



STANDING ADVISORY COMMITTEE AGENDA

Tuesday, December 3, 2019 at 3:00 p.m.
Truckee Meadows Water Authority
Independence Meeting Room
1355 Capital Boulevard, Reno, NV 89502

NOTES:

1. The announcement of this meeting has been posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), Reno City Hall (1 E. First St., Reno), Sparks City Hall (431 Prater Way, Sparks), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe County Courthouse (75 Court St., Reno), Washoe County Central Library (301 South Center St., Reno), Washoe County Administration (1001 East Ninth St., Reno), at <http://www.tmtwa.com>, and State of Nevada Public Notice Website, <https://notice.nv.gov/>.
2. In accordance with NRS 241.020, this agenda closes three working days prior to the meeting. We are pleased to make reasonable accommodations for persons who are disabled and wish to attend meetings. If you require special arrangements for the meeting, please call 834-8002 at least 24 hours before the meeting date.
3. Staff reports and supporting material for the meeting are available at TMWA and on the TMWA website at <http://www.tmtwa.com/meeting/> or you can contact Sonia Folsom at (775) 835-8002. Supporting material is made available to the general public in accordance with NRS 241.020(6).
4. The Committee may elect to combine agenda items, consider agenda items out of order, remove agenda items, or delay discussion on agenda items. Arrive at the meeting at the posted time to hear item(s) of interest.
5. Asterisks (*) denote non-action items.
6. Public comment is limited to three minutes and is allowed during the public comment periods. The public may sign-up to speak during the public comment period or on a specific agenda item by completing a "Request to Speak" card and submitting it to the clerk. In addition to the public comment periods, the Chairman has the discretion to allow public comment on any agenda item, including any item on which action is to be taken.
7. In the event the Chairman and Vice-Chairman are absent, the remaining SAC members may elect a temporary presiding officer to preside over the meeting until the Chairman or Vice-Chairman are present (**Standing Item of Possible Action**).

1. Roll call*
2. Public comment — limited to no more than three minutes per speaker*
3. Approval of the agenda (**For Possible Action**)
4. Approval of the minutes of October 1, 2019 meeting (**For Possible Action**)
5. Presentation of TMWA's Fiscal Year 2019 Customer Satisfaction Study — Andy Gebhardt*
6. Presentation on the Comprehensive Annual Financial Report for Fiscal Year ended June 30, 2019 — Matt Bowman*
7. Presentation of Financial Performance for First Quarter Fiscal Year 2020 — Matt Bowman*
8. Presentation on Interim Legislative Session activities — John Zimmerman*

9. Presentation of analysis of TMWA Rule 7 water demand estimates and discussion and possible action and recommendation to the Board on potential future changes to Rule 7 demand estimates — John Zimmerman and Laine Christman **(For Possible Action)**
10. Update on Verdi and Stonegate developments — Scott Estes and John Enloe*
11. Update on Standing Advisory Committee Membership — Sonia Folsom*
12. Presentation of applications to fill the Commercial Customer Class Alternate vacancy and other possible vacancies, and possible recommendation to the Board — Sonia Folsom **(For Possible Action)**
13. Presentation and possible approval of 2020 meeting schedule — Sonia Folsom **(For Possible Action)**
14. Election of Chair and Vice Chair for 2020 — Mat Trachok **(For Possible Action)**
15. Discussion and possible direction to staff regarding agenda items for future meetings **(For Possible Action)**
16. Staff Items* (Unless otherwise listed with a topic description, this portion of the agenda is limited to announcements)
17. Committee Items* (Unless otherwise listed with a topic description, this portion of the agenda is limited to announcements)
18. Public Comment — limited to no more than three minutes per speaker*
19. Adjournment **(For Possible Action)**



STANDING ADVISORY COMMITTEE

DRAFT MINUTES

October 1, 2019

The Standing Advisory Committee (SAC) met at Truckee Meadows Water Authority (TMWA) in the Independence Room, 1355 Capital Blvd., Reno, Nevada. Chair McGuire called the meeting to order at 3:01 p.m.

1. ROLL CALL

Primary Members and Voting Alternates Present: Harry Culbert, Jordan Hastings, Colin Hayes, Bill Hughes, Neil McGuire, Ken McNeil, Mike Schulewitch, and Jerry Wager.

Alternates Present: Ken Becker

Primary Members and Alternates Absent: Fred Arndt, Robert Chambers, Bruce Gescheider, Susan Hoog, Karl Katt, Don Kowitz, Carol Litster, Scot Munns, Jonnie Pullman, Dale Sanderson, Ann Silver, Fred Schmidt and Jim Smith.

Staff Present: Matt Bowman, Robert Charpentier, John Enloe, Scott Estes, Sonia Folsom, Mark Foree, Andy Gebhardt, Joe Petrelli, Danny Rotter, Michele Sullivan, Shawn Stoddard, Sandra Tozi, John Zimmerman, and Legal Counsel Mat Trachok (McDonald Carano).

2. PUBLIC COMMENT

There was no public comment.

3. APPROVAL OF THE AGENDA

Upon motion duly made by Member Culbert, and seconded by Member Wager, and carried by unanimous consent of the members present, the Committee approved the agenda.

4. APPROVAL OF THE MINUTES OF THE JUNE 4, 2019 MEETING

Upon motion duly made by Member McNeil and seconded by Member Hughes, and carried by unanimous consent of the members present, the Committee approved the June 4, 2019 meeting minutes.

5. WATER SUPPLY UPDATE

Bill Hauck, TMWA Senior Hydrologist, informed the Committee that the 2018-2019 snowpack was 200% of normal; all reservoirs have filled and/or spilled; TMWA conducted precautionary drawdowns at both Lake Tahoe and Lahontan Reservoir; Lake Tahoe is one foot below the natural rim; and the Truckee River Reservoir System storage is approximately at 80% capacity, which is enough reservoir storage for the next 2 years.

6. PRESENTATION OF PRELIMINARY, UNAUDITED FINANCIAL PERFORMANCE FOR FISCAL YEAR ENDED JUNE 30, 2019

Matt Bowman, TMWA Financial Controller, presented the preliminary findings and reported there were no major surprises in fiscal year 2019. Operating revenue was consistent with budget (\$0.2m higher due to \$0.8m more in water sales, offset by lower hydroelectric and other operating sales); investment earnings were better than budget (\$4.4m actual vs. budget of \$2.8m); capital contributions were \$25.5m higher than the budget of \$16.7m due to non-cash developer infrastructure contributions (approximately \$19.1m); hydroelectric revenue came in less than budget due to the Fleish hydropower plant closing for much of FY 2019 due to work on the spill structure and tail races; total operating expenses were \$0.9m less than budget; salaries and wages increased due to increase in head count (7% head count increase in preparation for 22 expected retirements occurring over the 3-5 years) and step increases; and non-operating expenses were down \$4.1m from budget due to higher investment earnings. Water sales were \$6.3m higher than in 2018 due to the 3% rate increase in May 2018; employee benefits were lower than in 2018 due to Governmental Accounting Standards Board (GASB) changes in Other Post-Employment Benefit (OPEB) and pensions in FY 2018. TMWA's total cash on hand is \$197.8m (\$152.9m unrestricted cash and \$44.9m restricted cash to pay for scheduled bond principal and interest payments).

At this time Committee members inquired about whether there was an increase in cost to TMWA due to the increase in service area (only the cost of maintaining additional assets in the expanded service area); where the new connection fees are shown on the documents presented to the Committee (the fees are shown under facility charges, but the new fees are not reflected in FY19); the impact of the increase in staff in FY19 (increase is due to employee overlap in anticipation of upcoming retirements and apprentice turnover internally); if there were any new incoming grants (there are \$1.9M in grant funds in the budget in FY20, a portion of which had been planned for receipt in FY19 but have been delayed); and whether TMWA has insurance (yes, general liability of \$300M, as well as property insurance).

7. PRESENTATION OF PRELIMINARY FUNDING PLAN FOR FISCAL YEARS 2020 THROUGH 2024, DISCUSSION AND POSSIBLE RECOMMENDATION TO THE BOARD

Ms. Sullivan provided a historical summary regarding the previous rate increases of 3% in May 2017 and 2018, with the first 2.5% rate increase being deferred in May 2019. TMWA deferred principal payments on Senior Lien debt in the 2016 Bond Refunding to allow for time to bring the rates in line with cost of service. Annual principal payments averaging \$11 million annually will resume in 2020,

and should be covered by recurring revenue, which is mainly water sales. Fitch ratings recently upgraded TMWA to AA- from A+, with an improved outlook of Positive from Stable, noting that TMWA's rates are low relative to median household income and there is room for inflation-like rate increases over the next few years. Staff recommends implementing the third phase rate increase of 2.5% in May 2020, which is in line with the Consumer Price Index (CPI).

The Committee discussed implementing the full 2.5% increase in May 2020 since TMWA did not have an increase in May 2019 and rate increases would still be under the CPI for two years, and would allow the debt service coverage (DSC) ratio to be kept in good standing. The Committee also discussed revisiting the two planned rate increases in 2021 and 2022 depending upon the state of the economy and CPI. The DSC ratio did not calculate the principal reductions that were deferred in 2017, which is why they were high. The DSC ratio will drop back down to 1.68 (closer to the 1.5 area, which represents the TMWA Board's policy goal) and include the \$11M formal payments of TMWA's debt. TMWA did not have a rate increase when it merged with Washoe County and South Truckee Meadows General Improvement District (STMGID) in 2015.

Mark Foree, TMWA General Manager, explained that water sales went down with the 10% reduction in 2015 and we have not seen a rebound in water sales to pre-2015 levels. Also, staff will be presenting this funding plan to the Board at its October meeting, and it will not go into effect until May 2020 and so there is time to provide formal action at a later date if so desired.

Upon motion duly made by Member Schulewitsch and seconded by Member McNeil, and carried by unanimous consent of the members present, the Committee recommended that TMWA staff present the funding plan to the Board as presented to the Committee.

8. PRESENTATION ON LARGE CAPITAL IMPROVEMENT PROJECTS

Danny Rotter, TMWA Engineering Manager, presented on a few high level capital improvement projects (CIP) TMWA has been working on recently, including: the Fleish Hydroelectric project, which included flume reconstruction, overflow/spill structure replacement and tailrace replacement, and was completed in June 2019; Glendale Diversion repairs and hardening, which were commenced in fall 2019 due to the damages caused by the 2017 flood and to ensure future damages caused by flooding are minimized or nonexistent; the Chalk Bluff additional backup generator project to ensure backup power for the water treatment plant; the Kings Row 1 Booster Pump Station project to replace the existing underground pump station with a new above ground pump station on TMWA property, which is expected to be completed in April 2020; and the Mt. Rose Water Treatment Plant (WTP) project, which will provide 4 million gallons per day (MGD) and will use Whites Creek water, with the potential to use Thomas Creek water in the future, and which was held up for most of February 2019 due to weather, which has delayed the project to be completed in summer/fall 2020.

At this time Committee members inquired how much hydro revenue is generated annually (about \$3.5m in a good year); if TMWA is selling the wood removed from the Fleish Hydroelectric project (Q&D construction was responsible for disposing of the material that was removed); if Mt. Rose WTP

operating costs were going to be greater than those of Chalk Bluff WTP (yes, because it has lower capacity, but it will be operated remotely which will help to reduce costs, and electricity infrastructure installation costs were reduced because electricity was put in with the subdivision and staff coordinated with development to install conduits ahead of time); and what percentage of creek water supply would be used by the Mt. Rose WTP (about 50% at peak flow, but it will always take in less than 100% of creek water supply, so there will always be water in the creek for habitat and water users downstream).

9. PRESENTATION OF BOARD DECISION REGARDING WATER SYSTEM FACILITY FEES AND BUSINESS SERVICE FEES

Scott Estes, TMWA Director of Engineering, informed the Committee that the Board approved increasing both the Water System Facility and Business Services Fees, which increases went into effect October 1; that the connection fees vary between areas due to different facility requirements; and that connection fees increased more (on a percentage basis) for multi-family than for single family residential. New business fees are collected upfront for review and inspection, but developers can defer facility fees for single family residential projects until the meter is set, but not for multi-family or commercial customers. For any development plans that were approved by September 30, the old fees were locked in.

10. STATUS UPDATE ON THE SALE OF FARAD PROPERTY

John Zimmerman, TMWA Water Resources Manager, provided a brief overview of the two-year history since the Board first heard staff present on this item in October 2017 (just before TMWA gained title to the property from NV Energy). Mr. Zimmerman informed the Committee that staff was directed to work with the Truckee Donner Land Trust (TDLT) to potentially transfer the property to TDLT, but that TDLT expressed concerns about liability and seemed uninterested in taking title to the property. The Board then directed staff to offer the property for sale. Staff received only two bids, the higher of which was \$63,000 by Mr. Bill Black, which he increased to \$127,500 after the August Board meeting. Staff will be bringing back this item to the Board at its October meeting for consideration.

11. DISCUSSION AND POSSIBLE DIRECTION TO STAFF REGARDING AGENDA ITEMS FOR FUTURE MEETINGS

Next meeting:

Upon motion duly made by Member Wager and seconded by Member Hayes, and carried by unanimous consent of the members present, the Committee approved the following agenda items for future meetings.

1. Presentation on first quarter FY20 financial performance
2. Presentation on Rule 7 demand estimates changes
3. Presentation on customer satisfaction survey results

4. Update on Verdi and Stonegate developments
5. Presentation on Interim Legislative Session activities
6. Discussion on Standing Advisory Committee membership

Upon motion duly made by Member Schulewitch and seconded by Member Hughes, and carried by unanimous consent of the members present, the Committee approved cancelling the November 5th meeting.

12. STAFF ITEMS

Mr. Foree informed the Committee that TMWA (due to Mr. Hauck's efforts) was awarded a grant of \$900,000 by the Bureau of Reclamation. Mr. Hauck stated the grant is for TMWA to conduct a climate change impact study on the region to work with the Federal Water Master and Army Corp of Engineers to consider changing winter time flood control conditions and drought storage since run-off is occurring earlier than the current 1985 manual stipulates that TMWA can capture run-off.

13. COMMITTEE ITEMS

There were no committee items.

14. PUBLIC COMMENT

There was no public comment.

15. ADJOURNMENT

With no further items for discussion, Chair McGuire adjourned the meeting at 4:16 p.m.

Approved by the Standing Advisory Committee in session on _____.

Sonia Folsom, Recording Secretary



Customer Satisfaction Study Fiscal Year 2019



Survey Purpose & Methodology

Fiscal Year 2019

Purpose:

- To assess TMWA customers' overall level of satisfaction and attitudes toward water-related issues including quality, sufficiency, and security
- To identify significant differences between customer groups
- To identify trends since 2002 with 18 annual studies to date

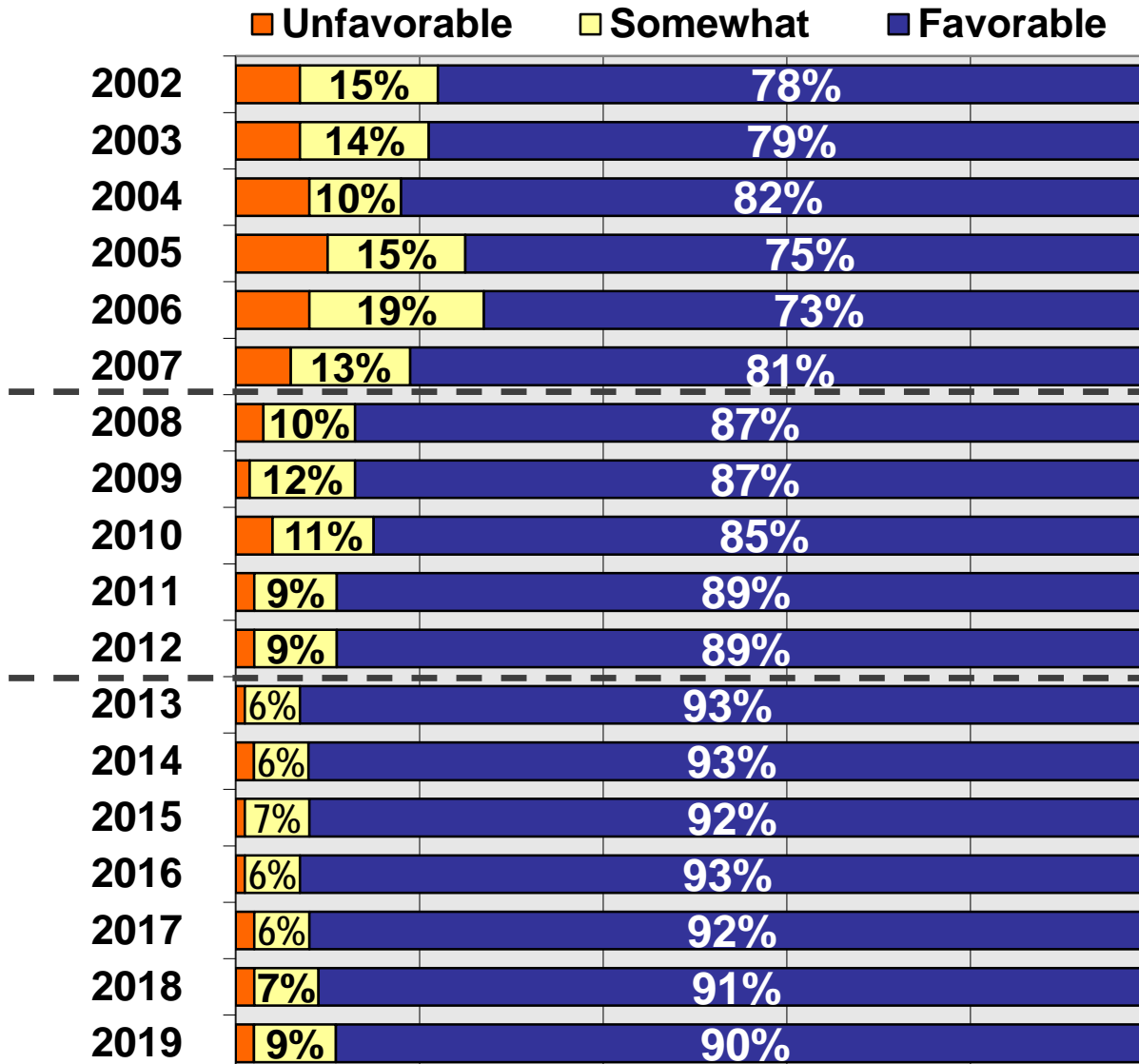


2019 Methodology:

- Telephone surveys managed by InfoSearch International
- In the field from July 2018 to June 2019; interviews averaged 8-10 minutes
- Sample of **500**: 400 Residential and 100 Commercial Customers
- Total sample, at 95% confidence level, $\pm 4.4\%$ confidence interval

Overall Customer Satisfaction

2002 - 2019

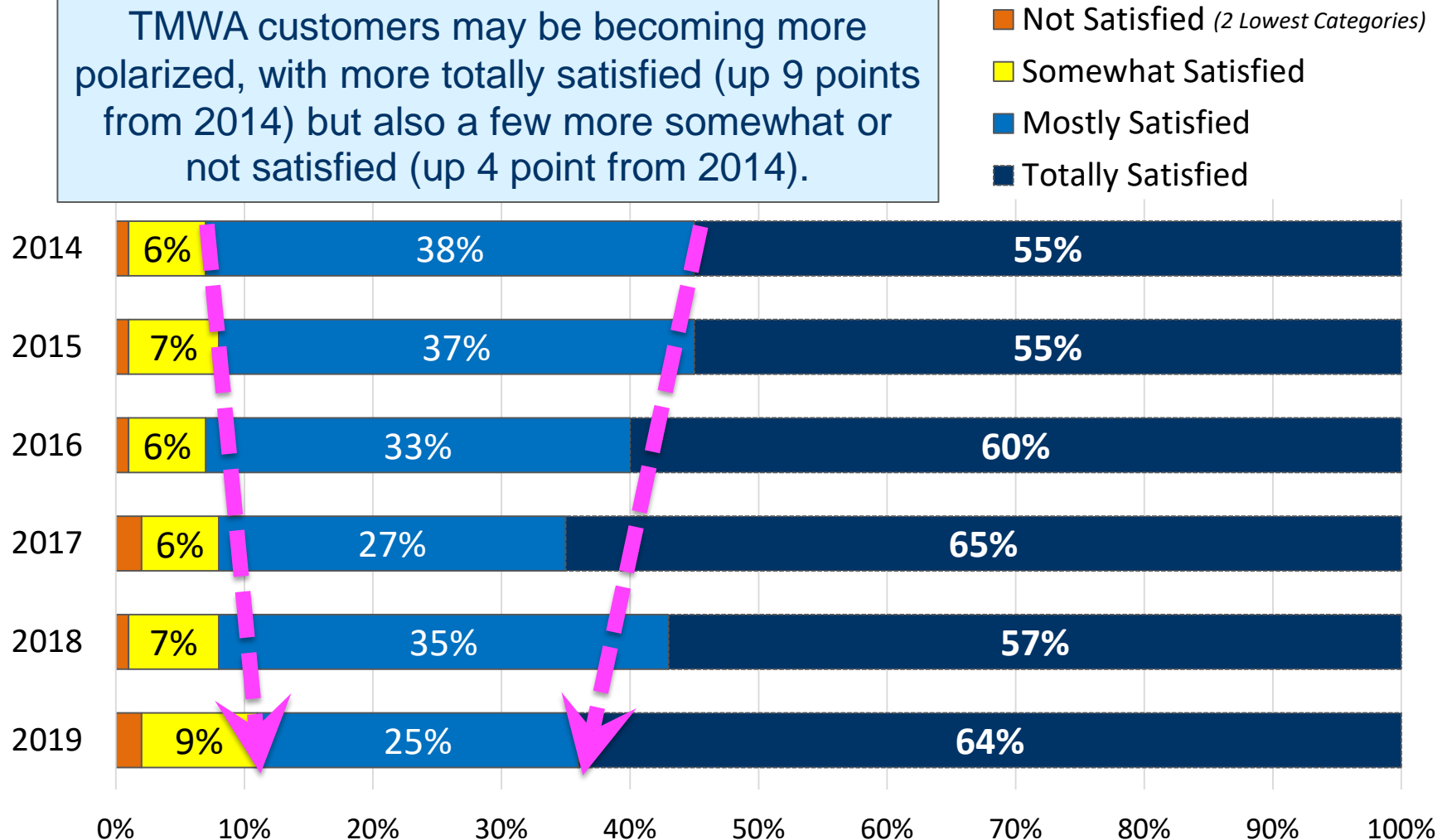


- From 2002 to 2007, overall satisfaction ratings ranged from 73-82% favorable.
- From 2008 to 2012, overall satisfaction ratings ranged from 85-89% favorable.
- For the last seven years, overall satisfaction ratings have been in the 90-93% range.

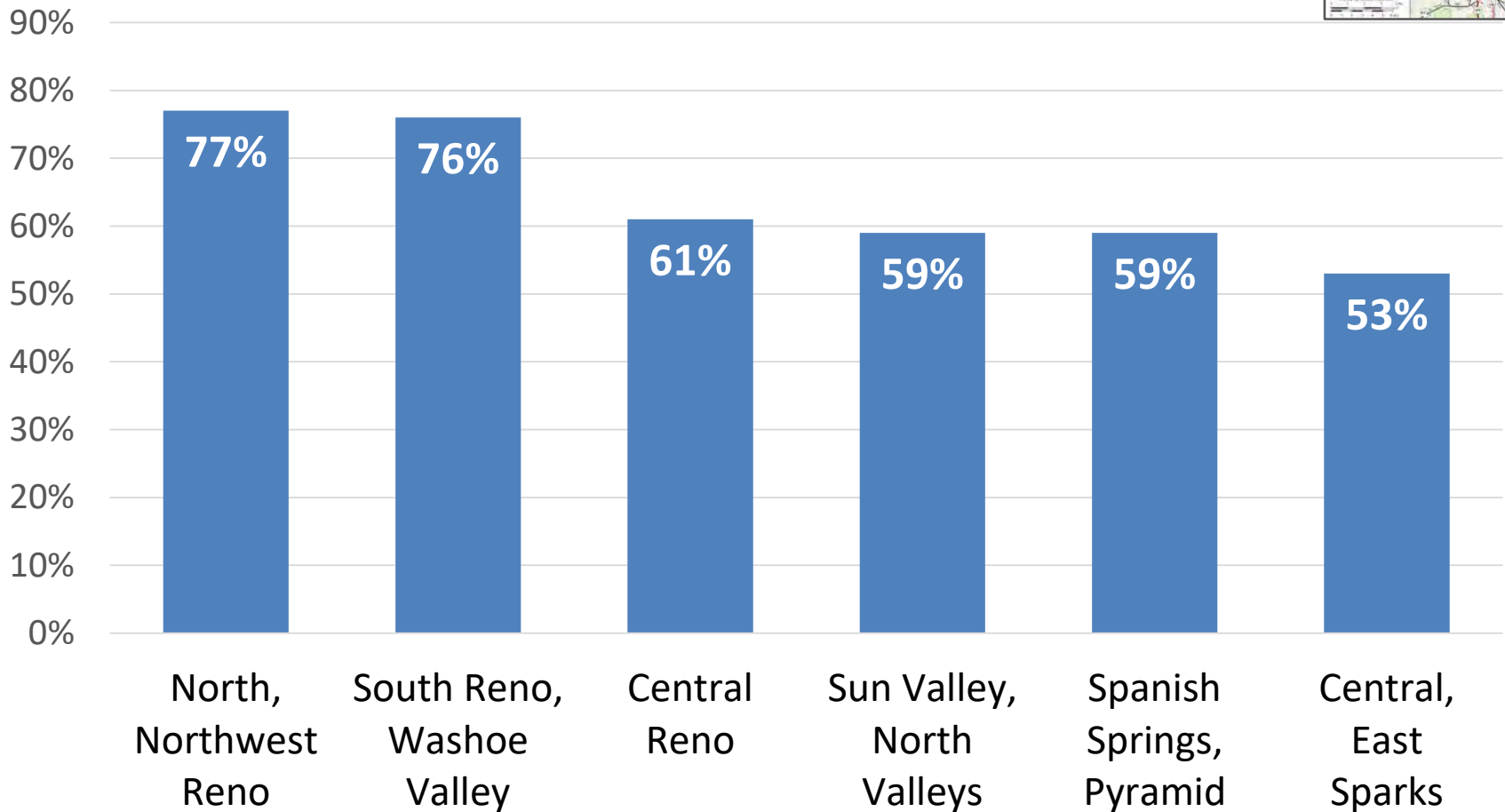
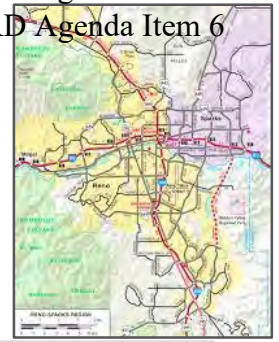


A Potential Developing Trend Regarding Overall Satisfaction – 2014 - 2019

TMWA customers may be becoming more polarized, with more totally satisfied (up 9 points from 2014) but also a few more somewhat or not satisfied (up 4 point from 2014).



