# Annual Report ACTON WATER DISTRICT

For the year ending December 31, 2019



Warrant Articles for the Annual Meeting
March 18, 2020



Pictured left to right are Commissioners Stephen Stuntz, Erika Amir-Lin, Barry Rosen, and District Manager Chris Allen

Commissioners typically meet on the second and fourth Monday of each month, at 7:00 P.M., 693 Massachusetts Avenue, Acton.

Meeting dates/times, agendas, and minutes are posted on our website www.actonwater.com

The public is welcome to attend, please join us!

# Index

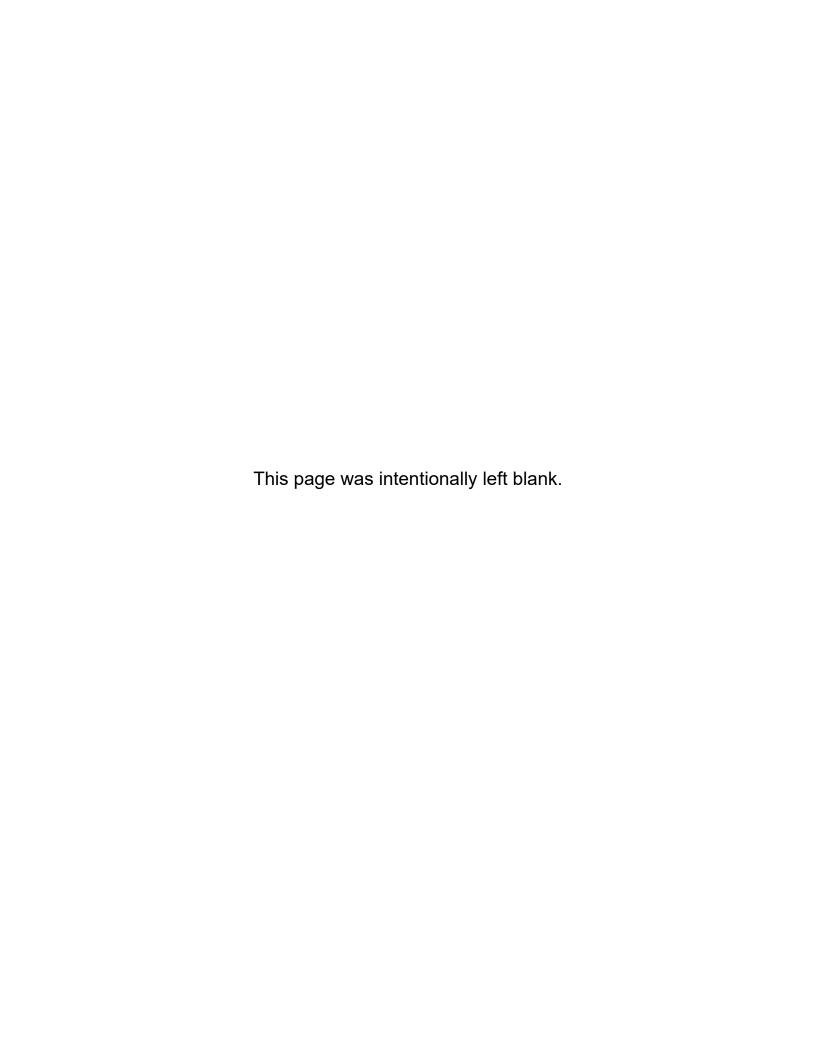
Auditor's Report	13
Budget FY 2021	4
Collector's Report	5
Commissioner's Report	6
District Manager's Report	9
District Meetings:	
Annual Meeting (March 20, 2019)	38
District Organization	41
Environmental Manager's Report	11
Finance Committee's Report	7
MIS Coordinator's Report	12
Treasurer's Report	5
Warrant	1

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

www.actonwater.com

Our publications are always available on our website.

If you would prefer to opt out of receiving certain future mailings by U.S. Postal Service, please visit our website and click on Go Paperless.



# 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 31, 2020 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 District Clerk 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 18, 2020 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, 2020 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,  $\S53E\frac{1}{2}$  as most recently amended by  $\S86$  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 Receipt Reserve for Appropriation Account (W.R. Grace settlement) the sum of \$125,000 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 \$75,000 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 \$30,000 for the purpose of repairing emergency water main breaks 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 \$65,000 for the replacement of the granular activated carbon media at the Clapp and Whitcomb well sites on Massachusetts Avenue in Acton 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 \$85,000 for the replacement of filter cartridges at the North Acton Water Treatment Plant to take any other action relative thereto.
- **Article 12.** To see if the District will vote to transfer from Surplus Revenue the sum of \$100,000 for the removal filtration residuals at the North Acton Water Treatment Plant or 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 purchase of a general service vehicle and for approval to sell or trade the District's 2004 Ford F-350 service truck or to take any other action relative thereto.
- **Article 14**. To see if the District will vote to transfer from Surplus Revenue the sum of \$100,000 for the purpose of exploration and/or permitting of a new well source or take any other action relative thereto.
- **Article 15.** To see if the District will vote to authorize the Commissioners to enter into a long-term written lease, with two 5-year options to extend, for a total term of thirty (30) years, for use of a ground-mount solar photovoltaic system and associated equipment and materials on land owned by the District located at Knox Trail and Lawsbrook Road in Acton. The written leases will include the most favorable annual lease payment and power purchase agreement terms received in response to a request for proposal issued by the District and will provide for electric power supply to the District's

wells and treatment facilities. The lease and power purchase agreement shall include other terms, conditions and limitations imposed by Article 97 special legislation and as the Commissioners shall deem necessary and appropriate to protect the public water supply or to take any other action relative thereto.

**Article 16.** To see if the District will vote to establish a stabilization fund in accordance with Article 97 special legislation and G.L. Ch. 40, sec. 5B for the purpose of dedicating a certain percentage of the rental revenues derived from the District solar leases on Knox Trail and Lawsbrook Road as required by state law, statutes and regulations, effective for fiscal year beginning on July 1, 2020 or take any other action relative thereto.

**Article 17.** To see if the District will vote to transfer from Surplus revenue the sum of \$50,000 to acquire by purchase, gift, eminent domain, or otherwise, all necessary utility easements needed in support of the project upgrades and infrastructure work at the Conant II well site and the central Acton treatment plant as follows:

- 1. An expanded access and utility easement under that certain private road commonly known as formerly known as Technology Drive, now Post Office Square, and the Access and Utility Area, owned by Acton Technology Park Real Estate Trust, and shown on a Plan of Land recorded in Plan Bk. 01984, Pg. 1544.
- 2. An expanded and modified access and utility easement to the District's existing easement recorded in Bk. 28286, Pg. 458, with plan recorded in Plan Bk. 25911, Pg. 35.
- 3. A small easement off the parcel identified in Bk. 68673 Pg. 454, 533 Main St.
- 4. A small easement off the parcel identified in Bk. 64784 Pg. 264, 6 Post Office Sq. and to take any other action necessary to secure necessary and useful easements and similar property interests in support of the project or to take any other action relative thereto.

**Article 18.** To see if the District will vote to establish a stabilization fund pursuant to G.L. Ch. 40, sec. 5B for the purpose of funding new construction, extraordinary maintenance or repairs throughout the water supply system, as requested by the Board of Commissioners, and to authorize the Commissioners to fund that stabilization fund with the entire balance of District funds in the WR Grace Receipt Reserved for Appropriation Account (WR Grace Fund) 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 27th day of January in the year two thousand and twenty.

