kupfer	Operator/Distribution
Matthew Walsh	Operator/Distribution
Lucas Peterson	Operator/Distribution
Josh Richard	Operator/Distribution

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Acton Water



Water Supply District of Acton

P.O. Box 953

Acton, MA 01720

OUTDOOR WATER USE RESTRICTIONS EFFECTIVE MAY 1 – OCTOBER 1

- Those of you with even numbered addresses may use water outdoors on Tuesdays, Thursdays and Saturdays.
- Those of you with odd numbered addresses may use water outdoors on Wednesdays, Fridays and Sundays.
- No lawn watering may occur between 7:00 AM and 7:00 PM. (Watering mid-day wastes water to evaporation.)
- No outdoor usage will be allowed on Mondays.

The Monday restriction will give our storage tanks a chance to recover after the weekend. Maintenance of adequate tank levels is critical to serving both our domestic needs, as well as providing fire protection, if needed.