Percentage Who are “Totally Satisfied” – By Geographic Area in 2019

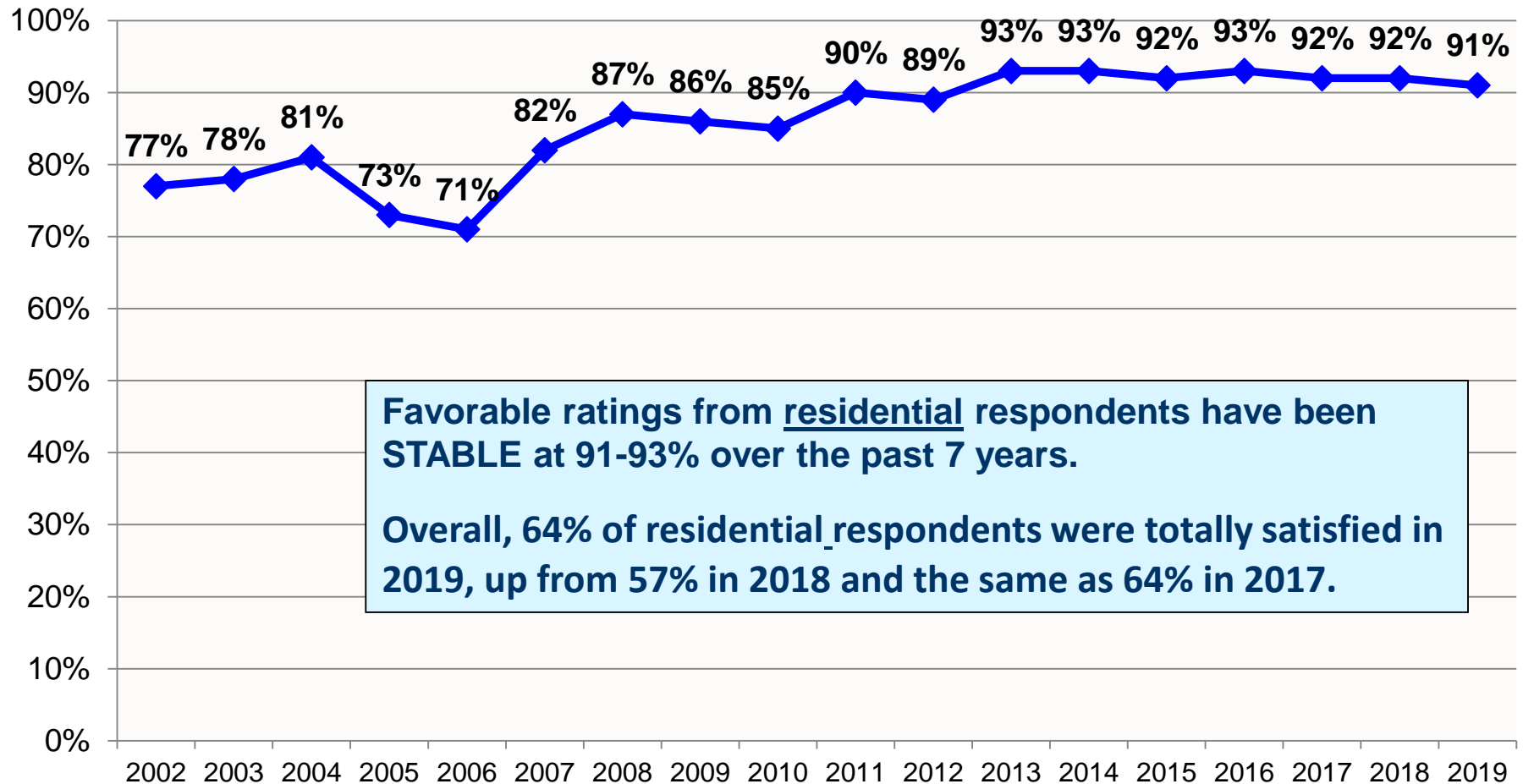


Overall Customer Satisfaction with Example Comments - 2019

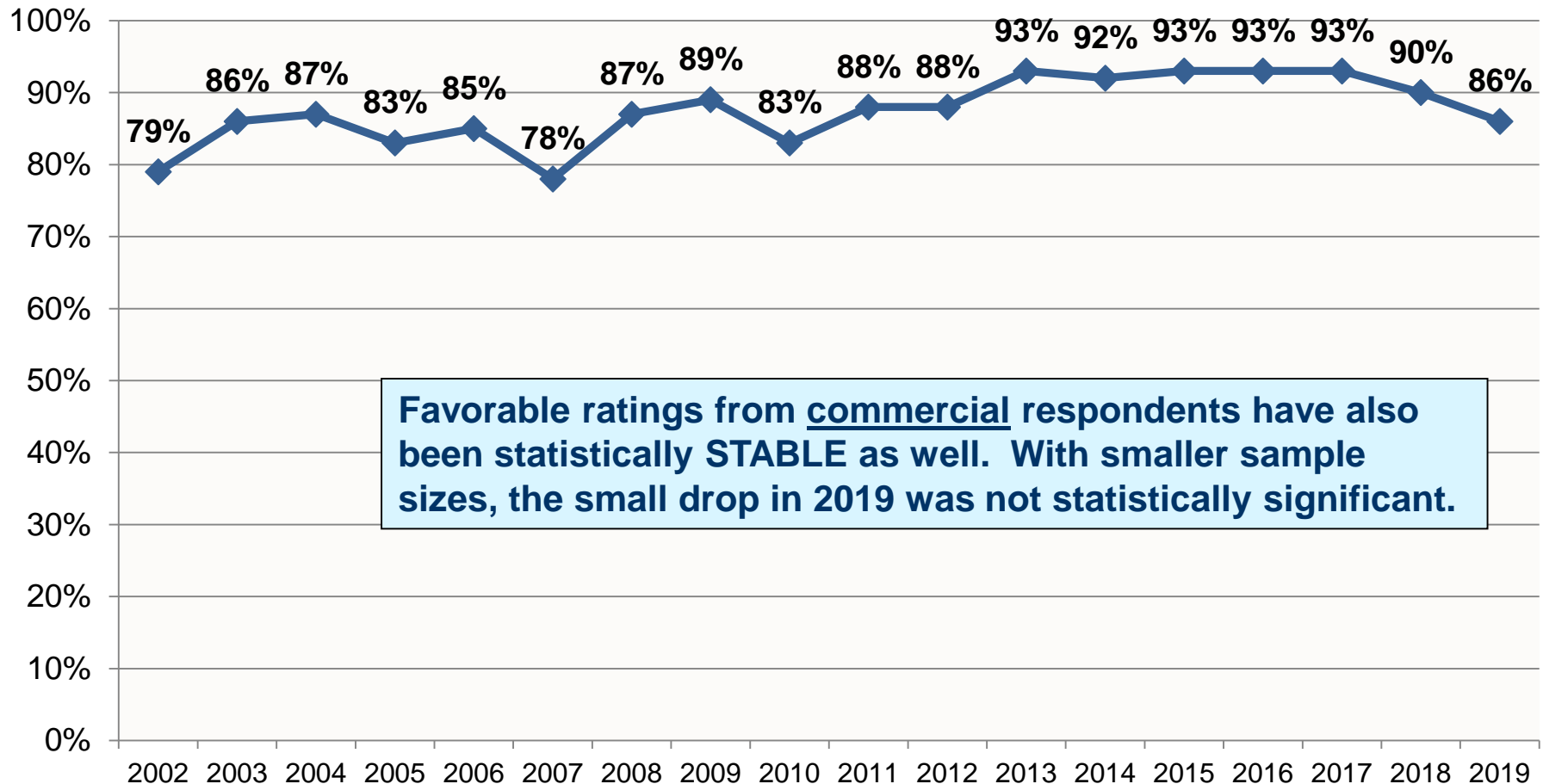


- **Totally Satisfied (64%)**
 - *“I really appreciate all the help TMWA gave me.”*
 - *“Keep providing water that tastes good.”*
 - *“They are doing a great job and they provide good service.”*
- **Mostly Satisfied (25%)**
 - *“A government entity doing an above average job.”*
 - *“Would like to have someone come out and test our water quality.”*
 - *“Would rather get notified of issues on the website, rather than in the bill or news.”*
- **Somewhat Satisfied (9%)**
 - *“Communicate more through email.”*
 - *“I have problems with the taste of the water sometimes.”*
- **Not Very Satisfied or Not at All Satisfied (2% Combined)**
 - *“Do more community meetings.”*
 - *“I will have to buy a water compressor to get my water pressure up.”*

Overall Satisfaction Among Residential Respondents 2002 - 2019



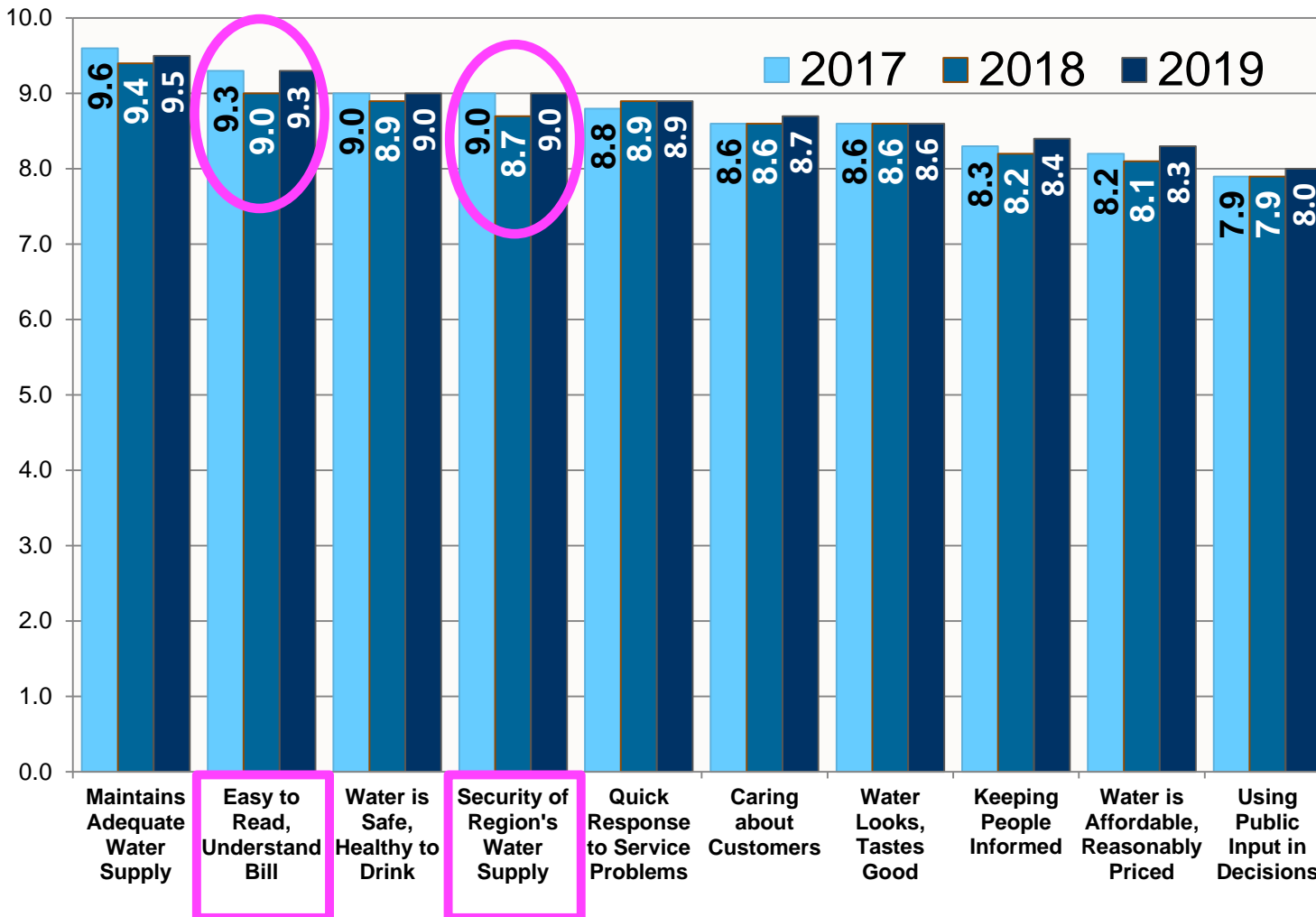
Overall Satisfaction Among Commercial Respondents 2002 - 2019





TMWA's Performance – 2017-2019

Scale from 0 “Very Poor Job” to 10 “Excellent Job”



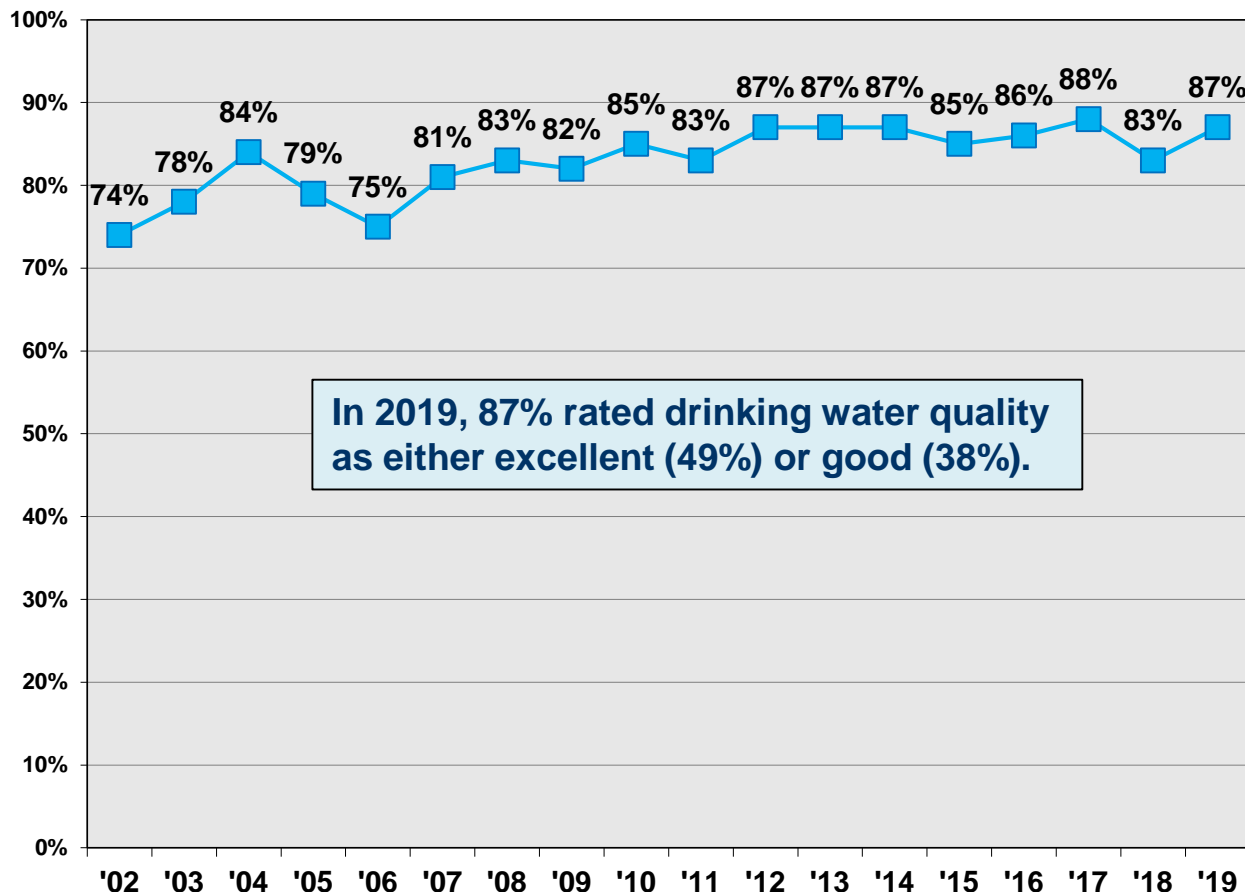
In 2019:

- All 10 performance measures had a mean of 8.0 or higher on a 0-to-10 scale.
- The highest rated item was maintaining an adequate water supply (9.5), while the lowest was using public input in decisions (8.0).
- Residential and commercial respondents provided statistically similar ratings for all 10 performance measures.
- Ratings dropped then rebounded up significantly for ease of reading the water bill and security of the water supply.



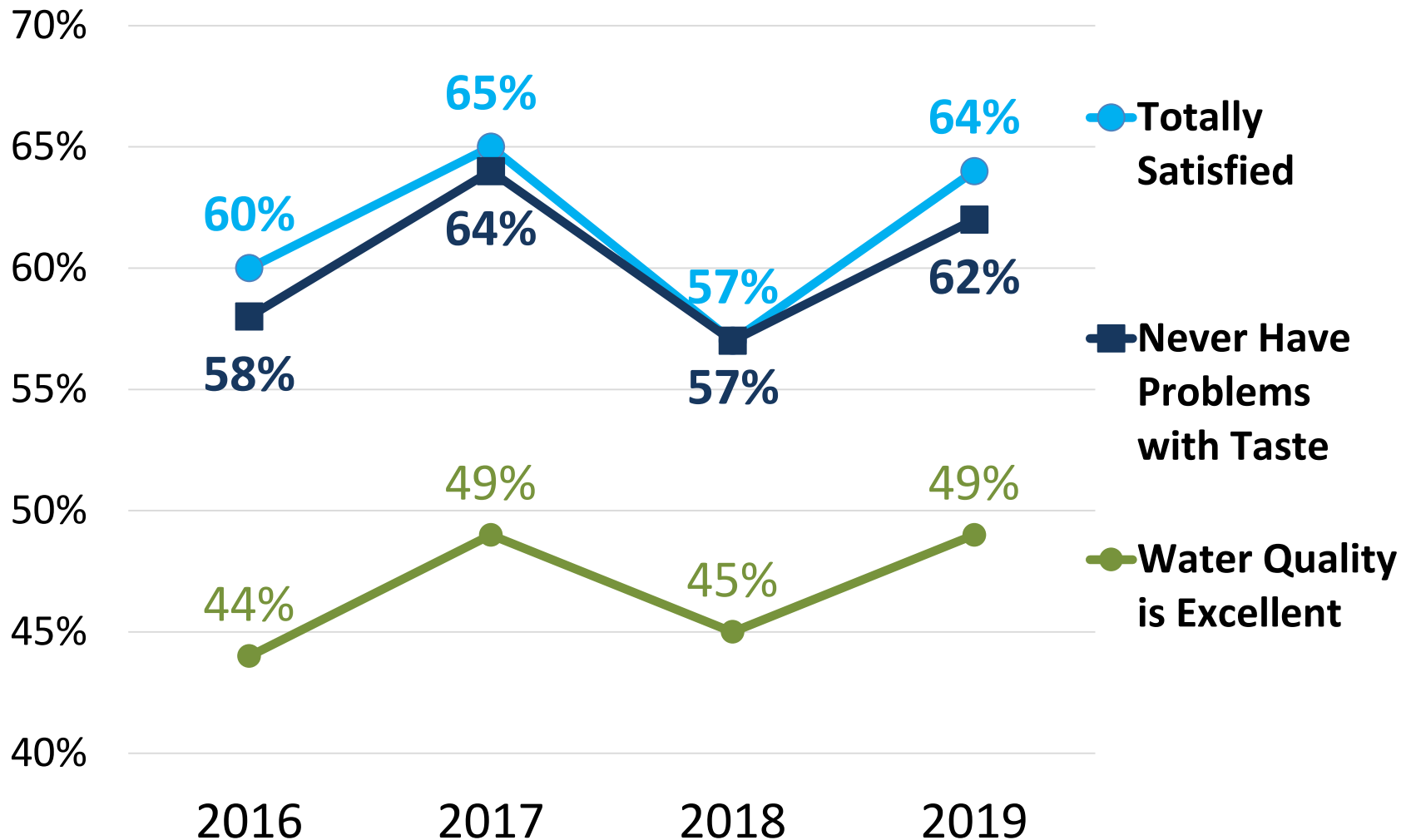
Quality of Drinking Water 2002 - 2019

Respondents Who Rated Drinking Water
Quality as Excellent or Good



- **UNCHANGED:** Nearly all respondents (94%) noted no difference in water quality as compared to one year ago; 4% said it was better and 2% said it was worse.
- **UNCHANGED:** Three out of five (60%) reported that the overall quality of tap water was better than that of other cities, while just 4% said it was worse.
- **REBOUNDED UP:** The percentage who reported “never” having problems with the taste (62%) rebounded up from 57% in 2018 and was similar to 64% in 2017.

Relationships between Satisfaction and Perceptions of Water Quality



Use of Water Filter in Home for Tap Water (New Question in 2019)



- In 2019, 36% of residential respondents indicated that they use a water filter in their home for tap water.

- Those who lived alone and/or who were age 65 or older were less likely to have a water filter.

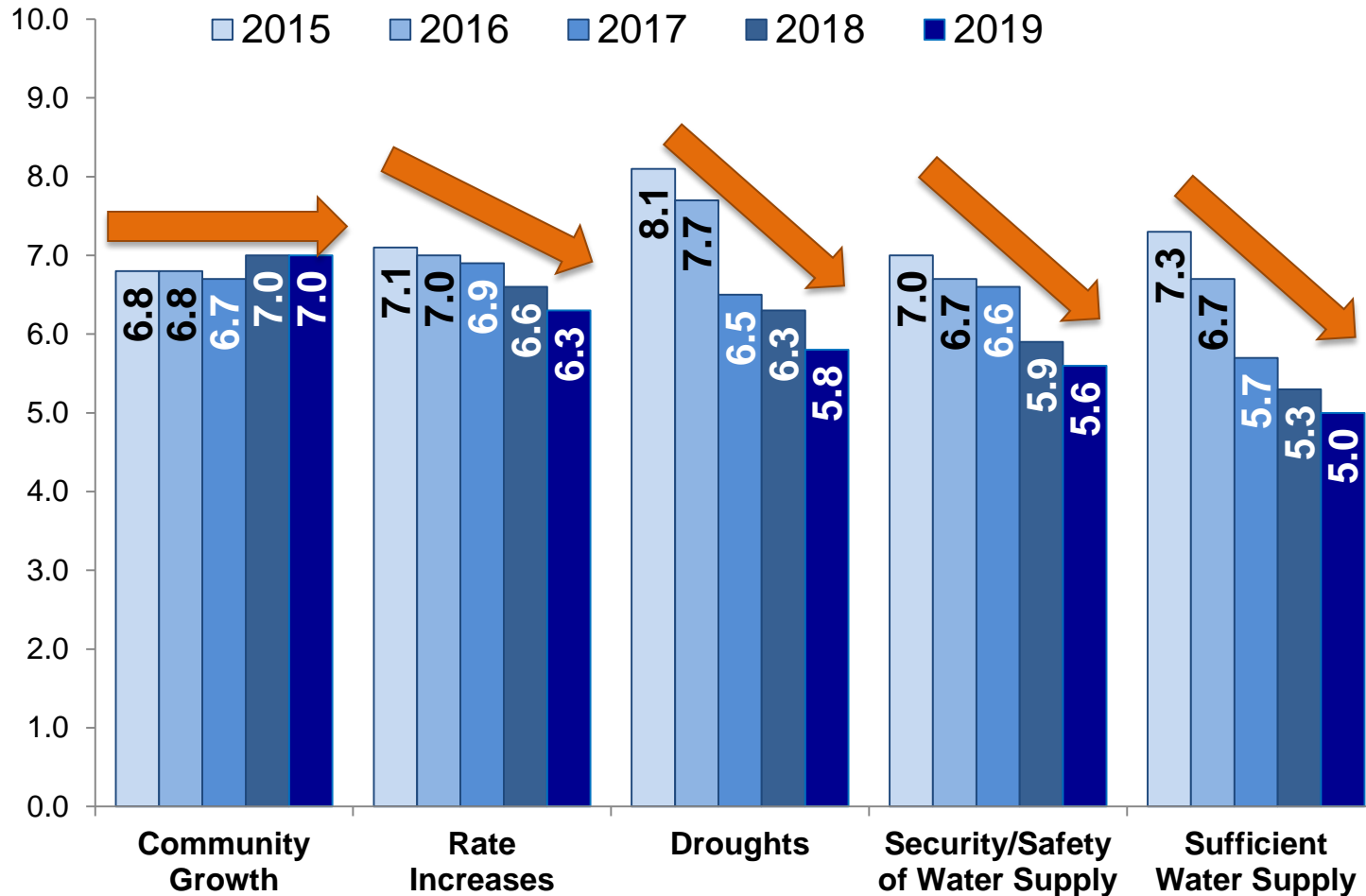
- Respondents with older homes were not more likely to have a water filter.