Stephen C. Stuntz Erika Amir-Lin Barry Rosen, Water Commissioners

A true copy. ATTEST:

William T. Stanford District Clerk

FY 2021 Budget and Estimated Revenue					
	Actual FY 2019	Budget FY 2020	6 month actual	Budget FY 2021	
EXPENSES					
Accounting	1,800	2,000	800	2,000	
Audit	16,000	16,000	16,000	16,000	
Auto Maint & Fuel	50,000	50,000	21,866	50,000	
Backflow/Cross Conn	468	1,000	118	1,000	
Short Term Debt	-	350,000	330,786	500,000	
Long Term Debt	1,526,093	1,512,816	411,080	1,490,908	
Chemicals	75,000	75,000	30,154	75,000	
Computer Maintenance	14,866	16,000	13,133	16,000	
DEP Withdrawal	5,066	6,500	4,624	6,500	
Employee Education	15,203	17,500	8,516	17,500	
Engineering	55,000	55,000	25,601	55,000	
Health/Life Insurance	342,935	397,000	175,083	412,880	
Hydrants	10,000	10,000	4,097	10,000	
Information Reports	31,476	45,000	27,313	45,000	
Insurance	81,253	86,000	85,692	89,000	
Laboratory Analysis	50,000	50,000	21,064	60,000	
Legal	40,000	40,000	21,613	40,000	
Lights/Power/Fuel	405,000	375,000	179,915	390,000	
Maintenance & Operations	396,002	325,500	140,529	335,000	
Middlesex Retirement	218,063	247,600	243,164	256,971	
Meters	57,401	75,000	7,119	75,000	
Office Supplies	13,797	20,000	4,785	20,000	
OPEB Expense	100,000	100,000	-	0	
Paving	47,339	50,000	24,090	50,000	
Petty Cash	600	1,000	300	1,000	
Postage	18,519	20,000	4,854	20,000	
Reserve Fund	-	100,000	-	100,000	
Salaries & Wages	1,301,768	1,460,000	701,440	1,505,000	
Telephone	18,145	20,000	8,402	20,000	
Total	4,891,794	5,523,916	2,512,138	5,659,759	
REVENUE					
Water Revenue	2,586,470	2 7/7 022	1,765,092	2,728,159	
Service Fee	517,500	2,747,932 522,000	261,300	522,000	
Debt Fee	1,823,200	1,983,600	991,800		
Total Water Revenue				1,983,600	
	4,927,170	5,253,532	3,018,192	5,233,759	
Fire Protection Sprinklers	40,212	40,000	40,067	40,000	
Rent/Lease	121,342	112,000	56,020	112,000	
Repairs/Installation	58,338	50,000	31,857	50,000	
Cross Connection	24,436	22,000	12,737	24,000	
Demand Fees	191,035	200,000	418,850	200,000	
Mitiagtion Fees	71,319	0	84,307	400.000	
Total Other Revenue	506,682	424,000	643,838	426,000	
Total	5,433,852	5,677,532	3,662,030	5,659,759	
		4			

# **Report of the Treasurer**

# Audited Account Balances June 30, 2019

Santander Bank		170,486
Enterprise Bank		471,757
MMDT		937,431
Century Bank		202,009
Radius Bank		28,756
UniBank		709,577
	Total	2,520,016

# Report of the Collector Audited Account Balances June 30, 2019

Accounts Receivable June 30, 2018 Charges Interest Charges Refunds	152,490 5,435,549 35,158 3,927
	5,627,124
Payments Abatements Adjustments	5,433,853 9,191 -
Outstanding June 30, 2019	184,080
	5,627,124

# Outstanding Debt June 30, 2019

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	3,000,000
Water Mains	2,135,000	2.03%	8/15/2013	8/15/2023	1,060,000
SA Treatment Plant	13,470,767	2.00%	1/17/2015	1/7/2035	11,219,051

# Mitigation Revolving Fund June 30, 2019

	6/30/	18 Balance	R	eceipts	Exp	penditures	Balance
Mitigation Revolving Fund	\$	137.020	\$	71.319	\$	100.000	\$ 108.339

Respectfully submitted, Mary J. Bates Treasurer/Collector

## Report of the Commissioners for 2019

Once again, we wish to thank our District Manager, Chris Allen, for making our jobs easier by hiring and training great staff. Both the field staff, who keep the water pure and flowing, and the office staff, who make sure the bills go out and the payments are made, do a super job dealing with issues in a timely and efficient manner. Our Environmental Manager, Matthew Mostoller, keeps us ahead of problems associated with treating our water to the high standards that you all expect. For the second year in a row we welcome a new Commissioner, Barry Rosen, who has been involved over the years with the District's Water & Land Management Advisory Committee (WLMAC), whose purpose is to advise the Commissioners on technical issues associated with the District. He replaces Ron Parenti who ably served the District for over 30 years, most recently as a Commissioner.

I would like to take this opportunity to thank Ron for his years of service. Ron's first involvement with the District was as a member of the WLMAC back in the early days of the problems with WR Grace and pollution of the South Acton wells. Not only was he instrumental in that settlement but continued to work for all the improvements in the treatment and delivery of water to our customers. He has helped select our last two District Managers and work with the staff and other Commissioners with intelligence, grace and courtesy. Ron thank you for making all our jobs easier! Fortunately, the community is not losing Ron's expertise since he has joined the Town of Acton Water Resources Advisory Committee (WRAC) that focuses on water issues for the Town's management.

The operation of the District revolves around long term planning and execution. With that as our focus, we continued to evaluate the long-term water needs of the community and how that fits into our existing system of infrastructure. With an investment of resources in the new treatment facility for the Conant wells and the 2018 acquisition of the 585 Main Street property, we are exploring how additional water supply could be obtained in this area.

Not all of our work is new items. Maintaining our present infrastructure is key to continuing to deliver the quality product you expect. We are careful not to defer maintenance for budgetary reasons. We have substantially met our commitment to fund the other post-employment benefits, commonly referred to as OPEB, for our current and retired employees. We continue to be concerned with the overall cost of delivering the best water we can to you and work to make sure our rates are fair. With this in mind we continued to offer to our senior citizen customers a water bill abatement in the same percentage as the qualifying real estate tax exemption the Town of Acton offers.

We have worked closely with the Town on issues associated with Nagog Pond since 2016. That issue was muddied because the rights to water from the pond were assigned before the District existed and therefore, we had no legal standing to intervene in a lawsuit brought by the Town of Concord against the Town of Littleton Water Department. However, our good and close working relationship with the Board of Selectmen and Town staff has helped them craft better discussions with our neighbors.

As always, we are delighted to represent you as your commissioners and invite you to come to our Annual meeting or any of our semi-monthly meetings. It is particularly gratifying to be working with a competent and dedicated staff here at the Acton Water District. They care about what they do and for that we thank them.

Respectfully submitted,

Stephen Stuntz, Chair Erika Amir-Lin Barry Rosen

# **Report of the Finance Committee for 2019**

Recent reports from the Finance Committee have been remarkably similar. This is another one with the same one sentence summary. The Acton Water District is financially healthy now, but there are several risks, as discussed below. Some potential problems, identified in previous reports have been reduced or eliminated.

Certified free cash was \$870,376 on 06/30/2019. This will be used for many of the proposed capital improvement projects, thus avoiding the expense of a bond issue, the resulting interest charges, and an increase in the debt service charge. The bonded debt of the district is rated AA+ by Standard & Poor.

The District has been using an inclining block rate pricing structure for many years. That is, the more water you use, the more it costs per gallon. The rates in the summer are higher than the rates in the winter. Water bills identify three categories, a fixed charge for the service, a variable charge for the water, and a debt service fee that has multiplied in recent years. Fixed charges now account for 37% of the total charges but the debt service fee is now the largest part of the total bill for more than half the customers. Builders pay a separate fee to join the system, depending on the size of the pipe.

All of these components are being reviewed and might change in the next few years. The District has always matched revenues to expenses on an annual basis. The goals are to more closely match revenues to expenses on a seasonal basis, and to be fair to the almost 8000 water takers that have to pay the bills. All meetings of the Finance Committee are posted and are open to the public. We invite you to participate.

Pollution from the Nuclear Metals, Inc. Superfund site was flowing toward our new, South Acton Water Treatment Plant (SAWTP), with a possibility of shutting it down while we still owed about \$12,000,000 on it. This threat has been addressed and the risk greatly reduced, and probably even eliminated.

Science continues to advance. Some substances that were recently undetectable in water at parts per million can now be measured in parts per billion, and even parts per trillion. No one knows what scary-sounding material that might have been in our water for decades will be discovered, publicized, and then regulated to be removed at substantial expense.

The Grace Fund has been our backstop against pollution. Established in 1987 at \$2,250,000, we have spent \$5,135,000 from it, and it had a market value of \$2,256,346 at the end of the fiscal year on June 30, 2019 and \$2,238,186 at the end of the calendar year on December 31, 2019.

The District invests the Grace Fund in a conservative mixture of about one half stocks and one half bonds. The Commonwealth of Massachusetts restricts our choices to about a dozen stocks and a small choice of bonds. This lack of diversification means we bear greater risk of loss and less chance of gain than the typical investor in unimaginative index funds. We have been urging our local legislators, for many years, to create legislation that allows us to use the same prudent-man rules as many state funds use. So far, we have had no success. Recently, a different pathway to prudent diversification has been discovered. There is an article planned for the next Annual Meeting Warrant that will convert the Grace Fund into a Stabilization Fund. This change will allow for prudent man investment of the fund.

Many government bodies are now willing to admit they have a problem with grossly underfunded OPEB, Other Post Employment Benefits, which means for us paying health insurance premiums for retired employees. The District has been reducing the unfunded gap for several years and the account is now fully funded. It is difficult to find other organizations at a similar level. One survey of state and other sampled OPEB plans found 2.63% funding overall, with 40 states in the 0 - 29% range, and 19 states at 0%. State statute allows for prudent man investment of the OPEB Fund.

The District spends about \$500,000 per year to replace old water mains. The frequency of water main breaks in the District seems to indicate that expense is about the right amount. However, data about the life expectancy of pipes, and the experience of many other systems indicates the expense should be much more. Perhaps the district has just been lucky so far. Various contractors have developed ways to extend the useful life of water mains and to replace them at lower cost.

The District is in the planning stages for a new, required treatment plant for the wells in Acton Center. So far, it seems to be less expensive than the SAWTP. We expected to be required to build a treatment plant for the wells in West Acton, but a recent water discovery might allow that plant to not be built, or at least delayed for many years.

The District is required by law to be a part of the Middlesex County Retirement System and to pay premiums into the system in whatever amount that the system administrators decide. In recent years that has been about \$200,000 to \$250,000 per year, with an increasing trend. The system is substantially underfunded, by about half according to an actuary's analysis, so eventually there will a very large increase in what we have to pay. The District's share of the unfunded amount is about 60% of annual revenue. The committee is investigating ways to reduce that shock when it happens. The only uncertainty is when it will happen.

In summary, the District is healthy now, and most of the potential future problems are still only problems sometime in the future, if at all.

One more thing is also a long-term situation. The Commissioners and the District employees are a pleasure to work with; they make our job easier.

Respectfully submitted,

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

## Report of the District Manager 2019

#### **Central Acton Water Treatment Plant**

In 2015, the Massachusetts Department of Environmental Protection (MassDEP) issued the District a request for a Written Corrective Action Plan (WCAP) for the Conant I well due to high levels of the mineral manganese (Mn). During the next four years, planning has been ongoing, and that will culminate with the construction of a 1.0-Million Gallon per Day (MGD) Greensand Plus filtration plant on the parcel at 8 Post Office Square-Behind. Given that the Conant II well has similar levels of Mn, it was incorporated into the project scope. Additionally, we've been conducting exploration and testing of a potential new source in this vicinity for addition to the new plant. During 2019, our engineering consultant, Wright-Pierce (W-P) of Andover, MA, has been fine-tuning the design for this facility. Prior, W-P had assisted the District filing an application for state funding through the Massachusetts Clean Water Trust, which was approved in early 2019; this entitles us to a 1.5% interest rate on the 20-year loan. At a projected \$9.249-million price tag, we anticipate that the Debt Fee will rise approximately \$17/quarter per unit beginning in 2022. In the current timeline, the project bids will be opened on March 5<sup>th</sup> 2020, and we expect to break ground in the late spring/early summer, with plant commissioning projected for June of 2021. Please check our website for periodic project updates on this very important infrastructure project.

#### **Solar Energy Projects on District Land**

Back in the fall of 2017, the District promulgated a Request for Proposals (RFP) to solar energy developers for the construction and operation of ground-mount photovoltaic solar arrays on separate parcels on Lawsbrook Road and Knox Trail (About 20-acres total). In early 2018, having undertaken a very scrutinous evaluation process, the District selected EDF Renewables of White River Junction, VT. Over the course of the last two years, it has truly been a learning experience! What we thought was a relatively straight forward process has been complicated and cumbersome, we, however, endeavor to persevere. The most recent hurdle was requirements related to Article 97 of the State constitution, and the need for us to replace the land being used for solar to achieve "No net loss" of water supply land. Negotiations with the Massachusetts Executive Office of Environmental Affairs led to sponsored legislation that affords us some flexibility with that requirement. Approval has been given to allow the District to establish a Land Acquisition Fund that shall be funded through a percentage of the land lease proceeds annually. When equivalent land is acquired, the funding requirement will expire. On a positive note, the Lawsbrook Road array (approximately 4-Megawatts) has been slotted in the Solar Massachusetts Renewable Target (SMART) Program in Block 3. We expect that the state legislature will take up our Article 97 bill in the forthcoming session. During 2019, we'd garnered the support of the local legislative delegation, and the projects were very well received. The Knox Trail array (approximately 1-Megawatt) will directly power our South Acton Water Treatment Plant in a behind-the-meter configuration and is moving a bit slower through permitting.

#### Nagog Pond Legal Proceedings

In November of 2018, 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 and the District, separately, filed Motions to intervene in the case to preserve Acton's right to Nagog Pond's waters. Concord allowed the Town of Acton's intervention, but objected to the District's. Subsequently, the Land Court allowed Acton's intervention, and disallowed the District's, contending that our interests were adequately represented by Acton. However, the Town and the District worked collaboratively to preserve Acton's rights, expending many personnel and financial resources. In October, after much legal posturing, the Land Court found in Concord's favor. Littleton and Acton will be appealing this decision, and those appellate proceedings are in progress.

2019 saw more turnover in our Board of Water Commissioners when Ronald Parenti decided to retire. I would like to wish Ron "Fair winds and following seas" in all his future endeavors. I am eternally grateful for his knowledge, wisdom, guidance and mentorship. I would like to warmly welcome Barry Rosen to the Board. Barry, a prior volunteer on the District's Water & Land Management Advisory

Committee has been serving as Commissioner since April of 2019. Barry's extensive knowledge of the District due to his prior service is working to his advantage and he's hit the ground running! I would 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; and, all elected and appointed officials for their dedication to the District's water takers. 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 ensure that we effectively and efficiently achieve our mission serving our water takers.

Respectfully submitted,

Chris Allen

## Report of the Environmental Manager for 2019

#### **Environmental Compliance**

We completed the drinking water monitoring and notification requirements under the Safe Drinking Water Act (SDWA). All requirements of the lead & copper rule, including sampling of educational facilities and homes was completed. Results indicated ongoing effectiveness of our corrosion control program. We began monitoring under the Unregulated Contaminant Monitoring Rule 4, which will be completed in 2020. 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. The Massachusetts Department of Environmental Protection (MassDEP) is moving forward with our Water Management Act permit renewal. Progress on the design and approval of the treatment system for the Conant wells occurred. After many years of managing the treatment residuals from North Acton, a complete cleanout of this material was completed during the summer of 2019 by P&H Senesac, Inc.

#### **Water Conservation**

In 2019, we approved conservation rebates resulting in 3 washing machines and 56 toilets being replaced with more water efficient models. Customers also received 29 subsidized rain barrels through our partnership with the Great American Rain Barrel Company. 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 fifth grant from MassDEP to perform a 3<sup>rd</sup> party audit of our water use. Our mitigation program expended its first funds in 2019.

#### **Source Water Protection**

This was another busy year for source protection activities. I continued my participation on the Town of Acton Open Space Committee and Water Resources Advisory Committee (WRAC). We continued to participate in the activities at the Acton-W.R. Grace (Grace) and Nuclear Metals, Inc. (NMI). Superfund Sites. Most notable was the completion of the Grace 5-year review and of a long anticipated joint regional groundwater model for the South Acton aquifer. Additionally, screening for the presence of Per- and polyfluoralkyl substances, or PFAS was initiated at both sites. Efforts to monitor potential impacts to water quality continued in areas surrounding all of our sources. This work resulted in reporting to MassDEP a release of chlorinated solvents in the vicinity of our Conant 2 wells. I participated on the MassDEP Waste Site Cleanup Advisory Committee, representing the interests of water suppliers on hazardous waste site issues.

#### **Education and Outreach Programs**

We taught approximately 300 students involved in water-related curriculum. This included classroom visits to 5<sup>th</sup> and 6<sup>th</sup> grade classrooms and field trips for the Conant school Green team and the high school Environmental Science class. Additionally, I hosted a booth at the Discover STEM event sponsored by the Acton-Boxborough Parent Involvement Project. During May, I hosted an intern from the high school and offered job shadowing to two additional students. We again visited the Acton Senior Center for Earthfest and the annual open house. The Acton Garden Club invited me to speak at a lively club meeting in March. Stemming from the Nagog Pond controversies, the League of Women Voters formed a study group with neighboring communities to better understand water issues. We met with this group on multiple occasions in 2019, including a treatment plant tour and a lesson utilizing our groundwater model. 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. Finally, work that I participated in regarding youth education, was recognized by the American Water Works Association at their Annual Conference and Exposition in Denver. I was fortunate to be able to travel to this event and accept the award on behalf of the group of New England water suppliers that collaborated on this program.