- The top reason for using a filter was for the taste of the water.

Reason	%	Example Comments
Taste, Flavor	29%	<i>"Tastes better," "Because of the taste."</i>
Filter in Fridge	19%	<i>"Fridge line," "It's on our fridge."</i>
Chemicals, Residue	18%	<i>"Clear out impurities," "Get Chlorine out."</i>
Health, Safety,	13%	<i>"Pregnant," "Can never be too careful."</i>
Availability	6%	<i>"Came with the house," "A present."</i>
Old House/Pipes	3%	<i>"It's an old house," "Don't trust pipes."</i>
Other Reasons	12%	<i>"Hard water," "For wife," "To keep cold."</i>

Trends for Concerns – 2015-2019

Scale from 0 “Not at all Concerned” to 10 “Very Concerned”



- Concern about community growth has remained moderately high, while levels of concern about the other four measures have trended down.

- Four of these measure were at their lowest level measured to date since 2002!

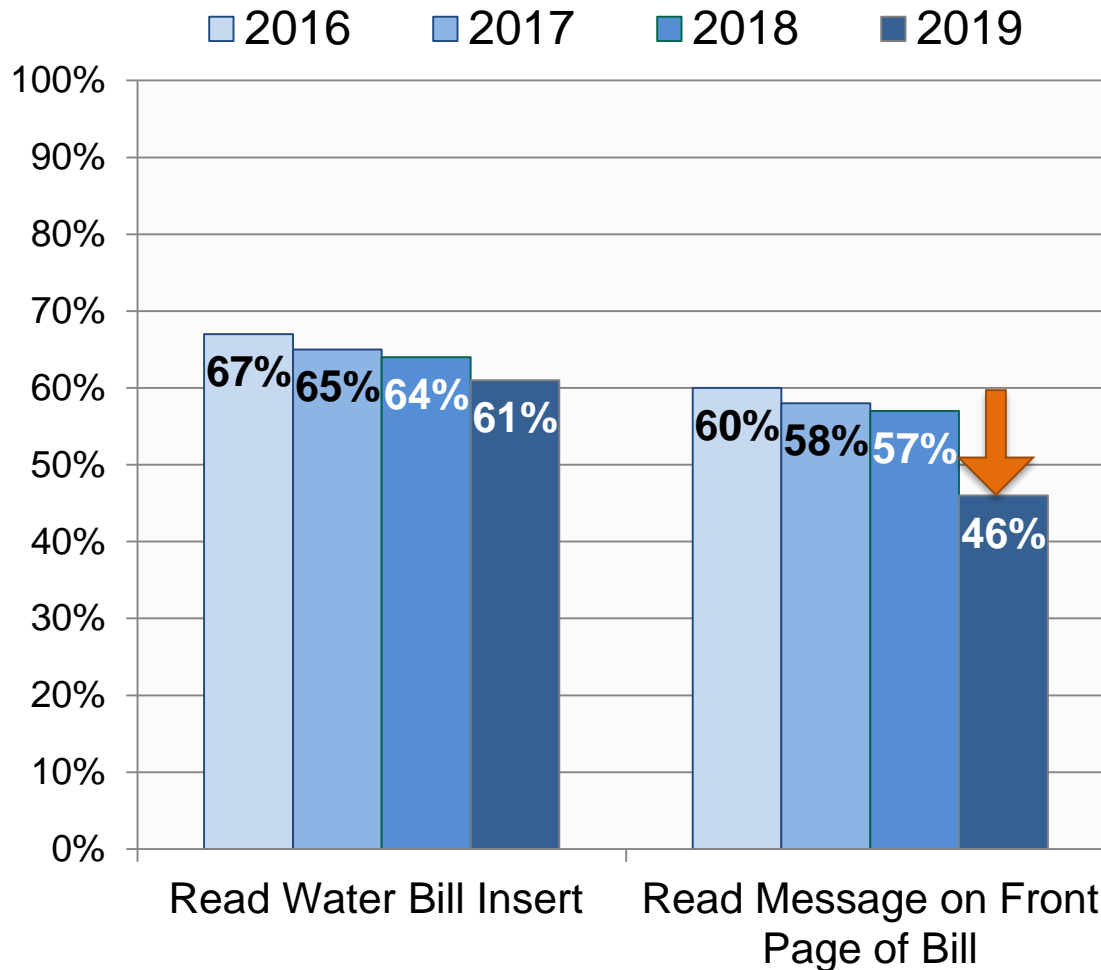
2019 = Lowest
Level Measured

2019 = Lowest
Level Measured

2019 = Lowest
Level Measured

2019 = Lowest
Level Measured

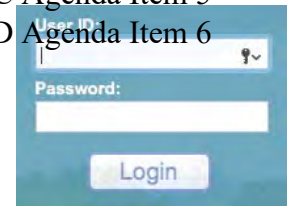
Attention to Written Messages in the Water Bill – 2016-2019



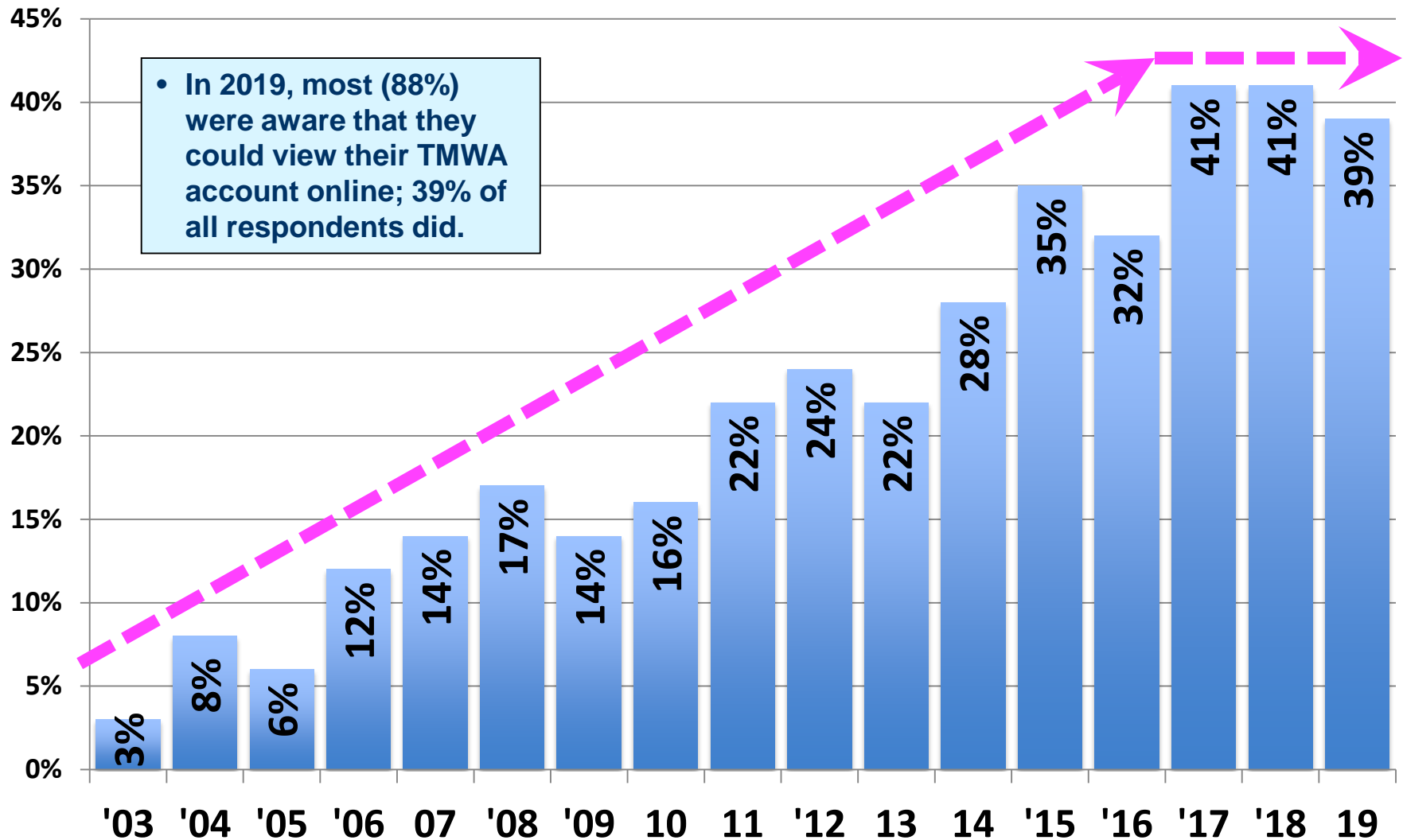
- Consistently, slightly more people read the water bill insert than read the message on the front page of the bill.

- The percentage who said they read the front page message dropped from 57% last year to 46% in 2019; this is the lowest percentage measured to date.

- In 2019, 57% of respondents age 65 or older read the front page message, as compared to 40% of those age 45-64, and 38% of those under age 45.



Accessed Online TMWA Account 2003-2019

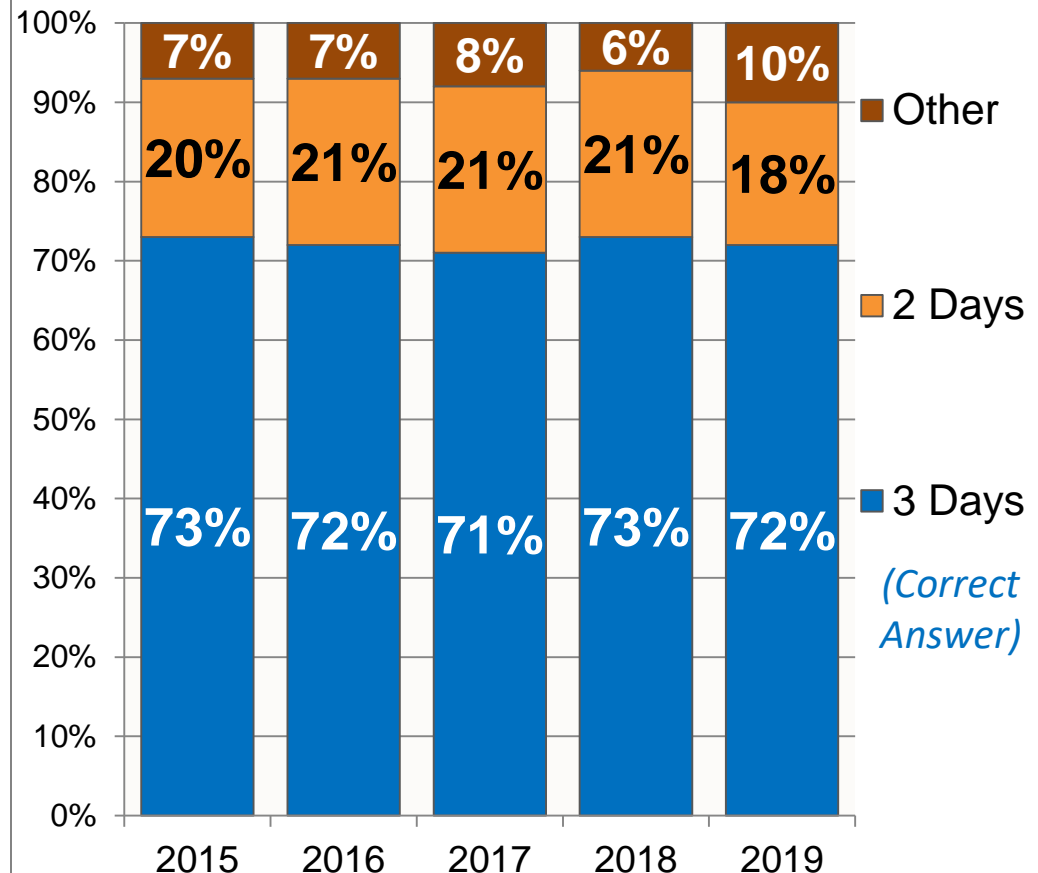


Assigned Day Watering Awareness 2015 - 2019



- In 2019, 90% of all respondents were aware of Assigned Day Watering.
- Respondents with less than 5 years of residency were less likely to be aware of Assigned Day Watering (79%) than were those with longer residency (92%).
- In 2019, two out of three (64%) had a lawn that they water.
- Among those who were aware of Assigned Day Watering and had a lawn, 72% reported that they could water 3 days a week, similar to 71%-73% over the prior four years.
- In 2019, residential respondents with a lawn reported that, on average, one-third (34%) of their yard was lawn, the same percentage as in 2018.

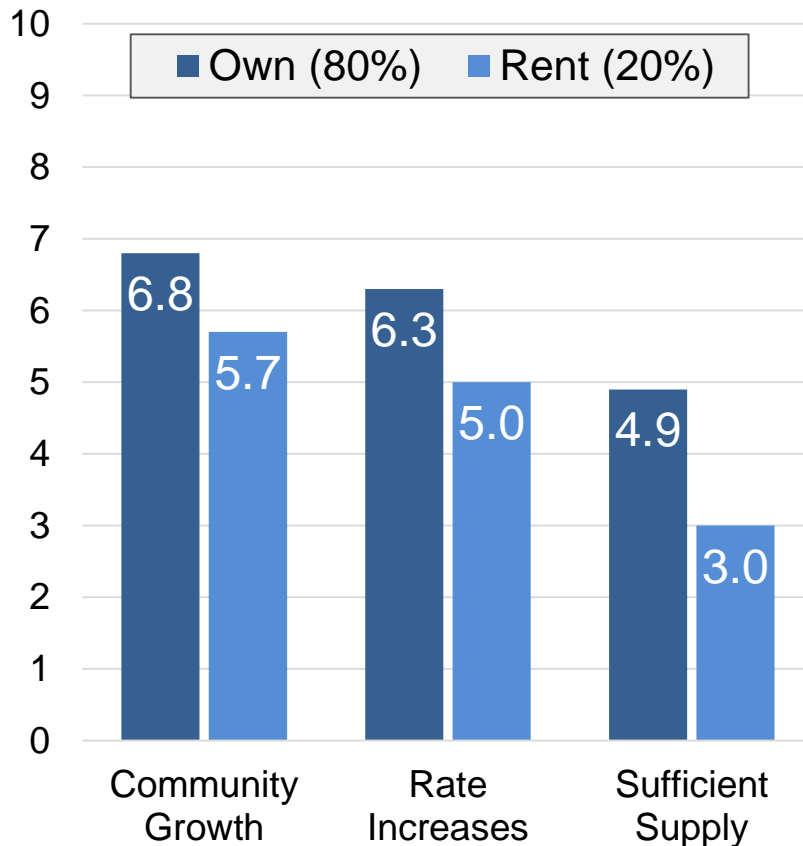
Number of Days Per Week Customers Can Water Their Lawn



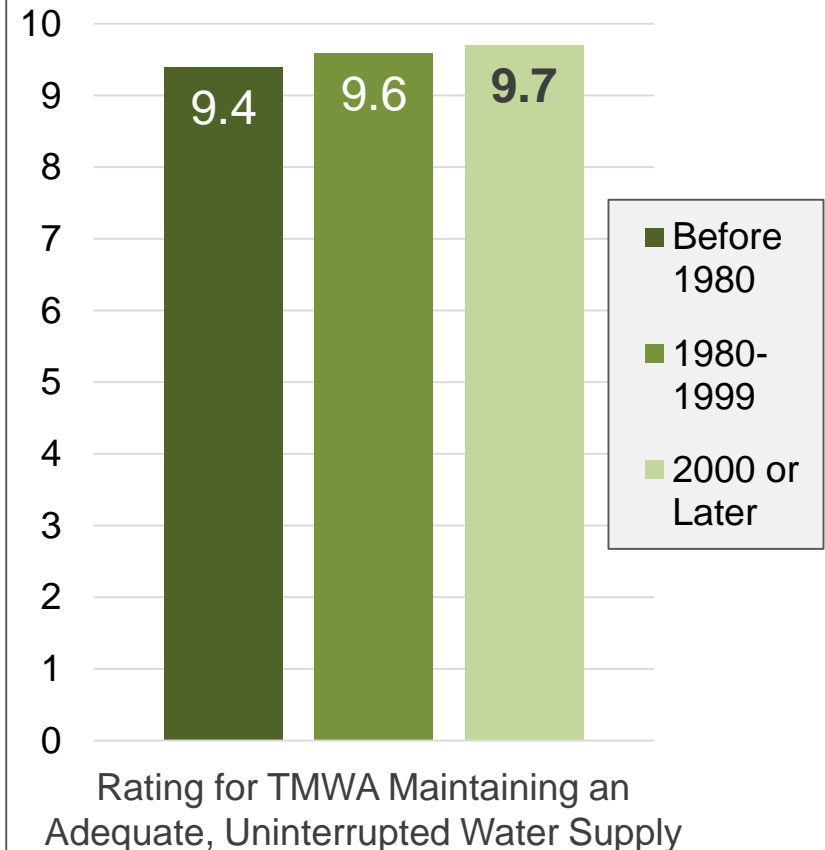


Factors Based on Home Ownership and Age of the Home

Differences in Level of Concern Based on Home Ownership



The One and Only Difference Based on Age of the Home





2019 Summary: Connection to TMWA's Goals and Communication Initiatives

TMWA's Goals for Customer Satisfaction	
<u>Residential:</u> Achieve at least 71% favorable ratings; 82%-86% is "excellent" and over 86% is "outstanding"	In 2019, 91% favorable – " Outstanding. " Rating remained stable with a similar score to last year (92%).
<u>Commercial:</u> Achieve at least 77% favorable ratings; 88%-90% is "excellent" and over 90% is "outstanding"	In 2019, 86% favorable. Rating remained stable with a similar score to last year (90%).

Communication Initiatives	
Increase awareness of <u>value</u>	Stable. In 2019, 75% rated value for price as excellent or good; this score has been 74% or 75% since 2016.
Increase awareness of <u>water quality</u>	Stable. In 2019, 87% rated drinking water quality as either excellent or good, similar to 83% last year and 88% in 2017.
Increase awareness of opportunities for <u>public input</u> in decision making	Stable. In 2019, the mean rating for using public input was 8.0; this rating has been statistically stable since 2012.



Customer Satisfaction Study Fiscal Year 2019





To: TMWA Board of Directors
Thru: Mark Foree, General Manager
From: Matt Bowman, Financial Controller
Date: November 25, 2019
Subject: **Presentation on the Comprehensive Annual Financial Report for Fiscal Year ended June 30, 2019**

Recommendation

TMWA staff will present the Comprehensive Annual Financial Report (CAFR) to the Board for the fiscal year ended June 30, 2019 for approval by resolution and request direction to the Chief Financial Officer to forward the appropriate documentation to the State of Nevada Department of Taxation within the prescribed deadline.

Summary

Pursuant to NRS 354.624, TMWA is required to conclude an audit before November 30, 2019, and submit the audit report to the governing body not later than six months after the close of the fiscal year for which the audit is conducted.

The CAFR for the fiscal year ended June 30, 2019, includes the letter of transmittal, management's discussion and analysis, the audit report, the financial statements, required supplementary information, statistical schedules and the compliance section.

The financial statements include the Statement of Net Position (Balance Sheet) of June 30, 2019 and June 30, 2018, related Statements of Revenues, Expenses and Changes in Net Position (Income Statement) and the Statement of Cash Flows.

Audit Results

Of particular importance to TMWA is the auditor's opinion on the financial statements that TMWA was in compliance with *Generally Accepted Accounting Principles (GAAP)*, and Nevada Revised Statutes for the year ended June 30, 2019. The auditors had no findings in the financial statement audit.

Financial Performance

This staff report presents a summary of overall financial performance. Complete information is shown in the financial statements and the notes supporting the financial statements. Management's Discussion and Analysis (MD&A) in the financial section provides a detailed discussion of comparative financial performance with FY 2018.

TMWA experienced a solid financial year with a change in net position of \$50.1 million. Net cash flow reflected an increase of \$4.4 million. Cash balance at the end of the year was \$197.8 million. Preliminary results were presented to the Board and SAC in September and October, respectively, reflecting a change in net position of \$50.2 million. Following final reconciliation, an adjustment to depreciation expense was made of \$42 thousand. There were no other adjustments.

TMWA ended the year with a debt service coverage ratio of 2.90x compared to 2.97x for FY 2018.

Fiscal Year 2019 Actual to Budget comparison

Operating revenue was \$0.2 million higher than budget due to \$0.8 million (1%) more in water sales offset by lower hydroelectric and other operating sales of \$0.6 million. Through the first half of FY 2019, water sales were \$2.0 million (3%) over budget driven by additional services (growth) and higher usage by customers. However, during the third and fourth quarters, we saw water sales drop due to lower consumption. Hydroelectric revenue came in less than budget due to work at the Fleish plant during the year to replace the tail race and to repair the flume.

Operating expenses ended up \$0.9 million or 1% less than budget. This variance is made up of \$1.0 million in non-cash depreciation that was less than budget, offset by operating expenses before depreciation that was higher than budget by \$0.2 million. As expected, each category ended the year close to budget. There were not any major surprises during the year from an operating expense standpoint. Any budget overages were generally offset by budget savings.

Nonoperating expenses were \$4.1 million less than budget due mostly to higher investment earnings than budgeted. Although interest rates have dropped in recent months, rates were generally higher during FY 2019 compared to FY 2018, especially early in the fiscal year. Of the \$4.4 million variance from budget due to investment earnings, \$1.6 million is cash and fully realized. The remaining \$2.8 million is non-cash and recognized as fair value changes in investments due to investments held at higher rates than market rates. These unrealized gains, can fluctuate as rates increase or decrease and may not result in actual cash gains.

Capital contributions were \$25.5 million more than budget in FY 2019, primarily due to non-cash developer infrastructure contributions which were \$19.1 million during the year. These represent water infrastructure constructed by developers then dedicated to TMWA following the completion of the project. Contributing another \$7 million to the variance was all other developer contributions. The volume of projects in the service area has remained high, and while construction continues at the current pace these contributions are expected to continue.

Spending on capital outlays and construction projects during the year was approximately \$41.3 million. Total planned spend for the year was \$52.3 million. Spending was lower than budget due primarily to deferrals of projects to future years.

Total cash and investments as of June 30, 2019 was \$197.8 million or \$14.9 million more than budget. Net cash provided by operating activities was \$5.4 million lower than budget due to lower hydroelectric revenues and higher operating expenses. Net cash used by capital and related financing activities was more favorable than budget by \$15.9 million. This is primarily due to \$11.0 million less in capital spending as discussed above. Also contributing to the variance is higher capital contributions from developers (discussed above), offset by a higher paydown of commercial paper and less grant proceeds received.

Fiscal Year 2019 Actual to Prior Year Comparison

Operating revenue ended up \$5.3 million higher in FY 2019 compared to the prior year. This is due to higher water sales of \$6.3 million driven by the 3% rate increase in May 2018 (in effect for all of FY 2019), increased service connections of approximately 2% and increased water use of approximately 2%.

Operating expenses were \$2.1 million higher in FY 2019 compared to the previous year. Salaries and wages increased due to additions in headcount and step and cost of living increases. Headcount has risen by approximately 7% since the end of FY 2018, some of which is due to backfilling (or overlapping) positions with upcoming known retirements. These increases are temporary. Employee benefits were lower than prior year by \$2.7 million due to large non-cash adjustments in prior fiscal year following the implementation of GASB 75 and 82 which required new accounting for OPEB and Pension plans, respectively. Services and supplies were higher due to several factors including general price increases in supplies and labor. Specific increases year over year include an increased contribution to the Truckee River Fund of \$850k in FY 2019 compared to \$450k in FY 2018, higher chemical costs of approximately \$0.7 million due principally to price increases, higher electric power costs of \$0.5 million due to the start up of Fish Springs booster pumps, and a property tax assessment related to the acquisition of Donner Lake water rights of \$0.2 million. The remaining variance is made up of several smaller increases in services and supplies costs.

Nonoperating expenses are lower than prior year by \$4.5 million due to several factors. First, both realized and unrealized investment income increased by \$5.9 million due primarily to the reasons discussed above. This is offset mostly by more interest expense incurred following the bond refunding in April 2018 (see Agenda Item 7 from May 2018 BOD Meeting for additional information on the refunding). This bond refunding decreased the principal of commercial paper which is variable rate debt, while increasing principal on fixed rate debt. While this transaction increased interest expense in the short term, it reduced risk by fixing a portion of the debt at a reasonable rate and limiting exposure to interest rate fluctuations in future years.

Capital contributions were \$4.8 million higher in FY 2019 compared to FY 2018. Certain categories are higher and lower, but primarily, this variance is due to non-cash developer contributed infrastructure which was \$4.1 million higher than prior year.

Total cash and investments were \$4.4 million higher at June 30, 2019 compared to June 30, 2018. Restricted cash balances decreased from \$45.7 million to \$44.7 million due to cash spent on projects in the former STMGID area, offset by cash received for the water meter retrofit and water resource sustainability programs. Unrestricted cash increased from \$147.7 million to \$153.1 million. Included in the unrestricted cash balance is \$21.5 million in insurance settlements collected in FY 2016 and FY 2017 related to the Farad hydroelectric facilities and \$9.1 million designated as rate stabilization funds.

November 25, 2019

To the Board of Directors
Truckee Meadows Water Authority
Reno, Nevada

We have audited the financial statements of Truckee Meadows Water Authority (TMWA) as of and for the years ended June 30, 2019 and 2018, and have issued our report thereon dated November 25, 2019. Professional standards require that we advise you of the following matters relating to our audit.