Respectfully submitted,

Matthew Mostoller

# Report of the M.I.S. Coordinator for 2019

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

Twenty-two years ago, my focus was primarily software based, from accounts receivable to Zip Files, to be sure our customers had what they needed all the time. As the years roll on, that hasn't changed but the focus has shifted more onto the security aspect from Access Points to Zero Day Exploits. This year, I participated in a 5-day Cyber Security training seminar hosted by the Department of Homeland Security, that ended with us studying potential network threats and exposing a mock Supervisory Controls and Data Acquisition, or SCADA network to hackers. The amount of information was overwhelming, but the key takeaways were, be ready and training. We have partnered with Barracuda for our assured backup of our primary electronic records, so we will be ready if that day comes. We have also partnered with Sonicwall support to manage our firewalls configuring all rules and activity with 24-hour support. We continue to utilize a 3<sup>rd</sup> party for simulated phishing emails to help our staff be able to identify and understand how destructive a single click on an email link can be.

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. If you have not signed up for this program, it is a great benefit to better manage your water use and communicate with the District. To date all older meters have been retrofitted with the newest Orion reading technology transponders. The Orion system detected more than 3,841 potential leaks in 2019, saving customers money and water. Unfortunately, our relationship with the current meter vendor, Badger Meter, is coming to an end but have partnered with Neptune Meter to provide us with a superb meter and a better reading distance. We will be utilizing both reading platforms until the end of your Badger meter's life cycle.

Respectfully submitted,

Robert Murch

## WATER SUPPLY DISTRICT OF ACTON

REPORT ON EXAMINATION OF BASIC FINANCIAL STATEMENTS

JUNE 30, 2019

#### WATER SUPPLY DISTRICT OF ACTON

# REPORT ON EXAMINATION OF BASIC FINANCIAL STATEMENTS

\_\_\_\_

#### JUNE 30, 2019

#### 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	0
Changes in Fund Balance – Budget and Actual	9
Chatamant of Fish airm Nat Donition	10
Statement of Fiduciary Net Position	10
Statement of Changes in Fiduciam Not Desition	10
Statement of Changes in Fiduciary Net Position	10
Notes to the Basic Financial Statements	11 – 20
Notes to the Dasic Pinancial Statements	11 – 20
Required Supplemental Information and Notes	
Pension Plan Schedules and Note	21
Other Post-Employment Benefits Schedules	22
other 1 ost-Employment Benefits Schedules	22
Other Supplemental Information	
Supplemental Schedule of Governmental Fund Balance-	
Capital Projects Activity	23

#### Mara CPA, PC

#### **Certified Public Accountant – Professional Corporation**

PO Box 1555, Concord, MA 01742

maureen@maracpa.com 978-371-2113

#### **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, 2019 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, 2019, 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.

Mara CPA, PC July 31, 2019

#### 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, 2019. 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 \$24,172,824 (net position). Unrestricted net position at year end is currently a deficit of (\$1,038,763), 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 \$44,853,993. Of this amount, \$4,096,661 represents current assets and \$40,757,332 represents capital assets.

The total liabilities of the District are \$21,145,749. Of this amount, \$2,895,844 represents current liabilities and \$18,249,905 represents long term liabilities.

Total net position of the District is \$24,172,824. This includes \$23,838,520 invested in capital assets, net of related debt, \$1,373,067 which is restricted for capital projects, \$168,234 which is appropriated for maintenance & operations, \$108,339 restricted for mitigation and (\$1,315,336) which is unrestricted.

The Net Pension Liability is \$3,740,627 as of June 30, 2019. The District incurred a current period expense for the unfunded actuarial liability of \$471,535, as well as deferred outflows and inflows of resources in the amounts of \$552,968 and \$150,128, respectively.

During the fiscal year ended June 30, 2018, the District updated the actuarial valuation for Other Post Employment Benefits (OPEB), as required by GASB Statement #75. The Net OPEB Liability is \$48,311 as of June 30, 2019. The District incurred a current period negative expense for the unfunded actuarial liability of (\$47,819), as well as deferred outflows and inflows of resources in the amounts of \$123,639 and \$61,898 respectively. The District funded \$100,000 into the OPEB Trust Fund.

#### **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 budgetary revenues for the year were greater than budgeted revenues by \$232,208. Actual budgetary expenditures were less than budgeted expenditures by \$289,166.

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)**

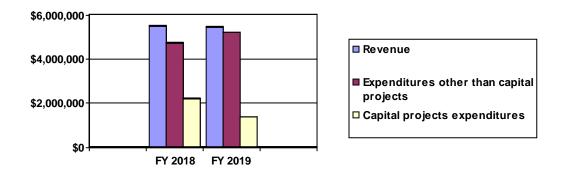
The total revenue for the District was \$5,466,325. Income for the Water Supply District of Acton is generated from water rates, mitigation fees, installation of new services and investment income. Income from water rates, mitigation fees and new services was \$70,729 less than last year. Investment income was \$10,542 greater than last year.

Total expenditures for the year amounted to \$7,089,893. This includes the expenditure of \$1,364,724 for capital projects. Expenditures for the current fiscal year increased from the previous fiscal year by \$144,625.

At the close of the fiscal year the Unreserved Fund Balance for the General Fund (Free Cash) was \$870,376. This represents a decrease of \$449,569.

At the close of the fiscal year there was a balance of \$1,373,067 restricted for capital projects. This represents an increase of \$1,219 from the previous fiscal year.

Below is a graph comparing revenues and expenditures for fiscal years 2018 and 2019.



#### **Capital Assets**

The Water Supply District of The District's investment in capital assets as of June 30, 2019 amounts to \$40,757,332 (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 \$1,290,221.

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

#### Fiscal Year 2020

The District has appropriated a balanced annual budget for FY 2020 of \$5,523,916.

WATER SUPPLY DISTRICT OF ACTON				Page 4
Statement of Net Position				
June 30, 2019		Capital	Invested in	
	General	Projects	Capital	
	Fund	Fund	Assets	Total
ASSETS				
Current Assets				
Cash and Cash Equivalents	\$2,520,016			\$2,520,016
Due to Capital Projects Fund	(1,373,067)	\$1,373,067		0
Accounts Receivable	184,712			184,712
Unbilled Accounts Receivable	1,391,933			1,391,933
Total Current Assets	2,723,594	1,373,067	0	4,096,661
Non Current Assets				
Capital Assets				
Land			\$2,673,725	2,673,725
Depreciable Capital Assets, net			38,083,607	38,083,607
Total Non Current Assets	0	0	40,757,332	40,757,332
Total Assets	2,723,594	1,373,067	40,757,332	44,853,993
10ttl 7155015	2,723,374	1,373,007	+0,737,332	<del>++</del> ,0 <i>55</i> ,775
Deferred Outflows of Resources	122 (22			122 (22
Other Post Employment Benefits	123,639			123,639
Pension	552,968			552,968
LIABILITIES				
Current Liabilities				
Notes Payable			1,595,000	1,595,000
Current Portion Long Term Debt			1,108,844	1,108,844
Accrued Interest Payable	192,000		, ,	192,000
Total Current Liabilities	192,000	0	2,703,844	2,895,844
Non-Current Liabilities				
Long Term Debt, net of current portion			14,214,967	14,214,967
Accrued Compensated Absences	246,000		,,,	246,000
Net OPEB Liability	48,311			48,311
Net Pension Liability	3,740,627			3,740,627
Total Non-Current Liabilities	4,034,938			18,249,905
Total Liabilities	4,226,938	0	16,918,811	21,145,749
Deferred Inflows of Resources				
Other Post Employment Benefits	61,898			61,898
Pension	150,128			150,128
NET POSITION				
Unappropriated Net Assets	(1,315,336)			(1,315,336)
Appropriated for Maintenance and Operations	168,234			168,234
Restricted for Mitigation	108,339			108,339
Appropriated for Capital Projects		1,373,067		1,373,067
Net Investment in Capital Assets			23,838,520	23,838,520
Total Net Position	(\$1,038,763)	\$1,373,067	\$23,838,520	\$24,172,824

WATER SUPPLY DISTRICT OF ACTON				Page 5
Statement of Activities		Capital	Invested in	
For the Year Ended June 30, 2019	General	Projects	Capital	
	Fund	Fund	Assets	Total
REVENUES				
Water Rates and Services	\$5,521,930			\$5,521,930
Mitigation Fees	71,319			71,319
Interest Income	36,399			36,399
Total Revenues	5,629,647	0	0	5,629,647
				, ,
EXPENDITURES				
Salaries and Wages	1,318,768			1,318,768
Other Post Employment Benefits Expense	(47,819)			(47,819)
Interest and Fees	433,881		(\$11,189)	422,692
Depreciation Expense			1,290,221	1,290,221
Lights, Power and Fuel	405,000		, ,	405,000
Health and Life Insurance	342,935			342,935
Maintenance and Operations	463,252			463,252
Middlesex Retirement	471,535			471,535
Insurance	81,253			81,253
Auto Maintenance and Fuel	50,000			50,000
Chemicals	75,000			75,000
Legal	40,000			40,000
Laboratory Analysis	50,000			50,000
Education	15,203			15,203
Audit	16,000			16,000
Computer Maintenance	14,866			14,866
Information Reports	31,476			31,476
Office Supplies	13,797			13,797
Paving	47,339			47,339
Engineering	55,000			55,000
Postage	18,519			18,519
Telephone	18,145			18,145
D.E.P. Withdrawal and Fees	5,066			5,066
Petty Cash	600			600
Hydrants	10,000			10,000
Backflow/Cross Connection	468			468
Accounting	1,800			1,800
Total Expenditures	3,932,084	0	1,279,032	5,211,116
Total Expenditures	3,932,004	U	1,279,032	3,211,110
REVENUES OVER (UNDER) EXPENDITURES	1,697,563	0	(1,279,032)	418,531
Capital Project Payments Made		(1,364,724)	1,364,724	Λ
Net Transfers Unrestricted to Capital Projects	(770,943)	770,943	1,304,724	0
Bonds Repaid	(1,096,212)	(500,000)	1 506 212	0
Bond Proceeds Received	(1,070,414)	1,095,000	1,596,212 (1,095,000)	0
Expenditures Capitalized	(202 506)	1,073,000		
Grace Expenditures Capitalized	(323,526)		323,526	284.052
= = = = = = = = = = = = = = = = = = = =	(402 110)	1 210	284,952	284,952
Net Change in Fund Balances	(493,118)	1,219	1,195,382	703,483
Not Desition Designation of West 11 / 1	(545.645)	1 271 040	00 640 100	22.460.241
Net Position - Beginning of Year as adjusted	(545,645)	1,371,848	22,643,138	23,469,341
Net Position - End of Year	(\$1,038,763)	\$1,373,067	\$23,838,520	\$24,172,824

WATER SUPPLY DISTRICT OF ACTON			Page 6
Governmental Funds - Balance Sheet			
June 30, 2019			
		Capital	Total
	General	Projects	Governmental
	Fund	Fund	Funds
ASSETS			
Cash and Cash Equivalents	\$2,520,016		\$2,520,016
Accounts Receivable	184,712		184,712
Less Reserve for Uncollectible	(184,712)		(184,712)
Due to Capital Projects Fund	(1,373,067)	\$1,373,067	0
Total Assets	\$1,146,949	\$1,373,067	\$2,520,016
LIABILITIES AND FUND BALANCES			
LIABILITIES			
FUND BALANCES			
Unappropriated Fund Balance (Free Cash)	\$870,376		\$870,376
Appropriated for Maintenance and Operations	168,234		
Restricted for Mitigation	108,339		108,339
Appropriated for Capital Projects		\$1,373,067	1,373,067
Total Fund Balances	1,146,949	1,373,067	2,520,016
Total Liabilities and Fund Balances	\$1,146,949	\$1,373,067	\$2,520,016

WATER SUPPLY DISTRICT OF ACTON			Page 7
Governmental Funds - Statement of Revenues, Expenditures and			
Changes in Fund Balances		Capital	Total
For the Year Ended June 30, 2019	General	Projects	Governmental
	Fund	Fund	Funds
REVENUES			
Water Rates and Services	\$5,358,607		\$5,358,607
Mitigation Fees	71,319		71,319
Interest Income	36,399		36,399
Total Revenues	5,466,325	0	5,466,325
EXPENDITURES			
Salaries and Wages	1,301,768		1,301,768
Other Post Employment Benefits Expense	100,000		100,000
Capital Project Payments Made		1,364,724	1,364,724
Bonds Interest and Fees	1,526,093	500,000	2,026,093
Lights, Power and Fuel	405,000	,	405,000
Health and Life Insurance	342,935		342,935
Maintenance and Operations	629,377		629,377
Middlesex Retirement	218,063		218,063
Meters	57,401		57,401
Insurance	81,253		81,253
Chemicals	75,000		75,000
Auto Maintenance and Fuel	50,000		50,000
Legal	40,000		40,000
Laboratory Analysis	50,000		50,000
Information Reports	31,476		31,476
Office Supplies	13,797		13,797
Audit	16,000		16,000
Education	15,203		15,203
Paving	47,339		47,339
Engineering	55,000		55,000
Postage	18,519		18,519
Telephone	18,145		18,145
D.E.P. Withdrawal and Fees	5,066		5,066
Computer Maintenance	14,866		14,866
Hydrants	10,000		10,000
Accounting	1,800		1,800
Petty Cash	600		600
Backflow/Cross Connection	468		468
			100,000
Mitigation Revolving Fund Expense Total Expenditures	100,000 5,225,169	1,864,724	7,089,893
Total Experientures	3,223,109	1,004,724	7,089,893
REVENUES OVER (UNDER) EXPENDITURES	241,156	(1,864,724)	(1,623,568)
TETETOES OFER (ONDER) EAT ENDITORES	271,130	(1,007,724)	(1,023,300)
OTHER FINANCING SOURCES (USES)			
Net Transfers from General Fund to Capital Projects	(770,943)	770,943	0
Bond Proceeds Received	(,,0,,,15)	1,095,000	1,095,000
Net Change in Fund Balances	(529,787)	1,219	(528,568)
a ver emaile in I and Buldilees	(32),101)	1,217	(320,300)
Fund Balances - Beginning of Year	1,676,736	1,371,848	3,048,584
Fund Balances - End of Year	\$1,146,949	\$1,373,067	\$2,520,016

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, 2019	
Total Governmental Fund Balances	\$2,520,016
Capital assets used in governmental activities are not financial resources,	40,757,332
and therefore are not reported in the funds.	10,737,332
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	184,712
Unbilled Accounts Receivable	1,391,933
The Statement of Activities includes accounts payable and debts,	
whereas in governmental funds these are not reported until paid.	
Accrued Compensated Absences	(246,000)
Accrued Interest Payable	(192,000)
Current Portion Long Term Debt	(1,108,844)
Notes Payable	(1,595,000)
Long Term Debt	(14,214,967)
Other Post Employment Benefits Liability	(48,311)
Net Pension Liability	(3,740,627)
Deferred Outflows - OPEB and Pension	676,607
Deferred Inflows - OPEB and Pension	(212,026)
Net Position of Governmental Activities	\$24,172,824
vet i osition of Governmental retryttes	Ψ21,172,021
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, 2019	
Net Change in Fund Balances - Total Governmental Funds	(\$528,568)
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	1,364,724
Bond Principal Received	(1,095,000)
Expenditures Capitalized	323,526
Grace Expenditures Capitalized	284,952
Bond Principal Repayment	1,596,212
Depreciation Expense	(1,290,221)
	, , , ,
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	163,322
Difference Cash versus Accrual Retirement Expense	(253,472)
Difference Cash versus Accrual OPEB Expense	147,819
Bond Premium Amortization	11,189
T / / A 1 A 1 1 1 / 2 T T	(4,000)
Interest Accrual Additional Expense	/1 - ^ ^ ^
Interest Accrual Additional Expense Compensated Absences Reported as Salaries and Wages	(17,000)