Our Responsibility in Relation to the Financial Statement Audit under Generally Accepted Auditing Standards and *Government Auditing Standards*

As communicated in our letter dated October 8, 2019, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of its respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing 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 over financial reporting. Accordingly, as part of our audit, we considered the internal control of TMWA solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

Planned Scope and Timing of the Audit

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

Compliance with All Ethics Requirements Regarding Independence

The engagement team, others in our firm, as appropriate, our firm, and other firms utilized in the engagement, if applicable, have complied with all relevant ethical requirements regarding independence.

Qualitative Aspects of the Entity's Significant Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by TMWA is included in Note 1 to the financial statements. TMWA adopted Governmental Accounting Standards Board Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. Accordingly, Note 1 to the financial statements has been updated to disclose additional information for such items affecting TMWA. There have been no other initial selection of accounting policies and no changes in significant accounting policies or their application during 2019. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments.

The most sensitive accounting estimates affecting the financial statements are:

- Liability and related disclosures for postemployment benefits other than pensions (OPEB)
- Liability and related disclosures for pension benefits
- Receivable for delivered but unbilled water sales revenue
- Allocation of administrative costs to capital assets
- Valuation of developer dedicated infrastructure and other donated capital assets

Management's estimate of the actuarial accrued liability for OPEB is based on third party actuarial valuation. Management's estimate of the pension liability is based on actuarial valuation; which are calculated based on the employee information submitted by TMWA to the Public Employees' Retirement System of the State of Nevada (PERS). Management's estimate of the delivered but unbilled water sales revenue is based upon number of days in the cycle and water usage. Management's estimate of the allocation of administrative costs to capital assets is based upon the year-to-date construction salaries and wages relative to total construction and indirect salaries and wages. Management's estimate of the value of the developer dedicated infrastructure and other donated capital assets is based on acquisition value (as defined under GASB Statement No. 72) using engineering cost indices at the time of dedication or donation. We evaluated the key factors and assumptions used to develop these sensitive estimates in determining that they are reasonable in relation to the financial statements taken as a whole.

Financial Statement Disclosures

Certain financial statement disclosures involve significant judgment and are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting TMWA's financial statements relate to:

- Long term debt obligations
- Obligations for pensions and other postemployment benefits

The financial statement disclosures are neutral, consistent, and clear.

Significant Difficulties Encountered during the Audit

We encountered no significant difficulties in dealing with management relating to the performance of the audit.

Uncorrected and Corrected Misstatements

For purposes of this communication, professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management; of which there were none. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole; of which there were none.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the financial statements or the auditor's report. No such disagreements arose during the course of the audit.

Representations Requested from Management

We have requested certain written representations from management that are included in the management representation letter dated November 25, 2019.

Management's Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

Other Significant Matters, Findings, or Issues

In the normal course of our professional association with TMWA, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, operating and regulatory conditions affecting the entity, and operating plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as TMWA's auditors.

This report is intended solely for the information and use of the Truckee Meadows Water Authority Board of Directors and management of Truckee Meadows Water Authority and is not intended to be and should not be used by anyone other than these specified parties.



Reno, Nevada



NEVADA

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Years Ended June 30, 2019 and 2018

PREPARED BY: Michele Sullivan, CPA
Chief Financial Officer

INTRODUCTORY SECTION

Letter of Transmittal	<u>1</u>
List of Principal Officials	<u>12</u>
Certificate of Achievement for Excellence in Financial Reporting	<u>14</u>

FINANCIAL SECTION

Independent Auditor's Report	<u>15</u>
Management's Discussion and Analysis	<u>18</u>
Basic Financial Statements	
Statements of Net Position	<u>29</u>
Statements of Revenues, Expenses, and Changes in Net Position	<u>31</u>
Statements of Cash Flows	<u>32</u>
Notes to Financial Statements	<u>34</u>
Required Supplementary Information	
Schedules of Changes in Net OPEB Liability and Related Ratios	<u>65</u>
Schedules of Contributions - OPEB	<u>67</u>
Schedules of TMWA's Share of Net Pension Liability	<u>69</u>
Schedules of TMWA Contributions - Pension	<u>70</u>
Supplementary Information	
Schedule of Revenues, Expenses, and Changes in Net Position - Budget and Actual	<u>72</u>

STATISTICAL SECTION

Schedule No. 1 - Net Position by Component	<u>76</u>
Schedule No. 2 - Changes in Net Position	<u>77</u>
Schedule No. 3 - Operating Revenues by Customer Class	<u>78</u>
Schedule No. 4 - Operating Expenses	<u>79</u>
Schedule No. 5 - Nonoperating Revenues and Expenses	<u>80</u>
Schedule No. 6 - Capital Contributions by Source	<u>81</u>
Schedule No. 7 - Gallons of Water Sold and Revenues by Category	<u>82</u>
Schedule No. 8 - Ten Largest Customers	<u>83</u>
Schedule No. 9 - Debt Service Coverage Ratios	<u>84</u>
Schedule No. 10 - Schedule of Total Building Permits Issued by Jurisdiction/Member Entity	<u>85</u>
Schedule No. 11 - Selected Demographic and Economic Statistics for Washoe County	<u>86</u>
Schedule No. 12 - Principal Employers	<u>87</u>
Schedule No. 13 - Customer and Water Sales by Category	<u>88</u>
Schedule No. 14 - Schedule of Insurance Coverage	<u>90</u>
Schedule No. 15 - Number of Employees by Identifiable Activity	<u>91</u>
Schedule No. 16 - Current and Historical Water Rates	<u>92</u>
Schedule No. 17 - Selected Operating and Capital Indicators	<u>93</u>
Schedule No. 18 - Schedule of Changes in Debt	<u>94</u>
Schedule No. 19 - Debt by Service Connection	<u>95</u>

Compliance Section

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	<u>97</u>
Auditor's Comments	<u>99</u>



November 25, 2019

To the Board of Directors, Our Customers, and Bondholders:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) for the Truckee Meadows Water Authority (TMWA) for the fiscal year ended June 30, 2019. The purpose of the report is to provide the Board of Directors (Board), our customers, and bondholders as well as other interested parties with reliable financial information about TMWA. TMWA's Finance Department has prepared the CAFR in accordance with Generally Accepted Accounting Principles (GAAP).

Management assumes full responsibility for the completeness and reliability of the information contained in this CAFR, based upon a comprehensive framework of internal control established for this purpose. Because the cost of internal control should not exceed benefits, the objective is to provide reasonable rather than absolute assurance that the financial statements are free of any material misstatements.

Nevada Revised Statutes and bond covenants require that an independent certified public accounting firm selected by the Board audit TMWA's financial statements on an annual basis. Eide Bailly LLP, a firm of licensed certified public accountants, has audited TMWA's basic financial statements as of and for the fiscal years ended June 30, 2019 and 2018. The independent auditor's report is presented in the Financial Section of this report. TMWA complies with the Local Government Budget and Finance Act as embodied in Chapter 354 and Public Investments as embodied in Chapter 355 of the Nevada Revised Statutes.

The CAFR consists of four sections:

Introduction Section - This section is comprised of the letter of transmittal which contains information relative to TMWA's background, a listing of TMWA's principal officers, organizational chart and other relevant information to assist the reader in understanding TMWA's operations, financial condition, and accomplishments.

Financial Section - This section consists of TMWA's basic financial statements, supplementary financial information and independent auditor's report on the basic financial statements. This section also includes Management's Discussion and Analysis (MD&A), which provides a narrative overview and explanation of the results reflected in the basic financial statements. The financial statements presented in this section were prepared in accordance with GAAP. TMWA's financial activities are reported as an enterprise fund (proprietary fund type).

Statistical Section - This section is comprised of selected financial, operational and demographic information generally presented annually and includes statistics for the past ten years.

Compliance Section - This section consists of information regarding TMWA's compliance with state statutes, in particular, conformance with the Local Government Finance Act.

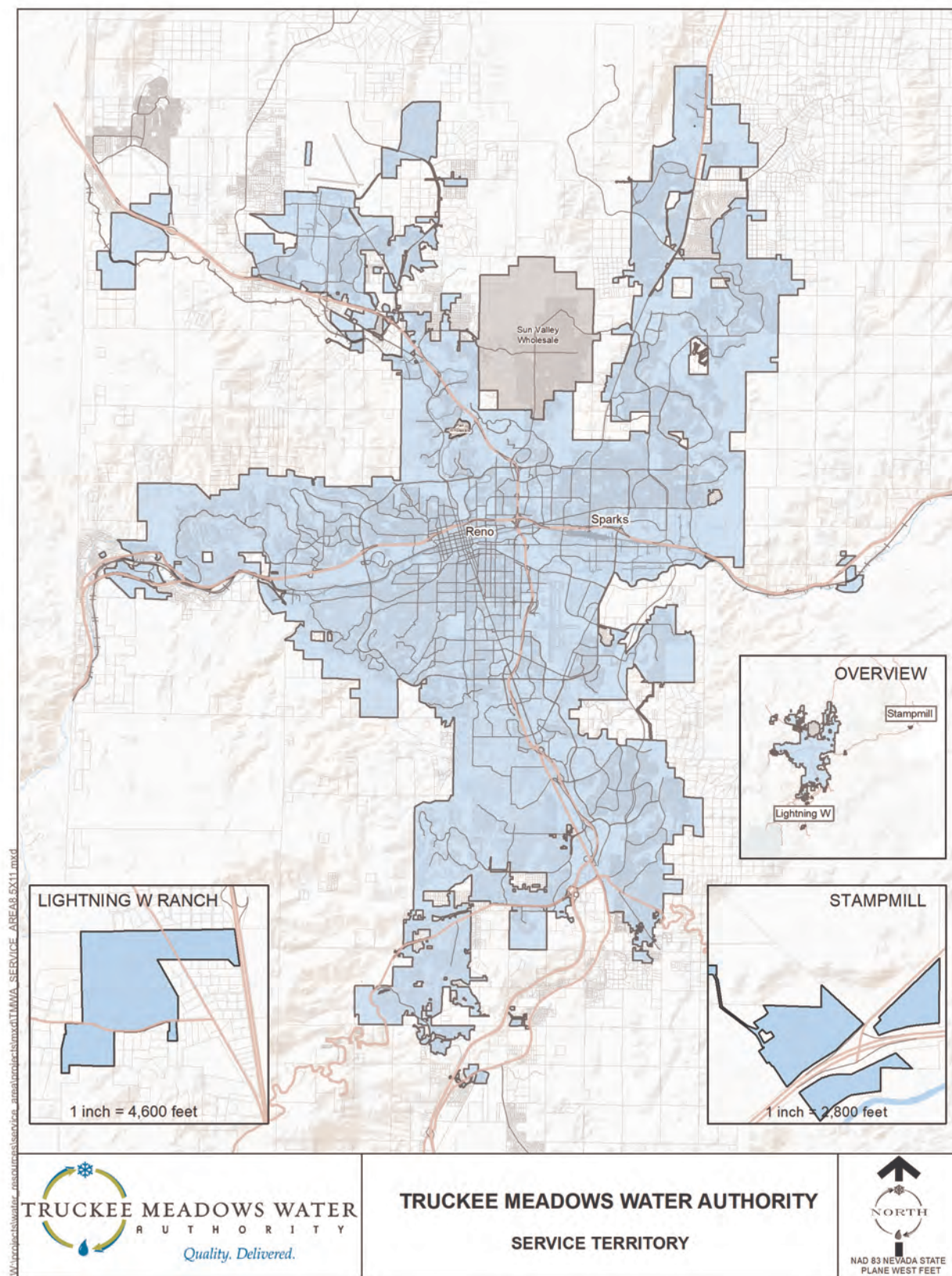
REPORTING ENTITY

TMWA was formed as a Joint Powers Authority (JPA) pursuant to Chapter 277 of the Nevada Revised Statutes and is a political subdivision of the State of Nevada. TMWA is separate from its member agencies: City of Reno, City of Sparks and Washoe County. TMWA was formed in November 2000 for the purpose of acquiring the assets of the water division of Sierra Pacific Power Co. (SPPCo), a subsidiary of Sierra Pacific Resources, now known as NV Energy, with the goal of retaining local control over the water resources of the area. TMWA took over the water system assets on June 11, 2001. Amendments to the JPA were approved by the Attorney General's Office of the State of Nevada effective February 3, 2010. The amendments were made in anticipation of the consolidation of TMWA, Washoe County's water utility and another water utility named South Truckee Meadows General Improvement District (STMGID). The consolidation of the water utilities occurred on January 1, 2015 with TMWA as the continuing entity. There are no component units associated with this financial reporting entity.

TMWA has no financial interdependence with its member agencies. TMWA has broad powers to finance, construct and operate the water system, for the diversion, treatment, distribution, and sale of treated water to retail and wholesale customers. TMWA has full authority to set water rates for services subject to the approval of the TMWA Board, without approval by other entities. TMWA is a tax-exempt entity for purposes of federal taxes and State of Nevada property and sales and use taxes, as well as other state taxes. TMWA pays property taxes in Nevada and Sierra Counties of California for the privilege of storing water in private and federal reservoirs. TMWA has no taxing authority.

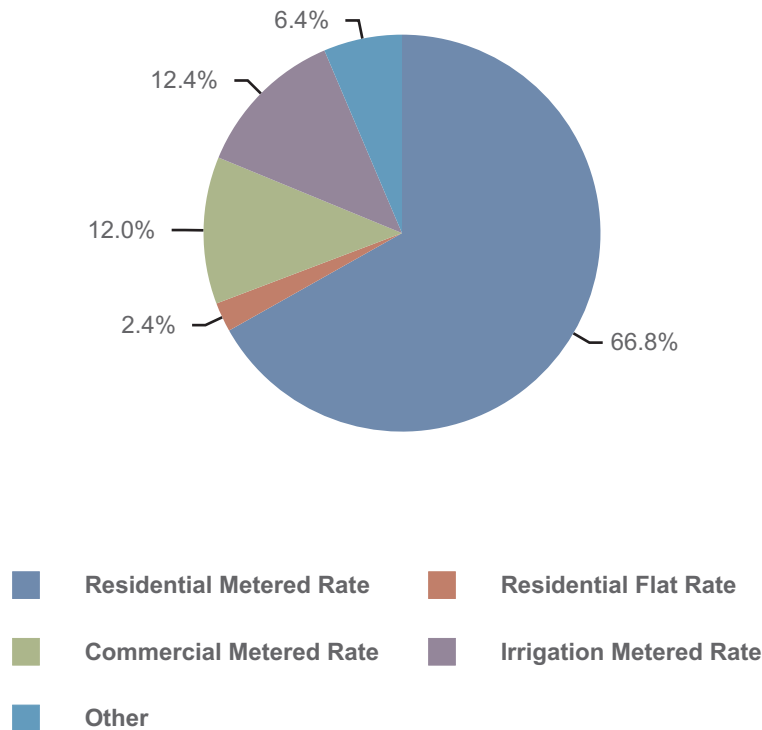
TMWA has over 125,000 service connections and one wholesale customer. TMWA operates within the Truckee Meadows service area. TMWA has only one wholesale customer, the Sun Valley General Improvement District (SVGID) located north of the Reno-Sparks main metropolitan area. SVGID is wholly dependent upon TMWA water deliveries since this district has no source of water supply. There is one water delivery contract associated with this wholesale connection.

The following map reflects the TMWA service territory.



The following graph depicts the proportion of operating revenues by class for fiscal year 2019:

TMWA Operating Revenues \$107.1 Million



The metering of the water system, which began under Sierra Pacific in 1995, presents various operational solutions for TMWA. These solutions present the opportunity to collect accurate data on water usage by customer class. This allows TMWA to make more accurate cost of service analyses, to make water rates more equitable across customer classes, and to better anticipate future water resource and water facility requirements. Since the acquisition of the water system, TMWA has metered nearly 100% of water services. Currently, there are less than 275 water services that do not have a meter installed and are billed on a flat rate and these represent problematic services with multiple customers on a single service line.

The Board adopted a goal in August 2003, to maintain a senior lien debt coverage ratio of at least 1.5 times recurring revenues less operating expenses divided by annual debt service. This calculation excludes developer facility charges and other fees associated with new development. This coverage target is sufficient to meet minimum debt service coverage requirements, fund reconstruction of the water system on primarily a pay-as-you-go basis and manage TMWA's senior lien bonding capacity to allow for potential future senior lien bond sales if necessary. These measures were deemed necessary to maintain water system infrastructure in a prudent manner and insure that

TMWA's bondholders are adequately protected. There are no other restrictions, commitments, or other limitations that would restrict the unrestricted cash assets for use in meeting TMWA's obligations. TMWA's senior lien coverage (excluding developer fees and charges) was approximately 2.90x and with certain developer fees and charges was approximately 3.78x as of June 30, 2019.

ECONOMIC OUTLOOK AND WATER RESOURCES

The Reno-Sparks metropolitan area enjoys a moderate climate, offers a wide variety of year-round recreational opportunities, and has a favorable tax structure. It is also centrally located in the Pacific region affording efficient distribution of goods throughout the western United States. Northern Nevada's favorable business tax environment nurtures steady growth in TMWA's service area and nearby communities in manufacturing, distribution, warehousing and industrial businesses. TMWA's service area has experienced steady growth since TMWA's inception in 2001, with overall population gains in Washoe County of over 30% percent. Taxable sales in Washoe County continues to grow with increases of 3.5%, 6.8% and 5.8% in fiscal years 2019, 2018 and 2017, respectively. Unemployment rates have decreased significantly since the recession, from highs in 2011 of over 13% to an unemployment rate of 3.4% in June of 2019, which was slightly lower than the national average of 3.7%. Total nonfarm employment increased 6.0% in fiscal year 2019 and 3.9% in fiscal year 2018. The total civilian labor force has also increased 6.0% in fiscal year 2019 and 3.4% in fiscal year 2018. The local economy remains strong and continues to grow with high levels of residential and commercial construction activity.

TMWA's service area also continues to expand. The Board voted in October 2018 to approve annexation of a planned development north of the current service area for retail water service. If the development is completed as planned it will add over 5,000 service connections. The developer will pay for all water line extensions and infrastructure needed to complete the project. In fiscal year 2019, TMWA completed the acquisition of West Reno Water Company's water system. This expanded TMWA's service area to the west where development is planned for over 3,500 service connections. Developer contributions and federal grants will pay for this expansion.

To meet water demands in the future, TMWA prepared a very detailed Water Resource Plan (WRP) for the years 2016-2035 during fiscal year 2016. That plan was adopted by the Board in March 2016, and was previously updated during fiscal year 2010. The WRP addresses current water resources, future water resources, and water rights availability as well as defined drought standards which conclude that TMWA can utilize the aforementioned water resources to meet incremental water demands required by growth for the next twenty years and beyond. The focal point of the WRP is the population and water demand forecasts for the TMWA consolidated water utility service territory. TMWA is in the process of drafting an updated WRP for the years 2020-2040.

To complement this water resource planning effort, a comprehensive Water Facility Plan (WFP) for the years 2015-2035 was developed. The original WFP was adopted by the TMWA Board in December of 2004 and updated in 2010. The WFP evaluates the infrastructure required to supply, treat and deliver water to customers over the life of the plan and determines infrastructure requirements needed in the Capital Improvement Plan to serve growth based upon population and water demand forecasts in the WRP.

Since inception, TMWA has made and will continue to make strategic water rights acquisitions to ensure sufficient inventory of water rights are available to issue will-serve commitments for the foreseeable future. Any given year, as much as 80% or more of the water supply to TMWA's service area is supplied from surface water from the Truckee River. As such, TMWA played a critical role in negotiating and implementing the Truckee River Operating Agreement (TROA). TMWA is a primary signatory to the TROA along with the Pyramid Lake Paiute Tribe (PLPT), the States of Nevada and California, and the Federal Government. TROA is intended to provide TMWA customers with benefits regarding a new, revised operation of the Truckee River system that provides additional drought supplies for existing as well as new customers. These lengthy and complex negotiations, which include interstate allocations of Truckee River water rights, were concluded when TROA was signed by the aforementioned parties on September 6, 2008 at a signing ceremony in Reno. TMWA made available to the PLPT certain water rights that met requirements to put TROA into effect in October 2015. In November 2015, remaining related lawsuits were dismissed and TROA became effective December 1, 2015 providing significant additional drought resources for TMWA's service area and completing a multi-decade effort.

TMWA owns and operates 27,000 acre-feet of reservoir storage comprised of 9,500 and 17,500 acre-feet in Donner Lake and Independence Lake, respectively (both owned and controlled by TMWA). In addition to the owned storage, as a result of TROA, TMWA can access additional storage capacity in certain federal lakes and reservoirs, including Lake Tahoe. Currently, TMWA has between 30,000 and 40,000 acre feet stored in these reservoirs.

To further drought resiliency for the community that TMWA serves, TMWA constructed the North Valley's Integration Project which ties in the Fish Springs Ranch infrastructure into TMWA's North Valleys water system providing access to approximately 8,000 acre feet of groundwater resources in the Honey Lake ground water basin which is located approximately 35 miles north of the Reno-Sparks metropolitan area. This project was completed in fiscal year 2017.

Since the implementation of TROA, TMWA's Privately Owned Stored Water (POSW) has more than doubled. Higher than average precipitation in Western Nevada during the winter of 2018/2019 allowed for TMWA's reservoirs to fill to near maximum capacity, which essentially guarantees normal river flows and water supply for the next two to three years. When combining TMWA's existing POSW surface water resources, the groundwater resources of the Honey Lake basin, the extensive drought storage benefits of TROA and the expansion of Aquifer Storage and Recovery (ASR) groundwater recharge efforts, the TMWA service area is well positioned with regards to drought resiliency.

Water Resource Sustainability Program

In fiscal year 2019 the TMWA Board established the Water Resource Sustainability Program. This program provides funding for projects benefiting TMWA's water resources. Such projects would include expanded conjunctive use, aquifer storage and recovery, demonstration and validation of exceptional quality reclaimed water uses and any other project that enhances water resource sustainability and drought resiliency. This program is funded by Rule 7 proceeds which previously were used to fund the Water Meter Retrofit Program. For every acre-foot of new surface water demand, developers and others pay \$1,600 to provide funding for this program.

WATER QUALITY

TMWA's highest priority is the protection of public health through modern water treatment techniques and water quality monitoring efforts. TMWA's primary source of water is the Truckee River, which sources at Lake Tahoe and other tributaries to the Truckee River, travels into Nevada through the Reno-Sparks Metropolitan area with the terminus of the river at Pyramid Lake, a distance of approximately 120 miles. The river's water quality is excellent; however, additional steps are taken to purify the water to meet safe drinking water standards that were set forth by the United States Department of Environmental Protection in the early 1990's. TMWA owns and operates the 84 million gallons per day (MGD) Chalk Bluff Water Treatment Plant and the 37.5 MGD Glendale Water Treatment Plant. In order to further diversify the water supply, TMWA is in the process of constructing a 4 MGD surface water treatment plant in the Southern service area. Attesting to TMWA's commitment to the protection of public health, TMWA's Chalk Bluff Water Treatment Plant received the Presidents Award from the Partnership for Safe Water in 2015. This prestigious recognition places the Chalk Bluff plant as one of 44 surface water treatment plants in the United States that have been so recognized. This recognition exemplifies TMWA staff's experience, passion, and commitment to producing and delivering outstanding water quality to customers. TMWA has requalified for this award successfully on an annual basis.

TMWA spends approximately \$1 million annually monitoring water quality by analyzing nearly 15,000 samples covering approximately 20,000 constituents at over 270 locations throughout the TMWA water system to insure compliance with all current drinking water standards promulgated by the United States Environmental Protection Agency, and administered by the Nevada Department of Environmental Protection, Bureau of Safe Drinking Water.

WATER CONSERVATION

Efficient use of water within the Truckee Meadows extends this vital resource through periods of drought in this high desert climate. Therefore, water conservation has been, and will continually be, a high-priority at TMWA. Not only does conservation promote water-efficient behavior, such efforts also reduce peak-day demand and help defer future investments in costly improvements to infrastructure. The purpose of water conservation at TMWA is to promote smart use of water through several programs. During a Drought Situation, TMWA enhances its conservation efforts to ensure drought storage is sufficient over the drought period.

Water-Efficiency Codes

TMWA's Rule 2 provides water-efficiency codes to which customers must adhere. First, customers must not use water excessively (i.e., no waste). TMWA also requires that its customers adhere to a three-day-a-week irrigation schedule. This watering restriction helps prevent overwatering, as well as, reduces peak-day demand. TMWA also requires no irrigation on Mondays to allow its system to recharge. Additionally, TMWA requires no irrigation between noon and 6 p.m. from Memorial Day to Labor Day. These water-efficiency codes have been successful in managing customer demands over time.

The Water Meter Retrofit Program

Under TMWA's Water Meter Retrofit Program, unmetered services were retrofitted with a meter. Customers without meters pay a flat, monthly water rate, thus have no simple way to know their water usage and have less monetary incentive to conserve. Through a charge of \$1,830 for every acre-foot of new surface water demand, developers and others have provided funding for this program. Due to the success of this program, TMWA estimates less than 275 water services do not have a meter installed. In fiscal year 2019, the Water Meter Retrofit Program was replaced by the Water Resource Sustainability Program.

Water Pricing Structure

TMWA has an inverted, tiered-rate billing structure in which customers are charged increasing rates based on the amount of water they use. This billing structure provides a "price signal" to customers who cross into a higher tier, thereby encouraging efficient use of water.

Water Usage Review Program

The Water Usage Review Program assists TMWA customers with issues with their water meter or their water delivery system. When a water usage review is requested, TMWA staff will go onsite to check meter accuracy as well as detect for leaks in the customer's system. If a leak is detected, staff will work with the customer to attempt to identify the leak source. Staff will also review the usage history of the service to determine water usage behavior. Once completed, staff will notify the customer regarding any leaks that were detected, make recommendations on how to reduce water consumption, and teach customers how to check for leaks in the future.