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, 2019			Variance
			Positive
	Budget	Actual	(Negative)
REVENUES			
Water Rates and Services	\$5,162,798	\$5,358,607	\$195,809
Interest Income	0	36,399	36,399
Total Revenues	5,162,798	5,395,006	232,208
EXPENDITURES			
Salaries and Wages	1,404,000	1,301,768	102,232
Bonds, Interest and Fees	1,614,128	1,526,093	88,035
Lights, Power and Fuel	405,000	405,000	0
Health and Life Insurance	385,000	342,935	42,065
Maintenance and Operations	385,500	377,840	7,660
Middlesex Retirement	222,170	218,063	4,107
Insurance	82,000	81,253	747
Chemicals	75,000	75,000	0
Reserve Fund	10,000	0	10,000
Laboratory Analysis	50,000	50,000	0
Auto Maintenance and Fuel	50,000	50,000	0
Information Reports	45,000	31,476	13,524
Telephone	20,000	18,145	1,855
Legal	40,000	40,000	0
Computer Maintenance	16,000	14,866	1,134
Office Supplies	20,000	13,797	6,203
Education	17,500	15,203	2,298
Audit	16,000	16,000	0
Paving	50,000	47,339	2,661
Engineering	55,000	55,000	0
Hydrants	10,000	10,000	0
Postage	20,000	18,519	1,481
D.E.P. Withdrawal and Fees	6,500	5,066	1,434
Cross Connection	1,000	468	532
Accounting	2,000	1,800	200
Meters	60,000	57,401	2,599
Petty Cash	1,000	600	400
Other Post Employment Benefits	100,000	100,000	0
Other 1 0st Employment Benefits	100,000	100,000	0
Total Expenditures	5,162,798	4,873,632	289,166
REVENUES OVER (UNDER) EXPENDITURES	0	521,374	521,374
OTHER FINANCING SOURCES (USES)			
Net Transfers to Capital Projects Fund		(770,943)	(770,943)
Transfers to Surplus Maintenance and Operations Fund		(200,000)	(200,000)
Net Change in Fund Balance	0	(449,569)	(449,569)
Budgetary Fund Balance (Free Cash) - Beginning of Year	1,319,945	1,319,945	0
Budgetary Fund Balance (Free Cash) - End of Year	\$1,319,945	\$870,376	(\$449,569)

WATER SUPPLY DISTRICT OF ACTON		Page 10
Statement of Fiduciary Net Position		
June 30, 2019		Other Post
	W R Grace	Employment
	Fund	Benefits Fund
ASSETS		
Current Assets	¢50.412	
Cash and Cash Equivalents	\$59,412	¢1 1 <i>(</i> 2 1 <i>(</i> 2
Investments	2,256,346	\$1,162,163
Total Assets	\$2,315,759	\$1,162,163
LIABILITIES		
NET POSITION		
Restricted for W.R Grace Activity	\$2,180,711	
Appropriated for Acton Center Water Treatment Plant	135,048	
Held in Trust for Other Post Employment Benefits		\$1,162,163
	Φ2 215 750	Φ1 1 C2 1 C2
Total Net Position	\$2,315,759	\$1,162,163
WATER SUPPLY DISTRICT OF ACTON		
Statement of Changes in Fiduciary Net Position		
For the Year Ended June 30, 2019		Other Post
	W R Grace	Employment
	Fund	Benefits Fund
ADDITIONS		
Employer Contributions		\$100,000
Dividend and Interest Income	\$64,532	26,565
Net Change in Fair Value of Investments	146,821	65,875
Total Additions	211,353	192,440
DEDUCTIONS		
Investment Management Fees	11,136	5,057
Expenditures Capitalized on Statement of Net Position	284,952	3,037
Total Deductions	296,089	5,057
	250,005	2,007
Change in Net Position	(84,735)	187,383
Net Position - Beginning of Year	2,400,494	974,780
Net Position - End of Year	\$2,315,759	\$1,162,163

#### WATER SUPPLY DISTRICT OF ACTON

Notes to the Basic Financial Statements - June 30, 2019

#### 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.

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

<u>Basis of Accounting and Presentation</u> - The District reports its financial statements in accordance with both the Governmental Accounting Standards Board requirements (accrual basis) and with its budgetary reporting (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: General Fund, Appropriated for Capital Projects, and Invested in Capital Assets Net of Related Debt.

<u>GOVERNMENTAL FUNDS</u> – 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 fund balances of the District are reported in two components: General Fund and the Capital Projects Fund.

<u>Budgets and Budgetary Accounting</u> - 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, the W.R. Grace Fiduciary Fund and other appropriations are also approved at the Annual Meeting. Any budget overrides or additional appropriations must be approved at a specially called District Meeting.

<u>Capital Assets</u> - 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.

<u>Compensated Absences</u> - 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.

#### NOTE 1 - GENERAL STATEMENT AND SIGNIFICANT ACCOUNTING POLICIES - continued

<u>District Funds</u> - The District categorizes its funds into governmental and fiduciary funds.

The following government wide and governmental funds are reported:

<u>Unappropriated Net Assets (accrual basis) and Fund Balance/Free Cash (cash basis)</u> - This primary operating fund is used for financial resources other than those that are required to be accounted for in another fund.

<u>Appropriated for Maintenance and Operations</u> – This fund reports the net assets that were appropriated for Maintenance and Operations expense, less amounts spent for this activity.

<u>Restricted for Mitigation</u> – 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.

<u>Appropriated for Capital Projects</u> - 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:

<u>W.R. Grace Fund</u> - 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.

<u>Other Post Employment Benefits (OPEB) Fund</u> – 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.

**Beginning Net Position Restatement** – The beginning (July 1, 2018) net position in the District's Government Wide Statement of Net Position has been restated for a change in accounting principle pursuant to adoption of Governmental Accountant Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions. The net position (deficit) was decreased from (\$810,074) to (\$545,645) as a result of this change.

#### 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, 2019, the District had the following investments:

Description	W.R. Grace Fiduciary Fund	OPEB Trust Fiduciary Fund
Cash and equivalents	\$122,117	\$159,616
Bonds (corporate & government)	1,193,141	457,286
Equities	941,088	315,114
Exchange Traded Funds and Other		230,147
Total	\$2,256,346	\$1,162,163

#### NOTE 4 - INTERFUND RECEIVABLES/PAYABLES

As of June 30, 2019, the General Fund owed \$1,373,067 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, 2019 were \$218,063.

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, 2019 were \$31,021 which is included in Salaries and Wages.

#### **NOTE 6 - CAPITAL ASSETS**

Capital asset activity for the District for the year ended June 30, 2019 consisted of the following:

Description	Balance	Additions	Disposals	Balance
	6/30/18			6/30/19
Land	\$1,578,725	\$1,095,000		\$2,673,725
Infrastructure	56,157,887	413,868		56,571,755
Buildings	1,191,763			1,191,763
Vehicles	668,591	21,981	(15,897)	674,675
Machinery & Equipment	2,960,145	57,401		3,017,545
Projects in Process	0	384,953		384,953
Total at Historical Cost	62,557,110			64,514,416
Less Accumulated Depreciation	22,482,760	1,290,221	(15,897)	23,757,084
Capital Assets, Net	\$40,074,350			\$40,757,332

#### **NOTE 7 – NOTES PAYABLE**

The District has utilized short term debt to finance construction costs of water mains at Indian Village. The District paid off the original \$1,000,000 of short term debt and borrowed a new short debt of \$500,000. The District also borrowed short term debt to acquire land. The District has indicated that it intends to refinance the debt to be paid off over four years. Since the debt has not been refinanced yet, the entire balance is reported as short term debt. The following is a summary of the changes in Notes Payable for the year ended June 30, 2019:

Description	Interest Rate	Due Date	Balance 6/30/18	Issued	(Retired)	Balance 6/30/19
Water Mains	1.3%	9/27/18	\$1,000,000		\$1,000,000	\$0
Water Mains	2.5%	9/27/19	0	\$500,000	+ -,000,000	500,000
585 Main Street Land	2.5%	9/27/19	0	\$1,095,000		1,095,000
Total Notes Payable			\$1,000,000			\$1,595,000

#### **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, 2019:

Description	Interest	Issue	Due	Balance	(Paid Down)	Balance
	Rate	Date	Date	6/30/18	(or Amortized)	6/30/19
North Acton Water	2.0% to	2/15/09	2/15/29	\$3,300,000	(\$300,000)	\$3,000,000
Treatment Plant	4.3%					
South Acton WTP,	2.0% to	8/15/13	8/15/23	1,275,000	(215,000)	1,060,000
Water Mains and Land	3.0%					
South Acton Water	2.0%	1/7/15	1/7/35	11,800,263	(581,212)	11,219,051
Treatment Plant						
Subtotal				16,375,263		15,279,051
Bond Premium		8/15/13	8/15/23	55,949	(11,189)	44,760
Total Bonds Payable				\$16,431,212		15,323,811

The annual debt service requirements for Bonds Payable outstanding at June 30, 2019 are as follows:

Fiscal Years	Principal	Interest	Total
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	1,157,177	266,450	1,423,627
2025-2029	4,953,083	917,587	5,870,670
2030-2034	3,844,993	339,691	4,184,684
2035	819,856	17,627	837,483
Total	\$15,279,051	\$2,915,672	\$18,194,723

Principal of \$1,596,212 plus interest and fees of \$429,881 for a total of \$2,026,093 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, 2019.