Water Watcher Program

During the irrigation months (April to October), TMWA ramps up its conservation efforts by hiring additional seasonal conservation consultants. These consultants are trained to monitor the TMWA service territory and ensure its water-efficiency codes are being adhered to. They also respond to water waste reports by the public. They provide customers with information about TMWA's water-efficiency codes and identify any leaks or sources of water waste in outdoor irrigation. This program not only promotes efficient use of water, but also facilitates lower monthly bills.

Landscape Retrofit Program

The Landscape Retrofit Program promotes water-efficiency measures on municipal landscapes. The program includes financial support of landscape augmentation projects by institutional irrigators. Projects supported under this program promote replacement of turf grass with drought-tolerant vegetation, tree conservation, and smart landscaping educational programs.

Water Conservation Education Program

TMWA has a strong educational program designed to teach customers about the benefits of conservation and techniques that can help them use water responsibly. Educational initiatives include a free workshop series, direct communication (bill inserts, emails, in-person, etc.), public presentations and events, as well as, a multi-media campaign. TMWA also partners with other local organizations to provide grade school students in the Truckee Meadows with information regarding our water sources, water quality and watershed protection.

FINANCIAL INFORMATION

Internal Controls

TMWA employs various internal controls for the safeguarding of assets against losses from unauthorized use or disposition. TMWA's management is responsible for establishing and maintaining a system of internal controls designed to meet these objectives. Another purpose of internal controls is to ensure that accounting data are compiled to allow for the preparation of financial statements in accordance with generally accepted accounting principles. The internal control structure is designed to provide reasonable assurance that these objectives are met. When establishing or reviewing internal controls, management weighs the cost to implement such controls over the benefits derived from implementing such controls. TMWA's management is constantly looking for opportunities to improve or redesign internal controls. A key component of TMWA's internal controls is its budgetary controls.

Budgetary Controls

TMWA is legally required to prepare, present to the TMWA Board and adopt an annual budget in conformance with Chapter 354 of the Nevada Revised Statutes. These statutes comprise the Administration of Local Government Finance Act, which stipulates that the Board be presented with a tentative budget by April 15 of each year, with formal adoption of the budget after a public hearing in May of each year. The adopted budget is then filed with the Nevada Department of Taxation.

TMWA is also required to prepare a Capital Improvement Plan for review and formal acceptance by the TMWA Board. This plan is a comprehensive compilation of all capital projects and capital outlays expected during the ensuing five fiscal year period. TMWA's Board is kept informed of TMWA's financial performance throughout the fiscal year at scheduled Board meetings. The General Manager, as the chief administrative officer, is authorized to approve all expenses that are within the approved budget. This authority is conferred upon the General Manager by virtue of the TMWA Cooperative Agreement between the City of Reno, City of Sparks, and the County of Washoe. This arrangement allows for the efficient operation of TMWA. TMWA routinely prepares five year financial forecasts in conjunction with the Capital Improvement Plan.

BUDGET ANALYSIS AND VARIANCES

Actual total operating revenues of \$107.1 million were \$0.2 million or 0.2% above the final budget for fiscal year ended June 30, 2019. Charges for water sales were \$101.5 million or 0.9% over budget. TMWA's water sales can fluctuate from budget based on weather conditions, especially during the spring and fall. During fiscal year 2019, water sales were higher early in the year due to dry, hot fall months, but then dropped during the spring months due to cool and wet weather conditions. Ultimately, water sales ended up very close to budget for the fiscal year.

Total operating expenses of \$92.5 million were approximately \$0.9 million under the budget of \$93.3 million. Operating expenses before depreciation were \$0.2 million over budget which is a variance of less than 1%. Service and supplies expenses were \$0.2 million under budget, a variance of 1%. All essential maintenance was performed and there were no major unplanned expenses incurred during the year. Spending on operating salaries and wages and employee benefits were both within 1% of budget.

Total net nonoperating revenues and expenses were \$4.1 million favorable to budget. This variance was primarily due to higher investment earnings. TMWA realized higher interest rates on investments early in the fiscal year, which helped to increase investment return.

Capital contributions of \$42.2 million were \$25.5 million above budget. Cash contributions from developers were \$7.1 million greater than budget and were attributable to increasing levels of residential construction activity as the local economy improves. Developer infrastructure contributions are not included in the budget, but total \$19.1 million in noncash contributions in fiscal year 2019.

Total capital spending was approximately \$41.3 million for fiscal year 2019, which was approximately \$11.0 million less than the \$52.3 million planned in the final capital budget. The underspend is due to various projects having been deferred to future years.

As reflected in the Statement of Cash Flows, TMWA funded the operating budget, debt service requirements and capital spending from operating revenues, capital contributions and investment income. As of June 30, 2019, TMWA has approximately \$153.1 million of unrestricted cash and investments to fund future operations and capital projects.

TMWA complied with bond covenants during fiscal year 2019 with respect to funding cash reserves. TMWA's renewal and replacement reserve is fully funded at \$10 million. The operations and maintenance reserve fund, which TMWA is required to maintain at a balance equal to one-sixth of TMWA's revised final operating budget, contained \$9.9 million as of June 30, 2019. As of June 30, 2019 TMWA retained a \$9.2 million water rate stabilization reserve of which \$0.5 million is restricted and \$8.7 million is included as a reservation of unrestricted net position. The Board voted in September, 2018 to significantly increase the unrestricted portion of the rate stabilization reserve from \$1.3 million to \$8.7 million to allow for a deferral in water rate increases if needed.

ACKNOWLEDGEMENTS

The timely preparation of this report could not be done without the assistance of TMWA finance personnel, the management team and employees of TMWA. We would like to thank the Board, TMWA customers, and the development community, for their commitment to the long-term operational and financial stewardship of TMWA.



Mark Foree, P.E.
General Manager



Michele Sullivan, CPA
Chief Financial Officer

**Truckee Meadows Water Authority
List of Principal Officials
June 30, 2019**

TMWA Board of Directors

Vaughn Hartung, Washoe County Commissioner, Chairman of the Board

Kristopher Dahir, City of Sparks Council Member, Vice Chairman

Paul Anderson, City of Sparks Council Member

Jeanne Herman, Washoe County Commissioner

Jenny Brekhus, City of Reno Council Member

Naomi Duerr, City of Reno Council Member

Neoma Jardon, City of Reno Council Member

Management

Mark Foree, PE, General Manager

Scott Estes, PE, Director of Engineering

Mike Pagni, General Counsel

John Enloe, Director of Natural Resources Planning and Management

Andy Gebhardt, Director of Operations and Water Quality

Pat Nielson, Director of Distribution, Maintenance, and Generation

Michele Sullivan, CPA, Chief Financial Officer





Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

Truckee Meadows Water Authority

Nevada

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrell

Executive Director/CEO



Independent Auditor's Report

To the Board of Directors
Truckee Meadows Water Authority
Reno, Nevada

Report on the Financial Statements

We have audited the accompanying financial statements of Truckee Meadows Water Authority (TMWA), which comprise the statements of net position as of June 30, 2019 and 2018, and the related statements of revenues, expenses and changes in net position and statements of cash flows for the years then ended, and the related notes to the financial statements, which collectively comprise the TMWA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of TMWA, as of June 30, 2019 and 2018, and the respective changes in its financial position and its cash flows for the years then ended in conformity 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 on pages 18 through 28, the schedules of changes in net OPEB liability and related ratios on pages 65 through 66, the schedules of contributions - OPEB on pages 67 through 68, the schedules of TMWA's share of net pension liability on page 69, and the schedules of TMWA contributions – Pension on page 70 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.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise TMWA's basic financial statements. The introductory section, the schedules of revenues, expenses and changes in net position – budget and actual, and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of revenues, expenses and changes in net position – budget and actual are the responsibility of management and were derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of revenues, expenses and changes in net position – budget and actual are fairly stated in all material respects in relation to the basic financial statements as a whole.

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 25, 2019, on our consideration of TMWA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of TMWA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering TMWA's internal control over financial reporting and compliance.

A handwritten signature in cursive script that reads "Eide Bailly LLP".

Reno, Nevada
November 25, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

This section of TMWA's Comprehensive Annual Financial Report presents management's discussion and analysis of TMWA's financial performance during the fiscal years ended June 30, 2019, June 30, 2018, and June 30, 2017. This section should be read in conjunction with the transmittal letter at the front of this report and TMWA's financial statements following this section.

FINANCIAL HIGHLIGHTS

TMWA's Net Position

(in millions)

	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>Restated June 30, 2017</u>
Unrestricted Current Assets	\$ 171.1	\$ 164.1	\$ 149.2
Restricted Current Assets	15.7	13.3	8.6
Long-Term Restricted and Other Assets	29.5	32.9	33.7
Net Other Postemployment Benefits Asset	—	0.2	—
Capital Assets, net	980.7	952.7	941.7
Total Assets	<u>1,197.0</u>	<u>1,163.2</u>	<u>1,133.2</u>
Deferred Outflow of Resources	14.1	14.5	17.9
Total Assets & Deferred Outflow of Resources	<u>1,211.1</u>	<u>1,177.7</u>	<u>1,151.1</u>
Total Current Liabilities	49.1	59.0	108.5
Long Term Debt Outstanding	401.7	409.2	372.3
Net Pension Liability	37.7	37.3	35.8
Net Other Postemployment Benefits Liability	1.9	0.8	1.7
Total Liabilities	<u>490.4</u>	<u>506.3</u>	<u>518.3</u>
Deferred Inflow of Resources	2.5	3.4	2.5
Net Investment in Capital Assets	573.2	533.1	506.7
Restricted	29.4	30.1	28.6
Unrestricted	<u>115.7</u>	<u>104.9</u>	<u>95.0</u>
Total Net Position	<u>\$ 718.3</u>	<u>\$ 668.1</u>	<u>\$ 630.3</u>

Financial Position

Fiscal Year 2019 Summary

In the fiscal year ended June 30, 2019, total net position increased by approximately \$50.1 million, the result of recording operating income, net nonoperating income and capital contributions.

Total Unrestricted Current Assets increased by \$7.0 million from June 30, 2018. Unrestricted cash increased \$5.4 million due to increases in investment income, higher operating revenues, and continued growth in the service area which increases cash contributions from developers. Total cash and investment balances, both restricted and unrestricted increased by \$4.4 million in fiscal year 2019.

Most of TMWA's net position is in Capital Assets. Capital Assets, net of accumulated depreciation increased by \$28.0 million in fiscal year 2019 as increases in capital assets from capital expenditures and contributions were greater than depreciation expense. Assets built by developers and contributed to TMWA were \$19.1 million. These assets are built to TMWA's standards and specifications. TMWA began construction in fiscal year 2019 on a new treatment plant and spent \$9.1 million on construction. Construction on this project should be complete in fall of 2020. Depreciation expense was \$32.8 million.

Total Current Liabilities decreased by \$9.9 million mainly due to decreases in commercial paper. TMWA paid off \$6.5 million of its commercial paper. Other current liabilities, including vendor accounts payable, and due to other governments were \$4.8 million lower than prior year due to timing of payments. Offsetting these decreases was an increase of \$0.7 million in contacts and retention payable, and an increase of \$0.7 million in interest payable at year end.

Long Term Debt decreased \$7.5 million, mainly due to amortization of bond premiums of \$4.7 million, and principal payments on debt of \$2.7 million.

During fiscal year 2019, TMWA booked additional liabilities of \$1.4 million related to retirement benefits. These accruals are based on an actuarial analysis. Detailed information about TMWA's postretirement benefits can be found in Notes 10 and 11 to TMWA's financial statements.

Fiscal Year 2018 Summary

In the fiscal year ended June 30, 2018, total net position increased by approximately \$37.7 million, the result of recording operating income, net nonoperating income and capital contributions.

Total Unrestricted Current Assets increased by \$14.9 million from June 30, 2017. Unrestricted cash increased \$15.5 million due to continued growth in the service area which increases cash contributions from developers. Total cash and investment balances, both restricted and unrestricted increased by \$19.3 million in fiscal year 2018.

Most of TMWA's net position is in Capital Assets. Capital Assets, net of accumulated depreciation increased by \$11.0 million in fiscal year 2018 as increases in capital assets from capital expenditures and contributions were greater than depreciation expense. Assets built by developers and contributed to TMWA were \$15.0 million. These assets are built to TMWA's standards and specifications. Depreciation expense was \$32.8 million.

Total Current Liabilities decreased by \$49.6 million mainly due to decreases in commercial paper. TMWA paid off \$9.2 million of its commercial paper, and refunded another \$44.2 million into long term fixed rate senior lien bonds. Decreases in commercial paper were offset by an increase of \$2.3 million in interest payable at year end, mainly due to the timing of the 2017 bond refunding which resulted in more interest payments on that debt prior to year end fiscal 2017. Other current liabilities, including vendor accounts payable, retention and contracts payable were \$1.5 million higher than prior year due to timing of vendor payments.

Long Term Debt Outstanding increased \$36.9 million due to the refunding of \$44.2 million of commercial paper, which resulted in long term senior lien debt of \$38.8 million, with a premium on the sale of \$5.8 million.

During fiscal year 2018 GASB Statement No. 75 related to postretirement medical benefits was adopted. Based on an actuarial analysis, TMWA booked a net asset for its Section 501-c-9 plan known as the TMWA Post-Retirement Medical Plan and Trust (PRMPT) of \$0.2 million as of June 30, 2018. This plan was slightly overfunded as of the actuarial measurement date of December 31, 2017. The Section 115 Trust plan measurement date was the same, and TMWA booked a liability of \$0.8 million for this plan.

TMWA's Changes in Net Position
(in millions)

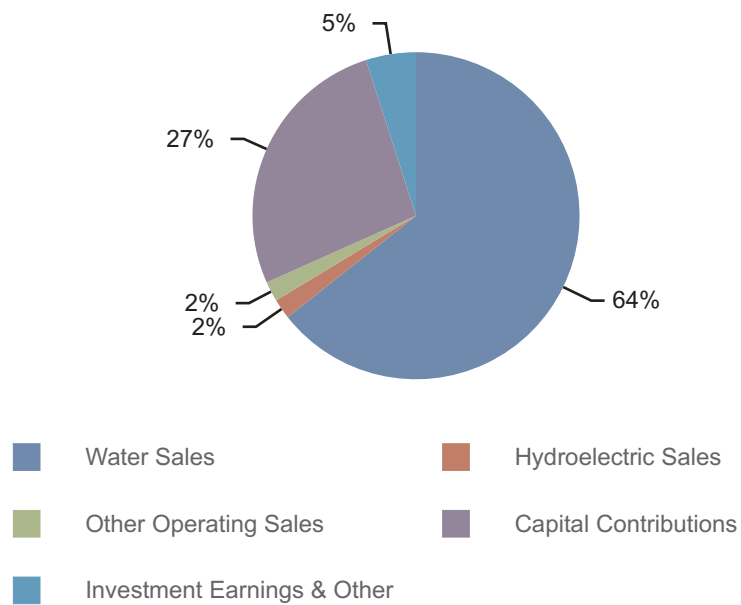
	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>Restated June 30, 2017</u>
Operating Revenues	\$ 107.1	\$ 101.8	\$ 97.3
Operating Expenses	92.5	90.3	82.3
Operating Income	<u>14.6</u>	<u>11.5</u>	<u>15.0</u>
Nonoperating Revenues (Expenses) net	<u>(6.7)</u>	<u>(11.2)</u>	<u>(11.7)</u>
Income before Capital Contributions	7.9	0.3	3.3
Capital Contributions	42.2	37.4	43.4
Change in Net Position	<u>50.1</u>	<u>37.7</u>	<u>46.7</u>
Net Position - BOY	668.1	630.4	585.0
Restatement of Beginning Net Position (Deficit)	—	—	(1.3)
Net Position - EOY	<u>\$ 718.2</u>	<u>\$ 668.1</u>	<u>\$ 630.4</u>

TMWA's Revenues
(In millions)

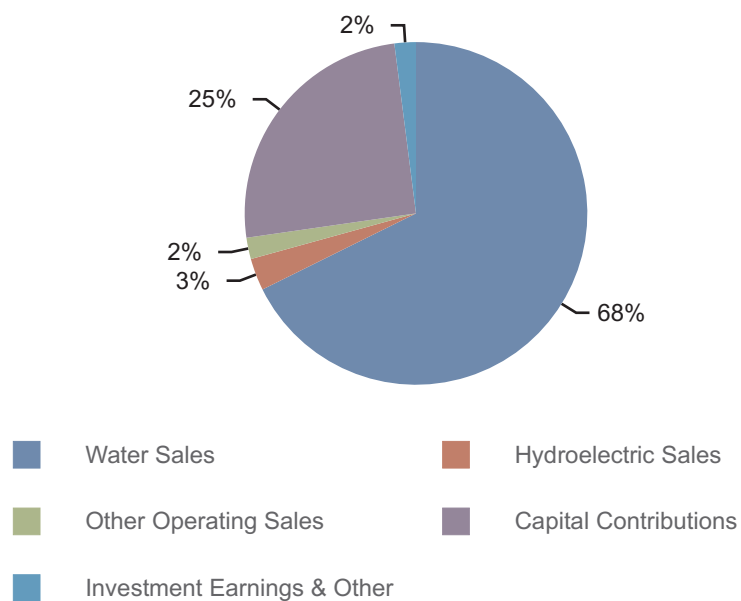
	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Revenues			
Operating Revenues			
Water Sales	\$ 101.5	\$ 95.2	\$ 92.7
Hydroelectric Sales	2.6	3.8	1.8
Other Operating Sales	3.0	2.9	2.8
	<u>107.1</u>	<u>101.9</u>	<u>97.3</u>
Nonoperating Revenues			
Investment Earnings	4.4	2.3	7.2
Other	2.8	0.1	—
	<u>7.2</u>	<u>2.4</u>	<u>7.2</u>
Capital Contributions	<u>42.2</u>	<u>37.4</u>	<u>43.4</u>
Total Revenues	<u>\$ 156.5</u>	<u>\$ 141.7</u>	<u>\$ 147.9</u>

The table above and the graphs that follow represent the makeup of TMWA's total revenues for fiscal years ended June 30, 2019, 2018 and 2017:

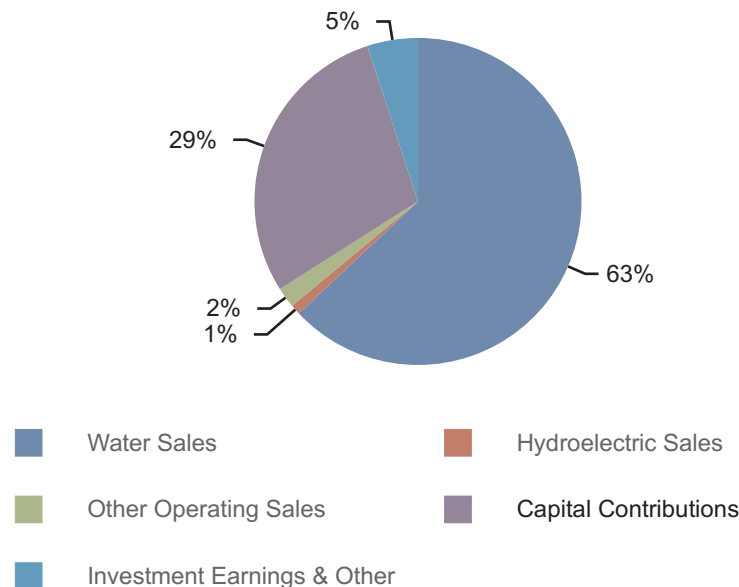
Total Revenues for the Year Ended June 30, 2019



Total Revenues for the Year Ended June 30, 2018



Total Revenues for the Year Ended June 30, 2017



Results of Operations-Revenues

Fiscal Year 2019 Summary

For fiscal year 2019, total operating revenues increased \$5.3 million from fiscal year 2018. Water Sales were \$101.5 million, \$6.3 million or 6.6% greater than in fiscal year 2018. Water Sales were higher mainly due to a 3% rate increase implemented in the first billing cycle of May, 2018. Growth in the service area and higher usage per customer account for the additional increase. Hydroelectric Sales were \$1.1 million or 30.2% less than fiscal year 2018, due to downtime for repairs at the hydroelectric plants.

Investment earnings were \$4.4 million in fiscal year 2019, \$2.1 million higher than fiscal year 2018. This is mainly due to investments made at higher yields, and higher cash balances. Other nonoperating revenues increased \$2.7 million from an increase in fair value of investments of \$2.8 million. In 2018, there was a gain on disposal of assets of \$0.1 million.

For fiscal year 2019, capital contributions increased by \$4.8 million. Increased developer contributed infrastructure at \$19.1 million, resulted in an increase of \$4.1 million due to a continued upward trend in construction in the service area. Contributions to the water meter retrofit program were \$1.4 million lower than 2018 due to decreased sales of surface water will-serve rights by \$2.0 million, as well as phase out of this fee for a new water sustainability fee implemented in January, 2019. This new sustainability fee related to surface water will-serve rights resulted in \$0.7 million in contributions. Contributions from developer facility charges increased \$2.7 million. Grants income increased by \$0.5 million, and other capital contributions increased by \$0.2 million.

Fiscal Year 2018 Summary

For fiscal year 2018, total operating revenues increased \$4.5 million from fiscal year 2017. Water Sales were \$95.2 million, \$2.5 million or 2.7% greater than in fiscal year 2017. Water Sales were higher mainly due to a 3% rate increase implemented in the first billing cycle of May, 2017. Hydroelectric Sales were \$2.0 million or 110.0% greater than fiscal year 2017, due to consistently high river flows and very little downtime for repairs at the hydroelectric plants.

Investment Earnings were \$2.3 million in fiscal year 2018, \$4.9 million lower than fiscal year 2017. This is mainly due to termination of two forward delivery agreements, one with JP Morgan, and one with Bank of New York Mellon, as part of the 2017 bond refunding. These banks are no longer required to provide a 5.5% interest rate on a portion of TMWA's debt reserves and O&M reserves balances, so they paid TMWA \$5.1 million dollars for the release of these commitments.

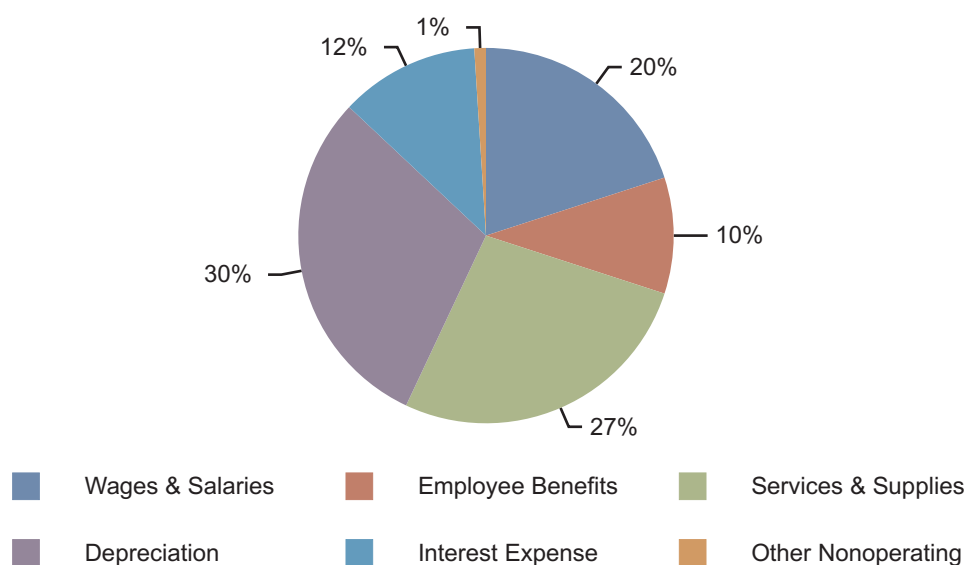
For fiscal year 2018, Capital Contributions decreased by \$5.9 million. This decrease was primarily due to a contribution received in fiscal year 2017 from NV Energy (NVE) from a court awarded payment by their insurers for flood damage to the Farad Hydroelectric Plant river diversion dam for \$11.8 million, that was paid to TMWA in accordance with an agreement with NVE. Offsetting was increased developer contributed infrastructure at \$15.0 million, an increase of \$4.2 million due to a continued upward trend in development in the service area. Contributions to the water meter retrofit program were \$2.0 million higher than 2017 due to increased sales of surface water will-serve rights which resulted in the collection of this fee. Other contributions were \$0.4 million lower than prior year.