Interest and Fees of \$433,881 less amortization of bond premium of \$11,189 for a total of \$422,692 is reported on the Statement of Activities to reflect the accrual basis calculation of interest incurred during the year ended June 30, 2019, regardless of when the actual interest payments were made by the District.

The District has \$9,242,000 in authorized and unissued Bonds Payable. The bonds were authorized at the March 20, 2019 Annual Meeting for the construction of the Acton Center Water Treatment Plant.

#### **NOTE 9 – COMMITMENTS & CONTINGENCIES**

The District has ongoing commitments for the construction of capital projects, many of which are for water main construction or repair. The District has also appropriated \$9,242,000 for the construction of the Acton Center Water Treatment Plant. The District has authorized the treasurer to borrow the same sum to finance the construction. 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.

#### 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, 2018. 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, 2019 was \$218,063, which equaled its required contribution.

At June 30, 2019, the District reported a liability of \$3,740,627 for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2018, 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, 2018, the District's proportionate share was 0.239866%, which increased from its 0.237502% proportion measured at December 31, 2017.

For the year ended June 30, 2019, the District recognized a pension expense of \$471,535. At June 30, 2019, the District reported the following deferred outflows and inflows of resources related to pensions:

Deferred Outflows- difference between expected and actual experience	\$7,653
Deferred Outflows – net difference between projected and actual investment earnings on	
pension plan investments	166,733
Deferred Outflows- changes of assumptions	232,473
Deferred Outflows- changes in proportion and differences between employer contributions and	
proportionate share of contributions	146,109
Deferred Inflows- difference between expected and actual experience	(13,038)
Deferred Inflows- changes in proportion and differences between employer contributions and	
proportionate share of contributions	(137,090)
Net Deferred Outflows and Inflows of Resources	\$402,840

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

Year ending June 30,	
2020	\$166,904
2021	132,888
2022	46,315
2023	56,733
Total	\$402,840

#### 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, 2018:

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	As of July 1, 2018, 1 year remaining for 2002 ERI liability, 2 years remaining for 2003
period	ERI liability, 4 years remaining for 2010 ERI liability and 17 years 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 4.00% 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-	RP-2014 Blue Collar Employee Mortality Table projected generationally with Scale MP-
retirement	2017
Mortality rate healthy	RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally with
retiree	Scale MP-2017
Mortality rate disabled	RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year and
retiree	projected generationally with Scale MP-2017
Investment rate of return/	7.50%, net of pension plan investment expense, including inflation.
Discount rate	

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	Long Term Expected
	Real Rate of Return	Asset Allocation
Domestic equity	7.62%	17.00%
International developed markets equity	7.80%	14.90%
International emerging markets equity	9.31%	6.00%
Core fixed income	4.00%	13.00%
Value-added fixed income	7.58%	8.10%
Private equity	11.15%	12.10%
Real estate	6.59%	9.40%
Timberland	7.00%	4.10%
Hedge funds, PCS	6.83%	14.20%
Liquidating portfolios/Overlay	0.00%	1.20%
		100.00%

#### 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, 2018, 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	\$4,537,548	\$3,740,627	\$3,068,706

*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

#### Other Post-Employment Benefits (GASB 75)

GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. The Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. This Statement identifies the methods and assumptions that are required to be used to project benefit payments, discounted projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. All the following OPEB disclosures are based on a measurement date of June 30, 2019.

#### A. General Information about the OPEB Plan

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.

Benefits Provided – The District provides medical, prescription drug, dental and life insurance benefits to retirees and their covered dependents. All active employees who retire from the District and meet the eligibility criteria will receive these benefits. 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.

Plan Membership – At the November 2018 census date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	11
Active employees	15
Total participants	26

*B. Investments* – The OPEB trust fund assets consist of an asset portfolio invested under the prudent investor management policy approved by the Commonwealth of Massachusetts.

Rate of return – For the year ended June 30, 2019, the annual money-weighted rate of return on investments, net of investment expense, was 8.53%.

#### NOTE 11 - OTHER POST-EMPLOYMENT BENEFITS - continued

C. Actuarial Assumptions and Other Inputs – The net OPEB liability was determined by an actuarial valuation as of June 30, 2018, rolled forward to June 30, 2019, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Actuarial Cost Method	Entry Age Normal
Salary increases	4.00%
Investment rate of return	7.0%
Healthcare cost trend rates	6.9% to 7.7% for 2019, reducing to an ultimate
	rate of 4.5% in 2028 and later years.
Retirees' share of benefit-related costs	Range of 11% to 20%
Mortality rates	Determined pursuant to the RP-2014 Combined Annuitant
	Mortality Table for males and females. The Mortality
	Table reflects recent rates developed by the Society of
	Actuaries.

The long-term expected rate of return on OPEB plan investments was determined using best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) 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 target asset allocation as of June 30, 2018 are summarized in the following table.

Asset Class	Target Asset Allocation	Long Term Expected Real Rate of Return
Cash	6%	1.0%
Money Market Funds	5%	2.0%
Fixed Income	34%	6.5%
Equities	21%	8.5%
Exchange Traded Funds	32%	8.5%
Other Assets	2%	6.0%
Total	100.00%	

D. Discount Rate – The discount rate used to measure the net OPEB liability was 7.0%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate. Based on those assumptions, the OPEB plan fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.

E. Net OPEB Liability - The components of the net OPEB liability, measured as of June 30, 2019, were as follows:

Total OPEB liability	\$1,210,474
Plan fiduciary net position	1,162,163
Net OPEB liability	\$48,311
Plan fiduciary net position as a % of the total OPEB liability	96.01%

#### NOTE 11 – OTHER POST-EMPLOYMENT BENEFITS - continued

#### F. Changes in the Net OPEB Liability

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	Lidomty	1 OSITION	Liaomty
Balances beginning of year June 30, 2018	\$1,170,622	\$974,781	\$195,841
Changes for the year:			
Service cost	19,350		19,350
Interest on total OPEB liability	78,986		78,986
Contributions – employer		100,000	(100,000)
Net investment income		82,326	(82,326)
Differences between expected and actual experience		12,767	(12,767)
Benefit payments	(84,498)		(84,498)
Administrative expenses		(5,057)	5,057
Other changes	26,014	(2,654)	28,668
Net changes	39,852	187,382	(147,530)
Balances end of year June 30, 2019	\$1,210,474	\$1,162,163	\$48,311

Update procedures were used to roll the amounts from the June 30, 2018 valuation date. Accordingly, there are no changes of benefit, assumptions or experience.

G. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate – The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percentage-point higher or one percentage-point lower than the current discount rate:

	1% Increase to	Current Discount	1% Decrease to
	8.0%	Rate 7.0%	6.0%
Net OPEB liability	(\$73,150)	\$48,311	\$194,268

H. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates – The following presents the net OPEB liability, as well as what the net OPEB liability would be if it as calculated using healthcare cost trend rates that are one percentage-point higher or one percentage-point lower than the current healthcare cost trend rates:

	1% Increase	Current Healthcare	1% Decrease
		Cost Trend Rates	
Net OPEB liability	\$215,110	\$48,311	(\$87,819)

I. OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB –For the year ended June 30, 2019, the District recognized a net OPEB expense of (\$47,819). At June 30, 2019, the District reported deferred outflows and inflows of resources related to OPEB from the following sources described below.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$24,042	
Changes of assumptions and other inputs	99,597	\$50,925
Difference between projected and actual OPEB investment earnings		10,973
Totals	\$123,639	\$61,898

#### NOTE 11 - OTHER POST-EMPLOYMENT BENEFITS - continued

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

Year ending June 30,	Deferred Outflows	Deferred Inflows
	of Resources	of Resources
2020	\$27,303	\$14,344
2021	27,303	14,344
2022	27,303	14,344
2023	27,303	14,091
2024	13,778	4,775
2025	651	
Totals	\$123,639	\$61,898

#### Other Post-Employment Benefits (GASB 74)

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB), replaces the requirements of Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. This applies if a trust fund has been established to fund future OPEB costs. In fiscal year 2011, the District established an OPEB Trust Fund to provide funding for future employee health care costs. All the following OPEB disclosures are based on a measurement date of June 30, 2019.

A. Investments – The OPEB trust fund assets consist of an asset portfolio invested under the prudent investor management policy approved by the Commonwealth of Massachusetts.

\*Rate of return – For the year ended June 30, 2019, the annual money-weighted rate of return on investments, net of

Rate of return – For the year ended June 30, 2019, the annual money-weighted rate of return on investments, net of investment expense, was 8.53%.

*B. Actuarial Assumptions and Other Inputs* –The total OPEB liability was determined by an actuarial valuation as of June 30, 2018. The actuarial assumptions used in this valuation (including mortality rates, the long-term expected rate of return and discount rate) are the same assumptions outlined in GASB 75 disclosures above.

C. Net OPEB Liability - The components of the net OPEB liability, measured as of June 30, 2019, were as follows:

Total OPEB liability	\$1,210,474
Plan fiduciary net position	1,162,163
Net OPEB liability	\$48,311
Plan fiduciary net position as a % of the total OPEB liability	96.01%

D. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate – The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percentage-point higher or one percentage-point lower than the current discount rate:

	1% Increase to	Current Discount	1% Decrease to
	8.0%	Rate 7.0%	6.0%
Net OPEB liability	(\$73,150)	\$48,311	\$194,268

E. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates – The following presents the net OPEB liability, as well as what the net OPEB liability would be if it as calculated using healthcare cost trend rates that are one percentage-point higher or one percentage-point lower than the current healthcare cost trend rates:

	1% Increase	Current Healthcare Cost Trend Rates	1% Decrease
Net OPEB liability	\$215,110	\$48,311	(\$87,819)

#### WATER SUPPLY DISTRICT OF ACTON

Required Supplemental Information and Notes to Required Supplemental Information - June 30, 2019

#### PENSION PLAN SCHEDULES

Schedule of the District's Proportionate Share of the Net Pension Liability of Middlesex County Retirement System (MCRS)	12/31/18	12/31/17	12/31/16	12/31/15	12/31/14
District's proportion of the MCRS Net Pension Liability	\$3,740,627	\$3,370,594	\$3,319,310	\$2,784,648	\$2,562,079
District's percentage share of the MCRS Net Pension Liability	0.239866%	0.237502%	0.234277%	0.215861%	0.213273%
District's covered employee payroll	\$1,188,771	\$1,141,452	\$1,136,133	\$1,013,745	\$974,755
District's Net Pension Liability as a % of covered payroll	314.66%	295.29%	292.16%	274.69%	262.84%
MCRS fiduciary net position as a % of its total pension liability	46.40%	49.27%	45.49%	46.13%	47.65%

Schedule of the District's Contributions to the Middlesex County Retirement System	Year Ended 6/30/19	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	1/1/2018	1/1/2016	1/1/2016	1/1/2014
Actuarially determined contribution	\$218,063	\$203,213	\$177,725	\$165,791	\$133,367
Contributions made	\$218,063	\$203,213	\$177,725	\$165,791	\$133,367
Contribution deficiency (excess)					
Covered employee payroll	\$1,188,771	\$1,141,452	\$1,136,133	\$1,013,745	\$974,755
Contributions as a % of covered employee payroll	18.34%	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 inflation rate was reduced from 3.50% to 3.25%.

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, 2019

#### OTHER POST-EMPLOYMENT BENEFITS SCHEDULES

Schedule of Changes in the District's Net OPEB Liability and Related Ratios	6/30/19	6/30/18
Total OPEB Liability		
Service Cost	\$19,350	\$18,605
Interest on Total OPEB Liability	78,986	73,230
Differences Between Expected & Actual Experience	, i	33,670
Changes of Assumptions and Other Inputs		18,838
Benefit Payments	(84,498)	(80,182)
Other Changes	26,014	20,229
Net Change in Total OPEB Liability	39,852	84,390
Total OPEB Liability Beginning of Year	1,170,622	1,086,232
Total OPEB Liability End of Year	\$1,210,474	\$1,170,622
Plan Fiduciary Net Position		
Employer Contributions	\$100,000	\$100,000
Net Investment Income	82,326	56,999
Difference Between Expected & Actual Experience	12,767	
Administrative Expenses	(5,057)	(4,348)
Other Changes	(2,654)	2,238
Net Change in Plan Fiduciary Net Position	187,382	154,889
Plan Fiduciary Net Position Beginning of Year	974,781	819,891
Plan Fiduciary Net Position End of Year	\$1,162,163	\$974,781
Net OPEB Liability	\$48,311	\$195,841
Plan Net Position as a % of the Total OPEB Liability	96.01%	83.27%
Covered Employee Payroll	\$1,230,570	\$1,191,141
Net OPEB Liability as a % of Covered Employee Payroll	3.93%	16.44%

Schedule of Investment Returns	6/30/19	6/30/18	
Annual money-weighted rate of return, net of investment			
expenses	8.53%	6.31%	

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 the District's financial statements for summary of significant actuarial methods and assumptions.

WATER SUPPLY DISTRICT OF	FACTON				Page 23
Supplemental Schedule of Government	ental Fund Bal	ance - Capital Pro	ojects Activity		
For the Year Ended June 30, 2019					
	Beginning	Transfers	Debt	Payments	Ending
	Balance	(To) From	Borrowed	Made	Balance
	06/30/18	General Fund	(Paid)		06/30/19
585 Main Street 18	\$0		\$1,095,000	\$1,095,000	\$0
Clean Rehab Wells 18	9,471		Ψ1,023,000	9,471	0
Clean Rehab Wells 19	0	\$90,000		61,576	28,424
Eminent Domain Main Street	19,519	Ψ20,000		01,570	19,519
Engineering NAWTP 12	532				532
Flagg Hill Tank Repairs 12	3,504				3,504
Indian Village Debt Repayment	0	500,000			500,000
Leak Detection 17	2,650	(1,810)		840	0
Marshall Well Replacement	54	(1,010)		0.10	54
Master Plan Update 17	10,054	(505)		9,549	0
Media Replacement 18	5,815	(0.00)		5,815	0
Replace NAWTP Filter Cart	85,000	85,000		- ,,,,,	170,000
Replace Old Mains 17	14,716	22,000		14,716	0
Replace Old Mains 18	30,000			17,213	12,787
Replace Old Mains 19	0	30,000		,	30,000
Residuals Management 16	10,075				10,075
Residuals Management 17	50,000				50,000
Storage Tank Repairs 16	129,310	45,000			174,310
Storage Tank Upgrades 13	55,000	,			55,000
Vehicles 16	160	(160)			0
Vehicles 17	1,476	(1,476)			0
Vehicles 18	32,087	(10,106)		21,981	0
Water Main Emergency 16	4,307			4,307	0
Water Main Emergency 17	30,000			18,627	11,373
Water Main Emergency 19	0	35,000		,	35,000
Water Main Improvements 17	378,118	,		105,629	272,489
Water Main Improvements 18	500,000		(500,000)	,	0
Total General Fund	\$1,371,848	\$770,943	\$595,000	\$1,364,724	\$1,373,067
Conant Pilot 2018	\$300,000	(\$80,000)		\$220,000	\$0
Engineering - ACWTP	3300,000	200,000		64,952	135,048
Total Grace Fund	\$300,000	\$120,000		,	
Total Grace Fund	\$300,000	\$120,000		\$284,952	\$135,048

# Minutes of March 20, 2019 Annual Meeting

Held at Acton Public Safety Facility 371 Main Street Acton, Massachusetts 7:00 PM

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

Unanimously approved.

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

Unanimously approved.

**Article 4.** To see what sums of money 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, 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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

**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.

Unanimously approved.

# **Water District Organization**

#### **ELECTED OFFICIALS**

**Commissioners** Stephen C. Stuntz Term Expires 2020

Erika Amir-Lin Term Expires 2021 Barry Rosen Term Expires 2022

**District Clerk** William T. Stanford Term Expires 2020

**District Moderator** Richard P. O'Brien Term Expires 2021

#### **APPOINTED OFFICIALS**

Finance Committee Charles Bradley Term Expires 2020

William Guthlein Term Expires 2021
David A. Butler Term Expires 2022

William Mullin, Associate Member

**District Manager** Christopher D. Allen Contract Expires 2020

**Treasurer/Collector** Mary J. Bates Term Expires 2020

**District Counsel** Mary Bassett Term Expires 2020

**Distripct Assistant Clerk** Helen F. Argento Term Expires 2020

Commissioners Secretary Lynn Protasowicki Term Expires 2020

Auditor Maureen Waters Mara, CPA, MST Term Expires 2020

Water Land Management

Advisory Committee Paul Malchodi

Charles Olmstead

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.

James Trippier

Keith Kupfer

Matthew Walsh

Lucas Peterson

Josh Richard

Assistant Foreman

Operator/Distribution

Operator/Distribution

Operator/Distribution

Operator/Distribution

Operator/Distribution



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.