TMWA's Expenses
(in millions)

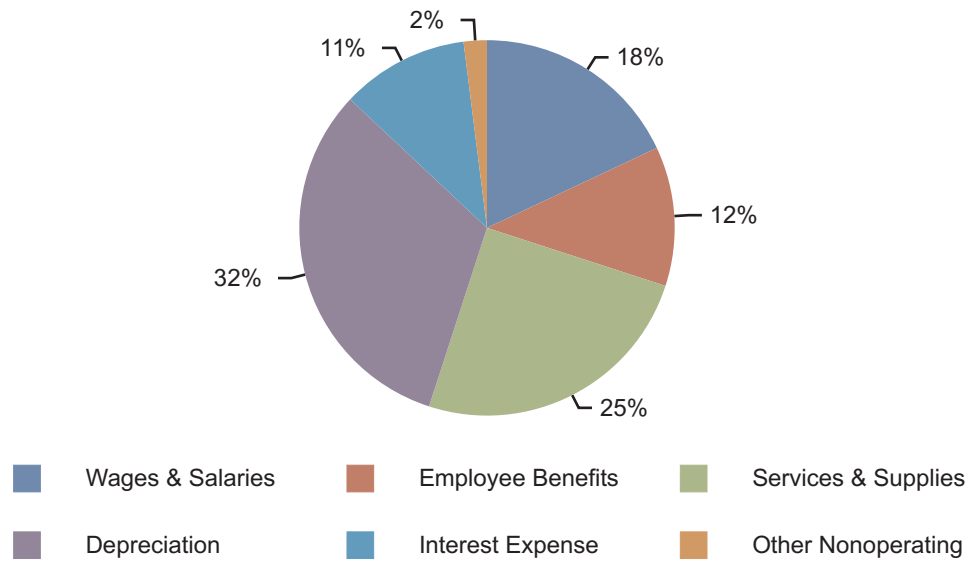
	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>Restated June 30, 2017</u>
Expenses			
Operating Expenses			
Wages & Salaries	\$ 21.0	\$ 18.7	\$ 17.3
Employee Benefits	10.2	12.9	8.9
Services & Supplies	28.5	25.8	24.0
Depreciation	32.8	32.8	32.2
	<u>92.5</u>	<u>90.2</u>	<u>82.4</u>
Nonoperating Expenses			
Interest Expense	13.3	11.7	17.0
Other Nonoperating Expenses	0.7	1.9	1.8
	<u>14.0</u>	<u>13.6</u>	<u>18.8</u>
Total Expenses	<u><u>\$ 106.5</u></u>	<u><u>\$ 103.8</u></u>	<u><u>\$ 101.2</u></u>

The table above and the graphs that follow represent the makeup of total operating and non-operating expenses for the years ended June 30, 2019, 2018 and 2017:

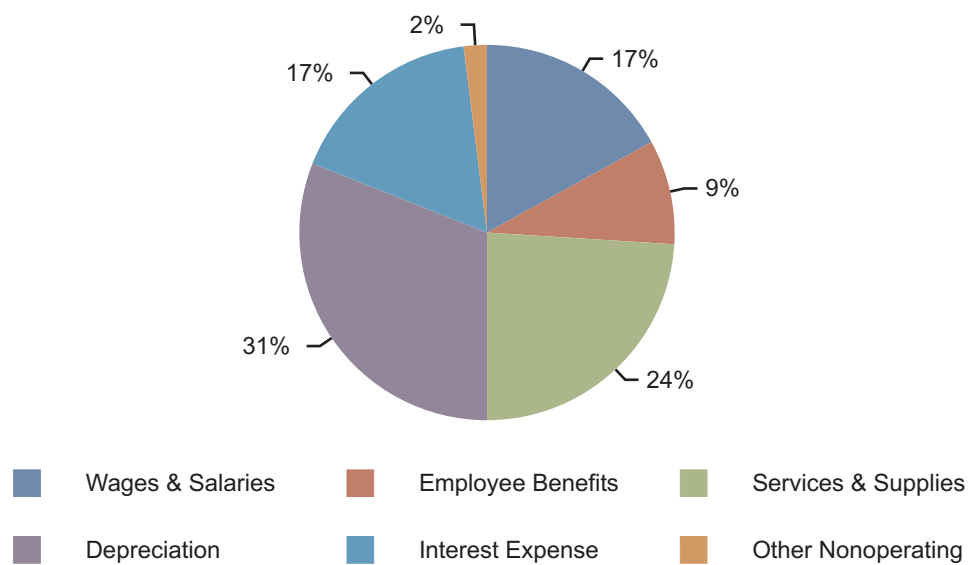
Total Expenses for the Year Ended June 30, 2019



Total Expenses for the Year Ended June 30, 2018



Total Expenses for the Year Ended June 30, 2017



Results of Operations-Expenses

Fiscal Year 2019 Summary

Operating expenses were \$92.5 million, \$2.2 million or 2.4% higher than fiscal year 2018. Spending on Wages and Salaries was \$2.2 million or 11.9% higher, due to a wage increase of approximately 3%, additional employees of 7%, and promotions. Employee Benefits were \$2.7 million or 21.2% lower mainly due to a \$4.6 million adjustment to pension expense related to GASB Statement No. 82 in 2018, offset by higher expenses related to increased headcount and wages. Spending on Services and Supplies was \$2.6 million or 10.2% more than prior year, mainly due to \$0.7 million in higher chemical costs, \$0.5 million in higher power costs, a \$0.4 million increase in donations to the Truckee River Fund, and general price increases in other operating supplies.

Net Nonoperating Expenses were unfavorable \$0.4 million as compared to prior year. Higher interest expense in 2019 by \$1.6 million was due to the 2018 bond refunding, which replaced a portion of TMWA's commercial paper with fixed rate bonds. TMWA refunded this commercial paper because bond rates were low, providing an opportunity to fix rates on balances in commercial paper that were not expected to be paid off in the next five years. Other Nonoperating Expenses were \$1.2 million favorable mainly due to decreases in fair value of investments in 2018 of \$0.9 million, higher amortization expense by \$0.7 million in 2018, offset by a loss on disposal off assets of \$0.2 million in 2019 and a \$0.2 million increase in other nonoperating expenses in 2019.

Fiscal Year 2018 Summary

Operating expenses were \$90.3 million, \$8.0 million or 9.7% higher than fiscal year 2017. Spending on Wages and Salaries was \$1.5 million or 8.6% higher, due to a wage increase of approximately 3%, promotions and addition of 12 employees. Six of the new employees were hired into apprenticeships to prepare for retirements occurring in the next two to three years. Employee Benefits were \$4.0 million or 44.7% higher mainly due to a \$4.6 million adjustment to pension expense related to GASB Statement No. 82, offset by lower pension expense allocation from NVPERS by \$0.6 million, and \$0.2 million lower other post retirement medical expense. Detailed information about TMWA's postretirement benefit plans can be found in Note 11 to TMWA's financial statements. Spending on Services and Supplies was \$1.9 million or 7.7% more than prior year, mainly due to \$1.3 million in maintenance expenses for dredging the channel at the Donner Lake dam.

Net Nonoperating Expenses were favorable \$5.4 million as compared to prior year. Lower interest expense in 2018 by \$5.2 million was due to the 2017 bond refunding. Other Nonoperating Expenses were \$0.2 million unfavorable due to decrease in fair value of investments.

CAPITAL ASSETS

At June 30, 2019, TMWA's total capital assets were \$1,435.0 million before accumulated depreciation of \$454.3 million, for a net book value of \$980.7 million. Included in the total capital assets reported on the Statement of Net Position was \$56.4 million in construction work in progress.

At June 30, 2018, TMWA's total capital assets were \$1,374.3 million before accumulated depreciation of \$421.6 million, for a net book value of \$952.7 million. Included in the total capital assets reported on the Statement of Net Position was \$29.2 million in construction work in progress.

Detailed information about TMWA's capital assets can be found in Note 5 to TMWA's financial statements.

LONG-TERM DEBT

At June 30, 2019, TMWA had \$428.0 million in total reported debt outstanding. This amount reflects \$380.7 million in total outstanding principal indebtedness, and \$47.3 million net bond premium. Of the \$380.7 million in total reported debt outstanding, \$26.3 million was due within in one year and is classified as short term indebtedness. Included in short term debt is TMWA's tax exempt commercial paper notes (TECP). TMWA intends to re-market the \$23.5 million in outstanding tax-exempt commercial paper notes as maturities come due, but all the TECP is classified as a short term indebtedness since the TECP notes mature in less than or equal to 270 days.

Total outstanding principal indebtedness of \$380.7 million as of June 30, 2019 reflects a decrease of \$9.2 million or 2.4% from total outstanding principal of \$389.9 million as of June 30, 2018. Total outstanding principal indebtedness of \$389.9 million as of June 30, 2018 reflects a decrease of \$17.2 million or 4.2% from total outstanding principal of \$407.1 million as of June 30, 2017.

During fiscal year 2018 and 2019, TMWA maintained credit ratings from Standard and Poor's of AA+, outlook Stable, from Moody's of Aa2, outlook Stable, and from Fitch of A+, outlook Stable . Subsequent to year end, in September, 2019, Fitch upgraded TMWA's rating to AA-, outlook Positive.

Detailed information about TMWA's indebtedness can be found in Note 6 to TMWA's financial statements.

CONTACTING TMWA's FINANCIAL MANAGEMENT

This financial report was prepared for the benefit of the customers, bond investors, and the Board of Directors of the Truckee Meadows Water Authority. The Comprehensive Annual Financial Report was prepared to provide interested parties with a general overview of the Truckee Meadows Water Authority's accountability for the financial resources it manages. For questions or additional information, please contact the Truckee Meadows Water Authority's Finance Department at P.O. Box 30013, Reno, Nevada 89509-3013.

	2019	2018
Assets		
Current assets		
Cash and investments	\$ 153,131,648	\$ 147,708,109
Accounts receivable, net	14,637,242	13,588,805
Due from others	332,456	309,092
Due from other governments	432,586	312,954
Interest receivable	769,266	782,611
Prepaid assets and other assets	1,810,519	1,436,188
	<u>171,113,717</u>	<u>164,137,759</u>
Restricted current assets		
Cash and investments		
Water meter retrofit program	5,711,052	4,717,726
Water resource sustainability program	689,060	—
Current bond debt service	9,283,775	8,538,712
	<u>15,683,887</u>	<u>13,256,438</u>
Total current assets	<u>186,797,604</u>	<u>177,394,197</u>
Restricted noncurrent assets		
Cash and investments		
Future bond debt service	2,376,329	3,286,363
Operations and maintenance	9,912,052	9,440,056
Renewal and replacement	16,214,654	19,180,630
Water rate stabilization	500,000	500,000
	<u>29,003,035</u>	<u>32,407,049</u>
Noncurrent assets		
Capital assets, not depreciated	186,576,533	159,065,468
Capital assets, depreciated	794,103,532	793,652,691
Other noncurrent assets	480,255	506,069
Net other postemployment benefits	—	232,223
	<u>981,160,320</u>	<u>953,456,451</u>
Total noncurrent assets	<u>1,010,163,355</u>	<u>985,863,500</u>
Total assets	<u>1,196,960,959</u>	<u>1,163,257,697</u>
Deferred Outflow of Resources		
Bond refundings	2,724,979	2,939,628
Net pension liability	10,546,937	11,138,222
Other postemployment benefits	791,303	443,895
Total deferred outflow of resources	<u>14,063,219</u>	<u>14,521,745</u>
Total Assets and Deferred Outflow of Resources	<u>\$ 1,211,024,178</u>	<u>\$ 1,177,779,442</u>

	2019	2018
Liabilities		
Current liabilities payable from unrestricted current assets		
Accounts payable	\$ 1,565,435	\$ 4,373,577
Contracts and retention payable	4,874,567	4,209,220
Accrued liabilities	4,126,273	4,028,764
Due to other governments	1,525,588	2,864,640
Accrued interest payable	306,226	347,867
Current portion of long-term debt	25,404,058	31,854,526
Customer deposits and amounts due to developers	2,021,318	2,766,275
	<u>39,823,465</u>	<u>50,444,869</u>
Current liabilities payable from restricted current assets		
Current portion of long-term debt	925,000	885,000
Interest payable	8,358,775	7,653,712
	<u>9,283,775</u>	<u>8,538,712</u>
Total current liabilities	<u>49,107,240</u>	<u>58,983,581</u>
Noncurrent liabilities		
Net pension liability	37,658,701	37,323,782
Long-term debt, net of current portion	401,665,043	409,187,994
Net other postemployment benefits liability	1,882,222	826,542
Total noncurrent liabilities	<u>441,205,966</u>	<u>447,338,318</u>
Total liabilities	<u>490,313,206</u>	<u>506,321,899</u>
Deferred Inflow of Resources		
Net pension liability	2,425,248	2,449,195
Bond refundings	97,629	107,535
Other postemployment benefits	—	824,624
Total deferred inflows of resources	<u>2,522,877</u>	<u>3,381,354</u>
Total liabilities and deferred inflow of resources	<u>492,836,083</u>	<u>509,703,253</u>
Net Position		
Net investment in capital assets	573,174,076	533,058,874
Restricted for water meter retrofit program	5,711,052	4,717,726
Restricted for water resource sustainability program	689,060	—
Restricted for debt service	925,000	885,000
Restricted for operations and maintenance reserve	5,312,052	4,840,056
Restricted for renewal and replacement reserve	16,214,654	19,180,630
Restricted for water rate stabilization	500,000	500,000
Unrestricted	115,662,201	104,893,903
Total net position	<u>718,188,095</u>	<u>668,076,189</u>
Total Liabilities, Deferred Inflow of Resources and Net Position	<u>\$ 1,211,024,178</u>	<u>\$ 1,177,779,442</u>

Truckee Meadows Water Authority
Statements of Revenues, Expenses, and Changes in Net Position
Years Ended June 30, 2019 and 2018

	2019	2018
Operating Revenues		
Charges for water sales	\$ 101,496,912	\$ 95,181,554
Hydroelectric sales	2,624,285	3,757,043
Other operating sales	2,968,321	2,873,495
Total operating revenues	107,089,518	101,812,092
Operating Expenses		
Salaries and wages	20,973,151	18,735,892
Employee benefits	10,184,189	12,919,692
Services and supplies	28,475,960	25,835,318
Total operating expenses before depreciation	59,633,300	57,490,902
Depreciation	32,833,604	32,820,720
Total operating expenses	92,466,904	90,311,622
Operating Income	14,622,614	11,500,470
Nonoperating Revenues (Expenses)		
Investment earnings	4,409,486	2,313,513
Net increase (decrease) in fair value of investments	2,843,154	(934,120)
Gain (loss) on disposal of assets	(225,687)	133,972
Debt issuance costs	(218,132)	(942,927)
Interest expense	(13,268,153)	(11,720,356)
Other nonoperating expense	(233,494)	(12,749)
Total nonoperating revenues (expenses)	(6,692,826)	(11,162,667)
Income before Capital Contributions	7,929,788	337,803
Capital Contributions		
Grants	831,116	348,248
Water meter retrofit program	994,706	2,379,206
Water resource sustainability program	689,060	—
Developer infrastructure contributions	19,112,590	15,017,446
Developer will-serve contributions (net of refunds)	4,663,826	6,652,819
Developer capital contributions-other	6,636,417	6,448,549
Developer facility charges (net of refunds)	9,154,403	6,464,559
Contributions from other governments	100,000	100,000
Net capital contributions	42,182,118	37,410,827
Change in Net Position	50,111,906	37,748,630
Net Position, Beginning of Year	668,076,189	630,327,559
Net Position, End of Year	\$ 718,188,095	\$ 668,076,189

Truckee Meadows Water Authority
Statements of Cash Flows
Years Ended June 30, 2019 and 2018

	2019	2018
Operating Activities		
Cash received from customers	\$ 105,272,760	\$ 103,087,315
Cash paid to employees	(30,024,544)	(27,042,296)
Cash paid to suppliers	(33,218,430)	(25,662,867)
Net Cash from Operating Activities	<u>42,029,786</u>	<u>50,382,152</u>
Capital and Related Financing Activities		
Acquisition and construction of capital assets	(41,281,759)	(29,059,520)
Interest paid on financing	(17,050,980)	(14,218,602)
Principal paid on financing	(2,738,723)	(2,655,702)
Proceeds from refunding bonds	—	44,601,977
Redemption of commercial paper notes	(6,500,000)	(53,400,000)
Proceeds from capital asset disposal	38,499	1,270,325
Contributions for water meter retrofit program	994,706	2,379,206
Contributions for water resource sustainability program	689,060	—
Contributions from developers-will-serve letters	4,663,826	6,652,819
Contributions from developers-other	6,636,417	6,448,549
Contributions from developers-facility charges	9,154,403	6,464,559
Contributions from other governments	200,000	—
Grants	582,755	240,493
Bond/note issuance costs	(218,132)	(942,927)
Net Cash used for Capital and Related Financing Activities	<u>(44,829,928)</u>	<u>(32,218,823)</u>
Investing Activities		
Payments received on loan receivables	24,835	3,703
Investment interest/earnings	7,222,281	1,167,934
Net Cash from Investing Activities	<u>7,247,116</u>	<u>1,171,637</u>
Net Change in Cash and Cash Equivalents	<u>4,446,974</u>	<u>19,334,966</u>
Cash and Cash Equivalents, Beginning of Year	<u>193,371,596</u>	<u>174,036,630</u>
Cash and Cash Equivalents, End of Year	<u><u>\$ 197,818,570</u></u>	<u><u>\$ 193,371,596</u></u>

Truckee Meadows Water Authority

Statements of Cash Flows

Years Ended June 30, 2019 and 2018

	2019	2018
Reconciliation of Operating Income to Net Cash from Operating Activities		
Operating Income	\$ 14,622,614	\$ 11,500,470
Adjustments to reconcile operating income to net cash from operating activities		
Depreciation	32,833,604	32,820,720
Other nonoperating expenses	(233,494)	(12,749)
OPEB expense	295,196	386,482
OPEB contributions	(179,325)	(546,504)
Pension expense	3,768,215	7,243,153
Pension contributions	(2,865,963)	(2,562,356)
Changes in assets and liabilities		
Accounts receivable, net	(1,048,437)	1,214,585
Due from others	(23,364)	24,325
Due from other governments	28,729	(97,190)
Prepaid assets	(373,347)	(212,992)
Accounts payable	(2,808,142)	1,345,514
Accrued liabilities	97,509	116,390
Due to customers and developers	(744,957)	36,313
Due to other governments	(1,339,052)	(874,009)
Total adjustments	27,407,172	38,881,682
Net Cash from Operating Activities	\$ 42,029,786	\$ 50,382,152
Non-Cash Capital and Related Financing Activities		
Developer infrastructure contributions	\$ 19,112,590	\$ 15,017,446
Amortization of net bond premium	(4,693,893)	(4,935,241)
Amortization of refunding allowances to interest expense	204,743	194,934

Note 1 - Summary of Significant Accounting Policies

The financial statements of the Truckee Meadows Water Authority (TMWA) have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental entities. A summary of the more significant accounting policies applied in the preparation of the accompanying basic financial statements follows.

Reporting Entity and Purpose

TMWA is a Joint Powers Authority (JPA) formed in November 2000 under the Joint Powers Legislation of the State of Nevada, pursuant to a Cooperative Agreement among the City of Reno, Nevada, the City of Sparks, Nevada, and Washoe County, Nevada. TMWA was formed to purchase water assets (the Water System), undertake the water utility operations, and to develop, manage, and maintain supplies of water for the benefit of the Truckee Meadows communities. TMWA purchased the existing water system originally operated by Sierra Pacific Power Company (SPPCo), now known as NV Energy, Inc.

TMWA is governed by a seven-member Board of Directors (Board) appointed by:

- Reno City Council (3 seats)
- Sparks City Council (2 seats)
- Washoe County Commissioners (2 seats)

The cities and county representatives are not required to be elected officials. Modifications to the JPA were approved by the governing bodies in December 2009 which changed the at-large seat into a second seat for Washoe County. The amendments to the JPA were approved by the Attorney General's Office of the State of Nevada (State) effective February 3, 2010. The amendments were made in anticipation of the consolidation of TMWA and Washoe County's Community Services Department's water utility (WCWU) and the merger of another water utility named South Truckee Meadows General Improvement District (STMGID). The transfer of operations of WCWU and the merger of STMGID occurred on January 1, 2015 with TMWA as the continuing entity.

Basis of Accounting

TMWA's activities are accounted for as an enterprise fund (proprietary fund type). A fund is an accounting entity with a self-balancing set of accounts established to record the financial position and results of operations of the governmental entity. Activities of enterprise funds resemble activities of business enterprises; the purpose is to obtain and use economic resources to meet its operating objectives. The financial statements for TMWA are reported using the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recognized at the time they are earned and expenses are recognized when the related liabilities are incurred.

A proprietary fund distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from an exchange transaction such as providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. Nonoperating revenues and nonoperating expenses result from nonexchange transactions or ancillary services.

TMWA applies all applicable Governmental Accounting Standards Board (GASB) pronouncements in accounting and reporting for proprietary activities.

When both restricted and unrestricted resources are available for use, it is TMWA's policy to use unrestricted resources first, then restricted resources as they are required.

Budgets and Budgetary Accounting

TMWA adheres to the Local Government Budget and Finance Act (Act) incorporated within the Statutes of the State of Nevada. The Act and TMWA policy include the following major procedures to establish budgetary data:

- On or before April 15, the General Manager of TMWA submits to the Board a tentative budget for the fiscal year commencing the following July 1.
- Public hearings on the tentative budget are held in May.
- Prior to June 1, at the public hearing, the Board indicates changes, if any, to be made to the tentative budget and adopts a final budget by the favorable vote of a majority of the members of the Board. The final budget must then be forwarded to the Nevada Department of Taxation for final approval.
- Any revisions that alter total appropriations must be approved in advance by the Board. Formal budgetary integration is employed as a management control device during the year.
- Budgets are adopted on a basis consistent with GAAP. Appropriations lapse at year end.
- In accordance with State statute, actual expenses may not exceed the sum of operating and nonoperating appropriations.

The budget reflected in the financial statements has been amended from the original amounts in accordance with State statute for the years ended June 30, 2019 and 2018. This presentation for fiscal year 2019 and 2018 is included as Supplementary Information.

Cash and Investments

Cash balances are, to the extent practical, invested as permitted by law. Monies that are not required for immediate obligations are invested.

Investments authorized by State statutes and TMWA's bond resolutions include, but are not limited to, U.S. Treasury instruments, U.S. government agency securities, agency issued mortgage backed securities (FNMA, FHLMC, GNMA), corporate notes meeting certain rating standards, money market mutual funds meeting certain criteria, certificates of deposit, repurchase agreements, commercial paper meeting certain standards, bankers acceptances, long-term forward sale contracts and guaranteed investment contracts meeting certain rating standards, the State's Local Government Investment Pools (LGIP), medium-term obligations of municipal issuers in the State that meet certain rating standards, and asset backed securities that meet certain rating standards. Investments are reported at fair value, including the investment with LGIP which is equal to TMWA's original investment plus monthly allocation of interest income, and realized and unrealized gains and losses, which is the same as the value of the pool shares.

Restricted cash and investments are monies that are restricted by legal or contractual requirements.

Cash Equivalents

Cash equivalents include short-term highly liquid investments (3 months or less at time of purchase) that are both readily convertible to known amounts of cash, and so near their maturity that they present insignificant risk of changes of value. Based on the nature of the investment policies, all amounts are available on demand and are, therefore, classified as cash equivalents on the Statements of Cash Flows.

Accounts Receivable

Accounts receivable is comprised of amounts due from TMWA's customers, net of an allowance for uncollectible accounts. Amounts due from TMWA's customers are comprised of amounts billed and an estimate of amounts earned but unbilled for water deliveries prior to fiscal year end.

Restricted Assets

Certain proceeds of TMWA's water revenue bonds, as well as certain resources set aside for their repayment, are classified as restricted assets on the Statements of Net Position because their use is limited by applicable bond covenants as follows:

- Current bond debt service - used to segregate resources accumulated for debt service payments over the next twelve months.
- Future bond debt service - used to report resources set aside to make up potential future deficiencies in the current bond debt service.
- Operations and maintenance - used to report resources set aside to subsidize potential deficiencies from TMWA's operation that could adversely affect debt service payments.
- Renewal and replacement - used to report resources set aside to subsidize potential deficiencies in cash flow for replacement of water facilities.
- Water rate stabilization - used to report resources set aside to stabilize customer rates if significant water revenue fluctuations occur.

Certain assets of TMWA are classified as restricted assets on the Statements of Net Position because they were derived from contributions from developers to fund the water meter retrofit and water resource sustainability programs adopted under Title II of Public Law 101-618.

Prepaid Items

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items. Prepaid items have been classified as current.

Capital Assets

All purchased property, plant, and equipment is stated at cost. TMWA capitalizes all assets with a cost of at least \$5,000 and a useful life greater than one year. The cost of maintenance and repairs that do not increase productive capacity or materially extend the life of an asset are not capitalized. Developer contributed capital assets are recorded at acquisition value in the year of contribution to TMWA.

Depreciation is computed using the straight-line method over the assets' estimated useful lives (in years) as follows:

	Years		Years
Distribution mains	60-75	Canals	15-50
Plants	15-50	Reservoirs	20-75
Services	15-60	Vehicles	5-10
Pump stations	10-60	Furniture and fixtures	10
Tanks	65-75	Computer hardware and software	3-5
Wells	7-50	Equipment	5-10
Pressure reducing stations	25	Administration buildings	50
Hydroelectric facilities	20-80		

Deferred Outflows/Inflows of Resources

In addition to assets, the Statements of Net Position report a separate section for deferred outflows of resources. This separate financial statement element represents consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. TMWA's deferred outflows of resources is its deferred charge on refunding which results from the difference in the carrying value of refunded debt and its acquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. In addition, TMWA has deferred outflows of resources related to pensions and other post-employment benefits.

In addition to liabilities, the Statements of Net Position report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. TMWA has deferred inflows of resources related to bond refundings, pensions and other post-employment benefits.

Pensions

For purposes of measuring the net pension liability, deferred outflows and deferred inflows of resources, and pension expense, information about the fiduciary net position of the Public Employees' Retirement System of the State of Nevada (PERS) Base Plan (Base Plan) and additions to/deductions from Base Plan's fiduciary net position have been determined on the same basis as they are reported by the Base Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Postemployment Benefits Other Than Pensions (OPEB)

For purposes of measuring TMWA's OPEB liability, deferred outflows and deferred inflows of resources, and OPEB expense, information about the fiduciary net position of TMWA's OPEB Plans and additions to/deductions from the fiduciary net position have been determined on the same basis as they are reported by TMWA's OPEB Plans. For this purpose, TMWA recognizes benefit payments when due and payable in accordance with the benefit terms and investments are reported at estimated fair value.

Compensated Absences

Employees are permitted to accumulate earned but unused vacation and sick pay benefits. The liability for compensated absences is accrued as amounts are earned by employees to the extent it is likely TMWA will ultimately pay those benefits. The liability is included in accrued liabilities in the accompanying Statements of Net Position.

Long-Term Debt

Long-term debt is reported at face value, net of any premium or discounts in the Statements of Net Position. Premiums and discounts are amortized using the effective interest method over the life of the related debt. Debt issuance costs are expensed in the period incurred.

Classification of Revenues

Operating revenues consist of water sales, hydroelectric sales, and miscellaneous fee income. Nonoperating revenues consist essentially of income derived from investments, and reimbursement for nonoperating activities. Developer facility charges, will-serve contributions, and other contributions reflect payments primarily for water service. Developer infrastructure contributions are an estimation of the value of infrastructure built by developers and permanently dedicated to TMWA.

Net Position

Net Position is displayed in three classifications:

- Net investment in capital assets. This component represents TMWA's net position in its capital assets. It reflects the cost of capital assets, less accumulated depreciation and less the outstanding principal of related debt, excluding unspent proceeds.
- Restricted. This component reflects the carrying value of assets, less related liabilities, that are restricted by law or by other externally imposed restrictions, such as bond covenants. Assets restricted only by TMWA or Board imposed limitations are not included in the calculation.
- Unrestricted. This component represents the remaining net position balance that is available to support TMWA's operations and capital asset acquisition/construction.

Use of Estimates in Preparing Financial Statements

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

New Accounting Pronouncements

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*, which is effective for fiscal years beginning after June 15, 2018. Earlier application is encouraged. The objective of this Statement is to provide financial statement users with information about asset retirement obligations that were not addressed in GASB standards by establishing uniform accounting and financial reporting requirements for these obligations. The implementation of Statement No. 83 in fiscal year ended June 30, 2019 resulted in no impact to TMWA's financial statements.

In March 2017, the GASB issued Statement No. 85, *Omnibus 2017*, which is effective for fiscal years beginning after June 15, 2017. Earlier application is encouraged. The objective of this Statement is to address practice issues that have been identified during the implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits). Statement No. 85 does not have any affect on TMWA's financial position, results of operations or cash flow at this time.

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*, which is effective for fiscal years beginning after June 15, 2017. Earlier application is encouraged. The primary objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources – resources other than the proceeds of refunding debt – are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. Statement No. 86 does not have any affect on TMWA's financial position, results of operations or cash flow at this time.

In June 2017, the GASB issued Statement No. 87, *Leases*, which is effective for fiscal years beginning after December 15, 2019. Earlier application is encouraged. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases; enhancing the comparability of financial statements between governments; and also enhancing the relevance, reliability (representational faithfulness), and consistency of information about the leasing activities of governments. TMWA does not expect the adoption of Statement No. 87 to have a material affect on TMWA's financial position, results of operations or cash flow.

In April 2018, the GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, which is effective for fiscal years beginning after June 15, 2018. Earlier application is encouraged. The primary objective of this Statement is to improve the information that is disclosed in notes to financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. Statement No. 88 does not have any affect on TMWA's financial position, results of operations or cash flow at this time.

In August 2018, the GASB issued Statement No. 90, *Majority Equity Interests - An Amendment of GASB Statements No. 14 and No. 61*, which is effective for fiscal years beginning after December 18, 2018. The primary objective of this Statement is to provide users of financial statements with essential information related to presentation of majority equity interests in legally separate organizations and requiring reporting of certain information about component units of the government. TMWA does not expect the adoption of Statement No. 90 to have a material affect on TMWA's financial position, results of operations or cash flow.

In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*, which is effective for fiscal years beginning after December 15, 2020. Earlier application is encouraged. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. TMWA does not expect the adoption of Statement No. 91 to have a material affect on TMWA's financial position, results of operations or cash flow.

Note 2 - Compliance with Nevada Revised Statutes and the Nevada Administrative Code

TMWA conformed to all significant statutory constraints on its financial administration during the year.

Note 3 - Accounts Receivable, Net

Accounts receivable, net consisted of the following:

	June 30, 2019	June 30, 2018
Billed amounts	\$ 6,829,381	\$ 5,598,850
Earned, but unbilled amounts	8,149,678	8,287,402
	14,979,059	13,886,252
Allowance for uncollectible accounts	(341,817)	(297,447)
Accounts receivable, net	<u>\$ 14,637,242</u>	<u>\$ 13,588,805</u>

Note 4 - Cash and Investments

In accordance with State statutes, TMWA's cash is deposited with insured banks. All money deposited by TMWA that is not within the limits of insurance must be secured by collateral. TMWA's deposits are collateralized by the Office of the State Treasurer/Nevada Collateral Pool.

As of June 30, 2019, TMWA had the following investments and maturities:

	Less than 1 Year	1 - 3 Years	4 - 5 Years	Total
Investments				
U.S. Treasuries	\$ 19,236,990	\$ 21,012,120	\$ 12,401,595	\$ 52,650,705
U.S. Agencies	24,293,349	40,159,868	29,499,980	93,953,197
LGIP	2,376,329	—	—	2,376,329
Money Market Mutual Funds	22,617,511	—	—	22,617,511
Certificates of Deposit	2,494,010	3,241,618	10,807,240	16,542,868
Corporate Commercial Paper	7,834,444	—	—	7,834,444
Total Investments	<u>78,852,633</u>	<u>64,413,606</u>	<u>52,708,815</u>	<u>195,975,054</u>
Total Cash	<u>1,843,516</u>	<u>—</u>	<u>—</u>	<u>1,843,516</u>
Total Cash and Investments	<u>\$ 80,696,149</u>	<u>\$ 64,413,606</u>	<u>\$ 52,708,815</u>	<u>\$ 197,818,570</u>

As of June 30, 2018, TMWA had the following investments and maturities:

	Less than 1 Year	1 - 3 Years	4 - 5 Years	Total
Investments				
U.S. Treasuries	\$ 13,725,538	\$ 9,103,904	\$ 20,250,408	\$ 43,079,850
U.S. Agencies	55,729,990	35,667,945	16,791,191	108,189,126
LGIP	3,286,363	—	—	3,286,363
Money Market Mutual Funds	26,345,520	—	—	26,345,520
Certificates of Deposit	1,244,937	3,686,092	5,792,653	10,723,682
Total Investments	100,332,348	48,457,941	42,834,252	191,624,541
Total Cash	1,747,055	—	—	1,747,055
Total Cash and Investments	<u>\$ 102,079,403</u>	<u>\$ 48,457,941</u>	<u>\$ 42,834,252</u>	<u>\$ 193,371,596</u>

Nevada Revised Statutes (NRS 355.170) set forth acceptable investments for Nevada governments. On September 20, 2017 the TMWA Board adopted an investment policy which extended TMWA's investment period from two years to five years. Nevada Revised Statutes and TMWA's investment policy set portfolio component thresholds to further limit its exposure to certain risks as set forth below.

Interest Rate Risk

Interest rate risk is the risk of possible reduction in the value of a security, especially a bond, resulting from a rise in interest rates. This risk can be mitigated by diversification of durations of fixed rate investments held in the investment portfolio. As a means of limiting TMWA's exposure to this risk, TMWA constantly monitors the bond futures market and ladders investments accordingly to maximize investment returns while balancing the investment maturities with spending requirements. TMWA follows State statute limits of investment in obligations of an agency of the United States or a corporation sponsored by the United States government to those maturing within five years from the date of purchase.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations and is a function of the credit quality ratings of investments. TMWA follows State statute for reducing exposure to investment credit risk by investing in U.S. Agencies securities; "AAA" rated money market mutual funds that invest in securities issued by the U.S. Government or agencies of the U.S. Government, and the State of Nevada Local Government Pooled Investment Fund (LGIP). TMWA has a debt reserve fund with LGIP, which is an unrated external investment pool with investment duration of 116 days at June 30, 2019, and 142 days at June 30, 2018. Investments in U.S. Agencies are rated "AAA" and when investments are made in corporate commercial paper these investments are rated "A-1+"/"P-1". Investments in corporate notes are rated "A" or better.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Securities held by TMWA or by TMWA's custodians are diversified to eliminate risk of loss from over-concentration of assets in a specific maturity, a specific issuer, or a specific class of securities.

At June 30, 2019 and 2018, the following investments by issuer, exceeded 5% of TMWA's total investments:

	June 30, 2019	
U.S. Treasuries	\$ 52,650,704	27%
Federal Home Loan Bank	41,143,051	21%
Federal National Mortgage Association	17,759,156	9%
Federal Home Loan Mortgage Corporation	15,843,376	8%
Federal Farm Credit Bank	15,184,737	8%

	June 30, 2018	
Federal National Mortgage Association	\$ 43,636,448	23%
U.S. Treasuries	43,079,850	22%
Federal Home Loan Bank	38,784,938	20%
Federal Home Loan Mortgage Corporation	16,185,898	8%

Investments Measured at Fair Value

TMWA categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. TMWA does not have any investments that are measured using Level 3 inputs.

TMWA has the following recurring fair value measurements as of June 30, 2019:

	Fair Value	Fair Value Measurements Using	
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Investments by fair value level			
U.S. Treasuries	\$ 52,650,705	\$ 52,650,705	\$ —
U.S. Agencies	93,953,197	—	93,953,197
Money Market Mutual Funds	22,617,511	22,617,511	—
Certificates of Deposit	16,542,868	—	16,542,868
Corporate Commercial Paper	7,834,444	—	7,834,444
	193,598,725	<u>\$ 75,268,216</u>	<u>\$ 118,330,509</u>
LGIP*	2,376,329		
	<u>\$ 195,975,054</u>		

TMWA has the following recurring fair value measurements as of June 30, 2018:

	Fair Value	Fair Value Measurements Using	
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Investments by fair value level			
U.S. Treasuries	\$ 43,079,850	\$ 43,079,850	\$ —
U.S. Agencies	108,189,126	—	108,189,126
Money Market Mutual Funds	26,345,520	26,345,520	—
Certificates of Deposit	10,723,682	—	10,723,682
	188,338,178	\$ 69,425,370	\$ 118,912,808
LGIP*	3,286,363		
	<u>\$ 191,624,541</u>		

*LGIP is reported at Net Asset Value. TMWA is able to withdraw funds on a daily basis and has no outstanding, unfunded commitments as of June 30, 2019 and 2018.

The following is a description of the valuation methodologies used by TMWA for its Level 2 assets:

U.S. Agencies – Valued using matrix pricing and market corroborated pricing models.

Corporate commercial paper – Valued based on cash flow models that maximize the use of observable inputs for similar securities. This includes basing value on yields currently available on comparable securities of issues with similar credit ratings.

Certificates of deposit - Valued using interactive date pricing and reference data.

Note 5 - Capital Assets

Capital asset activity for the year ended June 30, 2019 follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, not being depreciated				
Construction in progress	\$ 29,199,340	\$ 40,345,726	\$ (13,101,191)	\$ 56,443,875
Land	20,160,383	266,530	—	20,426,913
Water rights	109,705,745	—	—	109,705,745
Total capital assets, not being depreciated	159,065,468	40,612,256	(13,101,191)	186,576,533
Capital assets, being depreciated				
Distribution mains	528,175,088	15,488,107	—	543,663,195
Water treatment (plants)	187,200,554	854,317	—	188,054,871
Services	146,785,819	4,934,818	(8,025)	151,712,612
Pump stations	64,975,905	2,984,720	—	67,960,625
Treated water storage (tanks)	90,236,937	3,454,816	—	93,691,753
Wells	73,067,381	1,837,890	—	74,905,271
Pressure regulating stations	10,650,226	2,731,181	(30,536)	13,350,871
Canals	41,254,883	—	—	41,254,883
Reservoirs	18,804,258	—	—	18,804,258
Vehicles	6,948,935	748,972	—	7,697,907
Furniture and fixtures	808,750	—	—	808,750
Computer hardware and software	3,431,412	186,898	—	3,618,310
Equipment	197,578	63,094	(25,606)	235,066
Hydroelectric facilities	28,262,890	—	—	28,262,890
Administrative buildings	14,411,790	—	—	14,411,790
Total capital assets, being depreciated	1,215,212,406	33,284,813	(64,167)	1,248,433,052
Less accumulated depreciation:				
Distribution mains	(119,987,675)	(9,756,249)	—	(129,743,924)
Water treatment (plants)	(86,020,412)	(5,703,906)	—	(91,724,318)
Services	(100,176,556)	(7,350,424)	7,657	(107,519,323)
Pump stations	(21,637,979)	(2,001,905)	—	(23,639,884)
Treated water storage (tanks)	(26,689,852)	(1,949,704)	—	(28,639,556)
Wells	(31,348,819)	(1,841,759)	—	(33,190,578)
Pressure regulating stations	(6,167,406)	(517,688)	30,536	(6,654,558)
Canals	(10,390,074)	(944,128)	—	(11,334,202)
Reservoirs	(6,261,847)	(548,653)	—	(6,810,500)
Vehicles	(3,337,301)	(827,370)	—	(4,164,671)
Furniture and fixtures	(513,573)	(80,588)	—	(594,161)
Computer hardware and software	(2,061,507)	(312,318)	—	(2,373,825)
Equipment	(145,984)	(35,329)	25,606	(155,707)
Hydroelectric facilities	(4,138,759)	(560,128)	—	(4,698,887)
Administrative buildings	(2,681,971)	(403,455)	—	(3,085,426)
Total accumulated depreciation	(421,559,715)	(32,833,604)	63,799	(454,329,520)
Total capital assets, being depreciated net	793,652,691	451,209	(368)	794,103,532
Total Capital Assets, Net	\$ 952,718,159	\$ 41,063,465	\$ (13,101,559)	\$ 980,680,065

Capital asset activity for the year ended June 30, 2018 follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, not being depreciated				
Construction in progress	\$ 20,805,718	\$ 27,508,378	\$ (19,114,756)	\$ 29,199,340
Land	20,143,555	16,828	—	20,160,383
Water rights	109,705,745	—	—	109,705,745
Total capital assets, not being depreciated	150,655,018	27,525,206	(19,114,756)	159,065,468
Capital assets, being depreciated				
Distribution mains	508,804,207	19,370,881	—	528,175,088
Water treatment (plants)	184,897,020	2,303,534	—	187,200,554
Services	141,319,729	5,466,090	—	146,785,819
Pump stations	64,044,824	959,790	(28,709)	64,975,905
Treated water storage (tanks)	89,951,119	1,113,116	(827,298)	90,236,937
Wells	71,104,932	2,009,549	(47,100)	73,067,381
Pressure regulating stations	10,006,789	674,730	(31,293)	10,650,226
Canals	41,254,883	—	—	41,254,883
Reservoirs	18,564,775	239,483	—	18,804,258
Vehicles	5,685,360	1,281,742	(18,167)	6,948,935
Furniture and fixtures	603,066	205,684	—	808,750
Computer hardware and software	2,660,991	770,421	—	3,431,412
Equipment	197,578	—	—	197,578
Hydroelectric facilities	28,262,890	—	—	28,262,890
Administrative buildings	12,839,231	1,572,559	—	14,411,790
Total capital assets, being depreciated	1,180,197,394	35,967,579	(952,567)	1,215,212,406
Less accumulated depreciation:				
Distribution mains	(110,436,571)	(9,551,104)	—	(119,987,675)
Water treatment (plants)	(80,189,760)	(5,830,652)	—	(86,020,412)
Services	(92,850,085)	(7,326,471)	—	(100,176,556)
Pump stations	(19,622,935)	(2,036,064)	21,020	(21,637,979)
Treated water storage (tanks)	(25,011,176)	(2,039,551)	360,875	(26,689,852)
Wells	(29,349,994)	(1,998,937)	112	(31,348,819)
Pressure regulating stations	(5,751,392)	(442,562)	26,548	(6,167,406)
Canals	(9,409,860)	(980,214)	—	(10,390,074)
Reservoirs	(5,712,987)	(548,860)	—	(6,261,847)
Vehicles	(2,620,881)	(728,380)	11,960	(3,337,301)
Furniture and fixtures	(455,831)	(57,742)	—	(513,573)
Computer hardware and software	(1,700,082)	(361,425)	—	(2,061,507)
Equipment	(111,590)	(34,394)	—	(145,984)
Hydroelectric facilities	(3,563,380)	(575,379)	—	(4,138,759)
Administrative buildings	(2,372,986)	(308,985)	—	(2,681,971)
Total accumulated depreciation	(389,159,510)	(32,820,720)	420,515	(421,559,715)
Total capital assets, being depreciated net	791,037,884	3,146,859	(532,052)	793,652,691
Total Capital Assets, Net	\$ 941,692,902	\$ 30,672,065	\$ (19,646,808)	\$ 952,718,159

Note 6 - Long-Term Debt

On June 8, 2005, TMWA entered into a loan contract with the State of Nevada Drinking Water State Revolving Fund (DWSRF) to fund TMWA's Arsenic Mitigation Project. TMWA made draws on this contract as construction proceeded, totaling \$4,669,565. The loan constitutes a special limited obligation of TMWA and the principal and interest on the loan will be payable solely from and secured by an irrevocable pledge of the net revenues derived from the operation of the Water System. This loan has a term of 20 years. This loan is subordinate to the 2015A Refunding Bonds, the 2016 Refunding Bonds, the 2017 Refunding Bonds, the 2018 Refunding Bonds, and any future senior lien bonds.

On August 15, 2006, TMWA began an inaugural Tax-Exempt Commercial Paper (TECP) program that originally authorized the issuance of up to \$160,000,000 in TECP notes. The first draw was on August 16, 2006 for \$30,000,000, and a second draw was on December 5, 2006 for \$13,000,000. The proceeds from the first two draws were used solely to purchase water rights for future sale of will-serve commitments to developers. A third draw was made on February 15, 2008 for \$25,000,000 to fund certain construction projects on an interim basis. A fourth draw was made on June 28, 2011 for \$11,400,000 for the purpose of redeeming the remaining outstanding Series 2001A Bonds which were callable on July 1, 2011. TMWA redeemed the \$11,400,000 issued in the fourth draw on December 10, 2012. TMWA issued a fifth draw for \$27,000,000 on December 17, 2014 to refund, on an advanced basis, \$26,100,000 in Washoe County water obligations to effect the water utility consolidation between Washoe County and TMWA with proceeds transferred to escrow on the date of issuance. The funds in escrow were distributed to the Washoe County bondholders as of July 1, 2015, the call date of the bonds. On various dates in fiscal year 2016, TMWA redeemed \$7,200,000. On September 7, 2016, TMWA redeemed \$4,400,000. On September 5, 2017 TMWA redeemed \$9,200,000, and on May 15, 2018 TMWA redeemed \$44,200,000 as part of the Series 2018 Water Revenue Refunding (see below). This left an outstanding balance of \$30,000,000 as of June 30, 2018. On September 4, 2018, TMWA redeemed \$6,500,000. This left an outstanding balance of \$23,500,000 as of June 30, 2019. TMWA intends to pay off this balance over the next four years using proceeds from will-serve sales. Subsequent to fiscal year end 2019, in the second quarter of fiscal year 2020, TMWA paid off \$5,000,000 of the \$23,500,000 outstanding. TMWA has remaining authorization to issue \$53,600,000 as of June 30, 2019 and 2018. The TECP program is facilitated by a direct pay letter of credit (Liquidity Facility) between TMWA and Wells Fargo Bank. The stated amount of the Liquidity Facility is \$32,663,014. The average interest rate on the outstanding balance of TECP as of June 30, 2019 was 1.44% and June 30, 2018 was 1.54%. As of June 30, 2019, the total TECP notes outstanding were comprised of five tranches ranging from \$412,000 to \$12,870,000 with maturities ranging from 28 to 93 days. As of June 30, 2018, the total TECP notes outstanding were comprised of one tranche of \$30,000,000 with maturity of 51 days.

On July 25, 2009, TMWA entered into a loan contract with the DWSRF, the 2009A DWSRF Loan, to partially fund TMWA's Mogul Bypass Siphon Project. The loan was provided through the American Recovery and Reinvestment Act (ARRA) stimulus funding provided by the federal government. TMWA made draws on this contract as construction proceeded, totaling \$2,401,120. The loan constitutes a special limited obligation of TMWA and the principal and interest on the loan will be payable solely from and secured by an irrevocable pledge of the net revenues derived from the operation of the Water System. This loan has a term of 20 years. This loan is subordinate to the senior lien 2015A Refunding Bonds, the 2016 Refunding Bonds, the 2017 Refunding Bonds, the 2018 Refunding Bonds, and any future senior lien bonds.

On February 11, 2010, TMWA entered into a loan contract with DWSRF, the 2010A DWSRF Loan, to fund TMWA's Glendale Water Treatment Plant Diversion Project. Total construction costs for the Glendale Diversion Project were less than expected. Consequently, TMWA requested and was granted that the remaining loan authorization be able to fund final improvements on the Highland Canal. During fiscal year 2013, the loan was finalized in the total amount of \$4,381,614. The loan constitutes a special limited obligation of TMWA and the principal and interest on the loan are payable solely from and secured by an irrevocable pledge of the net revenues derived from the operation of the Water System. This loan has a term of 20 years. This loan is subordinate to the, senior lien 2015A Refunding Bonds the 2016 Refunding Bonds, the 2017 Refunding Bonds, the 2018 Refunding Bonds as well as any future senior lien bonds.

On December 31, 2014, TMWA entered into a loan contract with the DWSRF, to transfer the remaining loan balance of the Washoe County Water Utility 2005 DWSRF loan to TMWA. The transfer was in conjunction with the transfer of operations of the Washoe County Water Utility into TMWA on January 1, 2015. The loan contract was entered into by the Washoe County Water Utility to construct the Longley Lane Water Treatment Facility, a facility that was transferred to TMWA. The loan balance of \$9,109,437 was transferred to TMWA under the same terms that existed with Washoe County as the TMWA 2014 DWSRF loan. The original balance of the loan was \$14,162,268. The loan constitutes a special limited obligation of TMWA and the principal and interest on the loan are payable solely from and secured by an irrevocable pledge of the net revenues, derived from the operation of the Water System. When it was transferred this loan had a remaining term of 10 years. This loan is subordinate to the senior lien 2015A Refunding Bonds, the 2016 Refunding Bonds, the 2017 Refunding Bonds, the 2018 Refunding Bonds as well as any future senior lien bonds.

On April 14, 2015, TMWA issued \$28,750,000 in Series 2015A Refunding Bonds which constitute special limited obligations of TMWA. These bonds were sold to refund on a current basis \$33,050,000 in maturities of the Series 2005A Bonds. The proceeds of the refunding bond issue were placed in an irrevocable trust for the purpose of generating financial resources to defease the callable portion of the Series 2005A Bonds. The Series 2005A refunded bonds are considered to be defeased and the liability has been removed from TMWA's Statement of Net Position. The net carrying amount of the old debt exceeded the reacquisition price by \$140,645. The unamortized balance is being amortized as a component of interest income over the remaining life of the old and new debt, which has the same remaining life. This current refunding was undertaken to reduce total debt service payments over approximately 21 years by \$6,563,813 and resulted in an economic gain of \$4,575,309. The funds held in the irrevocable trust were distributed to 2005A bondholders as of July 1, 2015, the call date of the 2005A Bonds.

On July 30, 2015, TMWA entered into a loan contract with the DWSRF, the 2015B DWSRF Loan, to fund TMWA's surface and groundwater supplies in the North Valleys particularly the Stead area, Lemmon Valley area, and North Virginia Corridor. TMWA made draws on this contract as construction proceeded, totaling \$8,971,562. The loan constitutes a special limited obligation of TMWA and the principal and interest on the loan are payable solely from and secured by an irrevocable pledge of the net revenues derived from the operation of the Water System. This loan has a term of 20 years. This loan is subordinate to the senior lien 2015A Refunding Bonds, the 2016 Refunding Bonds, the 2017 Refunding Bonds, the 2018 Refunding Bonds as well as any future senior lien bonds.

On April 12, 2016, TMWA issued \$124,790,000 in Series 2016 Water Revenue Refunding Bonds which constitute special limited obligations of TMWA. These bonds were sold to refund \$148,015,000 in maturities of the Series 2006 Bonds. The proceeds of the refunding bond issue were used to purchase U.S. Government securities that were placed in an irrevocable trust for the purpose of generating financial resources for the future debt service payments of the refunded Series 2006 Bonds. As a result, the refunded bonds were considered to be defeased and the liability has been removed from TMWA's Statements of Net Position. The reacquisition price exceeded the net carrying amount of the old debt by \$3,092,808. The unamortized balance is being amortized as a component of interest expense over the original life of the old debt, which has a shorter remaining life in comparison to the remaining life of the refunding bonds. This current refunding was undertaken to reduce total debt service payments over 22 years by \$4,332,501, and resulted in an economic gain of \$15,025,124. The funds in the irrevocable trust were distributed to 2006 bondholders as of July 1, 2016, the call date of the 2006 Bonds.

On April 11, 2017, TMWA issued \$147,415,000 in Series 2017 Water Revenue Refunding Bonds which constitute special limited obligations of TMWA. These bonds were sold to refund \$214,290,000 in maturities of the Series 2007 Bonds. The proceeds of the refunding bond issue along with \$32,865,308 from TMWA's cash balances were used to purchase U.S. Government securities that were placed in an irrevocable trust for the purpose of generating financial resources for the future debt service payments of the refunded Series 2007 Bonds. As a result, the refunded bonds were considered to be defeased and the liability has been removed from TMWA's Statements of Net Position. The reacquisition price exceeded the net carrying amount of the old debt by \$289,903. The unamortized balance is being amortized as a component of interest income over the remaining life of the old and new debt, which has the same remaining life. This current refunding was undertaken to reduce total debt service payments over 14 years by \$15,301,534, and resulted in an economic gain of \$15,948,105. The funds in the irrevocable trust were distributed to 2007 bondholders as of July 1, 2017, the call date of the 2007 Bonds.

On May 15, 2018, TMWA issued \$38,835,000 in Series 2018 Water Revenue Refunding Bonds which constitute special limited obligations of TMWA. The proceeds of the bond issue of \$44,601,977 were used to refund or redeem \$44,200,000 in maturities of TECP (see above). This transaction was executed to provide a fixed rate of interest expense over the life of the refunding, which was effected by replacing variable rate TECP debt with fixed rate bonds.

The following schedules summarize the changes in long-term obligations as of June 30, 2019:

	Final Maturity Date	Authorized	Balance July 1, 2018	Additions	Deletions	Balance June 30, 2019	Due in 2019-2020
Direct Borrowings							
2005 - DWSRF Bonds 3.21%	1/1/2025	\$ 4,669,565	\$ 2,095,861	\$ —	\$ 271,578	\$ 1,824,283	\$ 280,365
2009 A - DWSRF ARRA Bonds 0.00%	7/1/2029	2,401,120	1,422,190	—	123,668	1,298,522	123,669
2010 A - DWSRF Bonds 3.25%	1/1/2030	4,381,614	3,331,595	—	231,088	3,100,507	238,660
2014 - DWSRF Bonds 2.81%	1/1/2025	9,109,437	6,364,231	—	834,864	5,529,367	858,488
2015 B - DWSRF Bonds 2.62%	7/1/2035	8,971,562	8,589,045	—	393,328	8,195,717	402,876
		29,533,298	21,802,922	—	1,854,526	19,948,396	1,904,058
Bonds Payable							
2015 A - Refunding Bonds 2.00%-5.00%	7/1/2036	28,750,000	27,070,000	—	885,000	26,185,000	925,000
2016 - Refunding Bonds 5.00%	7/1/2037	124,790,000	124,790,000	—	—	124,790,000	—
2017 - Refunding Bonds 4.00%-5.00%	7/1/2030	147,415,000	147,415,000	—	—	147,415,000	—
2018 - Refunding Bonds 5.00%	7/1/2039	38,835,000	38,835,000	—	—	38,835,000	—
		339,790,000	338,110,000	—	885,000	337,225,000	925,000
Subtotal		369,323,298	359,912,922	—	2,739,526	357,173,396	2,829,058
Plus unamortized net bond premium			52,014,598	—	4,693,893	47,320,705	
Total debt before TECP			411,927,520	—	7,433,419	404,494,101	
TECP		77,100,000	30,000,000	—	6,500,000	23,500,000	23,500,000
Total Debt		<u>\$ 446,423,298</u>	<u>\$ 441,927,520</u>	<u>\$ —</u>	<u>\$ 13,933,419</u>	<u>\$ 427,994,101</u>	<u>\$ 26,329,058</u>

The following schedules summarize the changes in long-term obligations as of June 30, 2018:

	Final Maturity Date	Authorized	Balance July 1, 2017	Additions	Deletions	Balance June 30, 2018	Due in 2018-2019
Direct Borrowings							
2005 - DWSRF Bonds 3.21%	1/1/2025	\$ 4,669,565	\$ 2,358,926	\$ —	\$ 263,065	\$ 2,095,861	\$ 271,577
2009 A - DWSRF ARRA Bonds 0.00%	7/1/2029	2,401,120	1,545,859	—	123,669	1,422,190	123,669
2010 A - DWSRF Bonds 3.25%	1/1/2030	4,381,614	3,555,353	—	223,758	3,331,595	231,089
2014 - DWSRF Bonds 2.81%	1/1/2025	9,109,437	7,176,120	—	811,889	6,364,231	834,864
2015 B - DWSRF Bonds 2.62%	7/1/2035	8,971,562	8,971,562	—	382,517	8,589,045	393,327
		29,533,298	23,607,820	—	1,804,898	21,802,922	1,854,526
Bonds Payable							
2015 A - Refunding Bonds 2.00%-5.00%	7/1/2036	28,750,000	27,920,000	—	850,000	27,070,000	885,000
2016 - Refunding Bonds 5.00%	7/1/2037	124,790,000	124,790,000	—	—	124,790,000	—
2017 - Refunding Bonds 4.00%-5.00%	7/1/2030	147,415,000	147,415,000	—	—	147,415,000	—
2018 - Refunding Bonds 5.00%	7/1/2039	38,835,000	—	38,835,000	—	38,835,000	—
		339,790,000	300,125,000	38,835,000	850,000	338,110,000	885,000
Subtotal		369,323,298	323,732,820	38,835,000	2,654,898	359,912,922	2,739,526
Plus unamortized net bond premium			51,182,862	5,766,977	4,935,241	52,014,598	
Total debt before TECP			374,915,682	44,601,977	7,590,139	411,927,520	
TECP		83,600,000	83,400,000	—	53,400,000	30,000,000	30,000,000
Total Debt		<u>\$ 452,923,298</u>	<u>\$ 458,315,682</u>	<u>\$ 44,601,977</u>	<u>\$ 60,990,139</u>	<u>\$ 441,927,520</u>	<u>\$ 32,739,526</u>

Annual debt service requirements to maturity for TMWA's bonds and commercial paper are as follows:

Year Ending June 30,	Direct Borrowings		Bonds and TECP		Total Debt Service
	Principal Payment	Interest Payment	Principal Payment	Interest Payment	
2020	\$ 1,904,058	\$ 516,663	\$ 24,425,000	\$ 16,699,050	\$ 43,544,771
2021	1,955,867	464,854	11,505,000	16,460,150	30,385,871
2022	2,009,193	411,528	11,590,000	15,950,000	29,960,721
2023	2,064,081	356,640	12,615,000	15,344,875	30,380,596
2024	2,120,578	300,143	13,245,000	14,698,375	30,364,096
2025-2029	5,849,704	875,634	75,875,000	62,782,875	145,383,213
2030-2034	3,146,093	328,155	115,790,000	39,787,500	159,051,748
2035-2039	898,822	23,651	84,430,000	11,590,750	96,943,223
2040	—	—	11,250,000	281,250	11,531,250
Total	<u>\$ 19,948,396</u>	<u>\$ 3,277,268</u>	<u>\$ 360,725,000</u>	<u>\$ 193,594,825</u>	<u>\$ 577,545,489</u>

Because commercial paper notes have a maturity of less than 270 days, they are presented as maturing in the current year. It is the intent of TMWA that as TECP matures, the interest and principal will be remarketed into new commercial paper notes.

Note 7 - Net Position

Restricted Net Position

TMWA records the following restrictions of net position:

Restricted in accordance with bond covenants: TMWA's bond covenants require certain restrictions of TMWA's net position for operations and maintenance, debt service, renewal and replacement, and water rate stabilization.

Restricted for water meter retrofit program: This restriction was created to segregate the portion of net position derived from contributions made by developers to fund the water meter retrofit program..

Restricted for water resource sustainability: Adopted by the TMWA Board in January, 2019, this restriction replaced the water meter retrofit program and was created to segregate the portion of net position derived from contributions made by developers to fund certain projects that are intended to benefit TMWA's long-term water resources sustainability.

Restricted in accordance with the STMGID merger agreement: The merger agreement with STMGID required that certain funds transferred to TMWA by STMGID may only be used for three purposes: a) payment of contingent liabilities b) construction of facilities to move surface water into the STMGID water utility, and c) replacement, rehabilitation and/or repair of the STMGID facilities. The restricted amount of \$6,214,654 and \$9,180,630 as of June 30, 2019 and 2018, respectively, is included in the amount restricted for renewal and replacement.

Board Designation

On September 19, 2018, the Board adopted a resolution to designate 3% of total projected water sales for the most recent three year forecast as a rate stabilization fund. At June 30, 2019, this amount was \$8,671,715. Under the previous resolution and different methodology, at June 30, 2018, the amount designated for the rate stabilization fund was \$1,300,000. This designation is not reflected as restricted net position, but is considered a designated portion of unrestricted net position.

Note 8 - Contingent Liabilities

Mt. Rose Fan Domestic Well Program: As part of the transfer of operations with the Washoe County water utility, TMWA also agreed to continue Washoe County's Mt. Rose-Galena Fan Domestic Well Mitigation Program, which provides for the reimbursement of specific well deepening costs or water system connection charges, incurred by property owners within the program area, whom experienced or will experience an "unreasonable adverse effect" as a result of municipal groundwater pumping. TMWA's continuation of the program provides continuity for domestic well owners in the specific program and provides protection of shared groundwater resources in the program area. TMWA's budget includes projected costs for administering the domestic well mitigation plan.

Note 9 - Risk Management

TMWA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. TMWA is responsible for group health insurance premiums payable to the City of Reno for coverage in the City's self-funded health insurance program. All other risks are covered by commercial insurance purchased from independent third parties. There have been no settlements in excess of insurance coverage for the past three years.

Note 10 - Defined Benefit Pension Plan and Other Employee Benefits**Defined Benefit Pension Plan***Plan Description*

TMWA contributes to the Public Employees' Retirement System of the State of Nevada (PERS). PERS administers a cost-sharing, multiple-employer, defined benefit public employees' retirement system. PERS was established by the Nevada Legislature in 1947, effective July 1, 1948. PERS is administered to provide a reasonable base income to qualified employees who have been employed by a public employer and whose earnings capacities have been removed or substantially impaired by age or disability.

Benefits Provided

Benefits, as required by the Nevada Revised Statutes (NRS or statute), are determined by the number of years of accredited service at time of retirement and the member's highest average compensation in any 36 consecutive months with special provisions for members entering PERS on or after January 1, 2010 and July 1, 2015. Benefit payments to which participants or their beneficiaries may be entitled under the plan include pension benefits, disability benefits, and survivor benefits.

Monthly benefit allowances for members are computed as 2.5% of average compensation for each accredited year of service prior to July 1, 2001. For service earned on and after July 1, 2001, this multiplier is 2.67% of average compensation. For members entering PERS on or after January 1, 2010, there is a 2.5% multiplier. Members entering PERS on or after July 1, 2015 have a 2.25% multiplier. PERS offers several alternatives to the unmodified service retirement allowance which, in general, allow the retired employee to accept a reduced service retirement allowance payable monthly during his or her lifetime and various optional monthly payments to a named beneficiary after his or her death.

Post-retirement increases are provided by authority of NRS 286.575 - .579.

Vesting

Members entering PERS prior to January 1, 2010, are eligible for retirement at age 65 with five years of service, at age 60 with 10 years of service, or at any age with thirty years of service. Members entering PERS on or after January 1, 2010, are eligible for retirement at age 65 with five years of service, or age 62 with 10 years of service, or any age with thirty years of service. Members entering PERS on or after July 1, 2015 are eligible for retirement at age 65 with five years of service, or at age 62 with ten years of service, or at age 55 with thirty years of service, or at any age with 33 1/3 years of service.

The normal ceiling limitation on monthly benefits allowances is 75% of average compensation. However, a member who has an effective date of membership before July 1, 1985, is entitled to a benefit of up to 90% of average compensation. Members become fully vested as to benefits upon completion of five years of service.

Contributions

The authority for establishing and amending the obligation to make contributions and member contribution rates, is set by statute. New hires, in agencies which did not elect the Employer-Pay Contribution (EPC) plan prior to July 1, 1983, have the option of selecting one of two contribution plans.

Contributions are shared equally by employer and employee. Employees can take a reduced salary and have contributions made by the employer (EPC) or can make contributions by a payroll deduction matched by the employer. TMWA contributes under the employer-pay option.

PERS' basic funding policy provides for periodic contributions at a level pattern of cost as a percentage of salary throughout an employee's working lifetime in order to accumulate sufficient assets to pay benefits when due.

PERS receives an actuarial valuation on an annual basis indicating the contribution rates required to fund PERS on an actuarial reserve basis. Contributions actually made are in accordance with the required rates established by the Nevada Legislature. These statutory rates are increased/decreased pursuant to NRS 286.421 and 286.450.

The actuarial funding method used is the Entry Age Normal Cost Method. It is intended to meet the funding objective and result in a relatively level long-term contributions requirement as a percentage of salary.

The Employer-pay contribution (EPC) rate was 28% for both fiscal years June 30, 2019 and 2018.

TMWA's contributions were \$2,865,963 and \$2,562,356 for the years ended June 30, 2019 and 2018, respectively.

PERS Investment Policy

PERS' policies which determine the investment portfolio target asset allocation are established by the PERS Board. The asset allocation is reviewed annually and is designed to meet the future risk and return needs of PERS.

The following was the PERS Board adopted policy target asset allocation as of June 30, 2018 and 2017:

	Target Allocation	Long-Term Geometric Expected Real Rate of Return
Domestic Equity	42%	5.50%
International Equity	18%	5.75%
Domestic Fixed Income	30%	0.25%
Private Markets	10%	6.80%

Net Pension Liability

At June 30, 2019, TMWA reported a liability for its proportionate share of the net pension liability of \$37,658,701. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

At June 30, 2018, TMWA reported a liability for its proportionate share of the net pension liability of \$37,323,782. The net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

TMWA's proportion of the net pension liability was based on TMWA's share of contributions in PERS pension plan relative to the total contributions of all participating PERS employers and members. At June 30, 2018 and 2017, TMWA's proportion was 0.2761 and 0.2806 percent, respectively, representing a decrease of .0045 percent and an increase of .0132 percent from its proportion measured at June 30, 2017 and 2016, respectively.

Pension Liability Discount Rate Sensitivity

The following presents the net pension liability of TMWA measured as of June 30, 2018 and 2017, calculated using the discount rate of 7.50% and what TMWA's net pension liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the discount rates used in each year's valuation:

	1% Decrease in Discount Rate (6.50%)	Discount Rate (7.50%)	1% Decrease in Discount Rate (8.50%)
Net Pension Liability, June 30, 2018	\$ 57,427,995	\$ 37,658,701	\$ 21,231,569
	1% Decrease in Discount Rate (6.50%)	Discount Rate (7.50%)	1% Decrease in Discount Rate (8.50%)
Net Pension Liability, June 30, 2017	\$ 56,423,138	\$ 37,323,782	\$ 21,461,468

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the PERS Comprehensive Annual Financial Report, available on the PERS website, www.nvpers.org.

Actuarial Assumptions

TMWA's June 30, 2019 net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. TMWA's June 30, 2018 net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The total pension liability was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	June 30, 2018	June 30, 2017
Inflation Rate	2.75%	2.75%
Payroll Growth	5.00% including inflation	5.00% including inflation
Investment Rate of Return	7.50%	7.50%
Productivity Pay Increase	0.50%	0.50%
Projected Salary Increases	4.25% to 9.15%, depending on service. Rates include inflation and productivity increases	4.25% to 9.15%, depending on service. Rates include inflation and productivity increases
Consumer Price Index	2.75%	2.75%
Other Assumptions	Same as those used in the June 30, 2018 funding actuarial valuation	Same as those used in the June 30, 2017 funding actuarial valuation

Mortality rates for non-disabled regular members were based on the RP-2014 Combined Healthy Annuitant Table projected to 2020 with Scale MP-2016, set forward one year for spouses and beneficiaries. The mortality table used in the actuarial valuation to project mortality rates for all disabled regular members is the RP-2014 Disabled Retiree Table, set forward four years.

Actuarial assumptions used in the June 30, 2018 and 2017 valuations were based on the results of the experience review issued October 16, 2017.

The projection of cash flows used to determine the discount rate assumed plan contributions will be made in amounts consistent with statutory provisions and recognizing the plan's current funding policy and cost-sharing mechanism between employers and members. For this purpose, all contributions that are intended to fund benefits for all plan members and their beneficiaries are included, except that projected contributions that are intended to fund the service costs for future plan members and their beneficiaries are not included.

Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments for 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 as of June 30, 2018 and June 30, 2017.

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

For the years ended June 30, 2019 and 2018, TMWA recognized pension expense of \$6,571,967 and \$9,796,032, respectively.

At June 30, 2019, TMWA reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 1,179,759	\$ 1,748,035
Changes in assumptions or other inputs	1,984,404	—
Net difference between projected and actual earnings on pension plan investments	—	179,295
Changes in TMWA's proportion and differences between TMWA's contributions and TMWA's proportionate contributions	4,516,811	497,918
TMWA contributions subsequent to the measurement date	2,865,963	—
	<u>\$ 10,546,937</u>	<u>\$ 2,425,248</u>

Deferred outflows of resources of \$2,865,963 resulted from TMWA contributions subsequent to the measurement date, and will be recognized as a reduction of the net pension liability in the year ended June 30, 2020.

At June 30, 2018, TMWA reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ —	\$ 2,449,195
Changes in assumptions or other inputs	2,476,078	—
Net difference between projected and actual earnings on pension plan investments	242,337	—
Changes in TMWA's proportion and differences between TMWA's contributions and TMWA's proportionate contributions	5,857,451	—
TMWA contributions subsequent to the measurement date	2,562,356	—
	<u>\$ 11,138,222</u>	<u>\$ 2,449,195</u>

Deferred outflows of resources of \$2,562,356 resulted from TMWA contributions subsequent to the measurement date, and was recognized as a reduction of the net pension liability in the year ended June 30, 2019.

The average of the expected remaining service lives of all employees that are provided with pensions through PERS (active and inactive employees) determined at July 1, 2017 (the beginning of the measurement period ended June 30, 2018) is 6.22 years.

Other estimated amounts reported by TMWA as deferred outflows of resources and deferred inflows of resources related to pensions at June 30, 2019 will be recognized in pension expense as follows:

<u>Year Ending June 30,</u>	
2020	\$ 2,212,200
2021	1,572,458
2022	531,550
2023	841,841
2024	152,808
Thereafter	(55,131)

Additional Information

The PERS Comprehensive Annual Financial Report (CAFR) is available on the PERS website at www.nvpers.org under Quick Links – Publications.

Deferred Compensation Plans

All employees of TMWA are eligible to participate in a Section 457 Deferred Compensation Plan, monies of which are maintained in a trust, separate from the general assets of TMWA. In addition to the Section 457 Deferred Compensation Plan, all employees are eligible to participate in a Section 401(a) Money Purchase Retirement Plan, monies of which are maintained in a trust, separate from the general assets of TMWA. For the years ended June 30, 2019 and June 30, 2018, TMWA had matching contributions totaling \$1,322,978, and \$1,181,760, respectively.

Note 11 - Other Post-Employment Benefit (OPEB) Plans

TMWA has two Other Post-Employment Benefit (OPEB) Plans referred to as the §501(c)(9) and §115 plans. The §501(c)(9) plan was established for the benefit of transferred employees from Sierra Pacific Power Company and all new hires. The §115 Plan plan was formed to provide post-employment benefits for employees who transferred from Washoe County as a result of the water utility consolidation. Both plans reference the Internal Revenue Code sections that the plans were formed under. Both plans' investments are held by the Nevada Retirement Benefits Investment Board.

Census data as of June 30, 2019 for both plans is as follows:

	<u>§501(c)(9) Plan</u>	<u>§115 Plan</u>
Retirees receiving benefits	40	6
Retirees eligible for but not receiving benefits	1	—
Active employees	197	16
Total	<u>238</u>	<u>22</u>

Census data as of June 30, 2018 for both plans is as follows:

	<u>§501(c)(9) Plan</u>	<u>§115 Plan</u>
Retirees receiving benefits	38	3
Retirees eligible for but not receiving benefits	1	—
Active employees	194	19
Total	<u>233</u>	<u>22</u>

Plan Descriptions, Eligibility Information and Funding Policies

§501(c)(9) Plan

Plan Description. The §501(c)(9) plan known as the Truckee Meadows Water Authority Post-Retirement Medical Plan and Trust (Plan), is a single-employer defined benefit OPEB plan that was established to provide eligible TMWA employees with post-employment health benefits. The Plan was amended to provide post-retirement life insurance benefits in July 2011. Pursuant to Nevada State Administrative Regulations, adopted in September 2008, the Plan is governed by not less than three, but not more than five trustees. Four trustees were appointed by the TMWA Board, two from non-represented employees and two from represented employees. The Plan issues a financial report that includes the financial statements and required supplementary information. That report may be obtained by contacting TMWA in writing at P.O. Box 30013, Reno, NV 89520-3013.

Eligibility. Effective December 13, 2018, the Board adopted a resolution to close the Plan to employees hired on or after December 13, 2018. Existing employees and plan participants currently receiving benefits were not impacted by this resolution. There are three employee classifications eligible for benefits: a pre-January 1, 1998 collective bargaining unit group, a post-December 31, 1997 collective bargaining unit group, and a group for management, professional, and administrative (MPAT) personnel hired prior to December 13, 2018. Eligibility requirements benefit levels, employee contributions, and employer contributions are amended through TMWA's collective bargaining agreements for its represented employees and by the TMWA Board with respect to MPAT employees.

Employees must have at least ten years of service to be eligible for benefits and must be at least 55 years of age. The pre-January 1, 1998 group of represented employees will receive a subsidy as a percentage of the total health premium, dependent upon years of service and age of retirement, with a maximum subsidy of 85% with 20 years of credited service. Employees with 20 or more years of service electing the Medicare Risk Contract would pay nothing towards health premiums. For this group, dependents are also covered. The post-December 31, 1997 group of represented employees will receive a total subsidy of \$1,250 times years of service towards health care premiums. This amount does not grow with interest and once exhausted a retiree may convert to COBRA, but only for the 18 month continuation period. For MPAT employees, the annual subsidy is \$235 times years of service, up to 30 years, prorated for each month of retirement while under the age of 65. On or after the age of 65, the subsidy is \$105 times years of service prorated for each month of retirement while age 65 and older. If an MPAT employee retires and draws benefits before age 62, the subsidy is reduced by 5% for each full year retirement precedes 62.

There is no extra subsidy for spousal or dependent coverage except continuation benefits provided for under COBRA. Retirees are responsible for the remaining portion of premiums.

Funding Policy. Beginning in fiscal year 2011, the plan has funded retiree benefits through its Voluntary Employee Benefit Association (VEBA) that TMWA established as an irrevocable trust for funding of the post-employment health benefits. TMWA funds the plan based on the actuarially determined contribution (ADC) each year.

§115 Plan

Plan Description. On December 17, 2014, TMWA formed The Truckee Meadows Water Authority OPEB Trust Fund (§115 Plan), a single-employer defined benefit OPEB plan that was established to provide certain eligible TMWA employees with post-employment health benefits. This specific plan was formed to provide post-employment benefits to qualified transferred Washoe County employees as a result of the water utility transfer of operations. STMGID had no employees and was contractually operated by Washoe County. The §115 Plan is a closed plan that will provide future benefits to the remaining eligible transferred employees and no new beneficiaries can be enrolled in this plan.

Eligibility. There are two employee classifications eligible for benefits in this plan: Tier I and Tier II classifications.

For Tier I retirees that have at least ten years but less than 15 years of combined full-time employment with Washoe County and/or TMWA the maximum benefits payable by the §115 Plan will be 50% of the premium for coverage of such retiree under the benefit plans. For Tier I employees that have at least fifteen years but less than twenty years of combined full-time employment with Washoe County and/or TMWA the maximum benefits payable by the §115 Plan will be 75% of the premium for coverage of such retiree under the benefit plans. For Tier I employees that have at least twenty years of combined full-time employment with Washoe County and/or TMWA the maximum benefits payable by the §115 Plan will be 100% of the premium for coverage of such retiree under the benefit plans.

For Tier I retirees who have attained the Medicare Eligibility Age (currently age 65) during a plan year must enroll in and pay the cost of Medicare Part “A” and Medicare Part “B” or Medicare Part “C” coverage and the §115 Plan will become the secondary payer regardless of whether the retiree enrolls in the Medicare program or not. The Medicare Eligibility Age is currently defined as age 65 but will be changed if Medicare changes the eligibility age.

For Tier II retirees the maximum benefits to be paid by the §115 Plan who have not attained Medicare Eligibility Age (currently age 65) is to be the same amount as the premium paid for group health coverage by an employer for coverage of non-state employees under the Nevada State Public Employee Benefit Plan (PEBP) Retiree Health Insurance plan. The 2003 Nevada Legislature passed legislation (AB 286) that afforded public employees of Nevada political subdivisions the opportunity to enroll, upon their retirement in the PEBP Retiree Health Insurance Plan and obligated public employers of enrolled retirees to pay a portion of the medical premium on the retiree’s behalf (the Subsidy). Tier II Retirees are entitled to receive the Subsidy from the §115 Plan towards their coverage under the employer Benefit Plans rather than the PEBP Retiree Health Plan.

For Tier II retirees who have attained the Medicare Eligibility Age (currently age 65) or older will instead receive benefits equal to the equivalent of the State of Nevada’s Medicare Exchange Retiree HRA Contribution Subsidy based upon the combined years of service with Washoe County and/or TMWA and must elect Medicare. The Medicare Eligibility Age is currently defined as age 65 but will be changed if Medicare changes the eligibility age.

In order to receive the benefits described the Tier II employee must be an employee of TMWA immediately prior to drawing their retirement benefits.

Funding Policy. The plan funds retiree benefits through an irrevocable trust for funding of the post-employment health benefits. TMWA funds the §115 Plan based on the ADC each year.

OPEB Expense and Net Position

Total OPEB Expense recognized for fiscal years June 30, 2019 and 2018 is below:

	§501(c)(9) Plan	§115 Plan	Total
2019	\$ 362,331	\$ 133,768	\$ 496,099
2018	\$ 182,959	\$ 100,914	\$ 283,873

Changes in Net Position for each plan for the measurement period ended December 31, 2018 is below:

	§ 501(c)(9) Plan			§115 Plan		
	Total OPEB Liability	Fiduciary Net Position	Net OPEB (Asset)/ Liability	Total OPEB Liability	Fiduciary Net Position	Net OPEB (Asset)/ Liability
Balance at Fiscal Year Ending June 30, 2018	\$ 10,694,671	\$ 10,926,894	\$ (232,223)	\$ 1,826,373	\$ 999,831	\$ 826,542
<i>Measurement Date - December 31, 2017</i>						
Changes During the Period:						
Service Cost	295,437	—	295,437	56,960	—	56,960
Interest Cost	648,751	—	648,751	111,978	—	111,978
Expected Investment Income	—	653,877	(653,877)	—	61,939	(61,939)
Employer Contributions	—	324,529	(324,529)	—	119,366	(119,366)
Auditing Fees	—	(18,545)	18,545	—	(13,690)	13,690
Investment & Administrative Fees	—	(3,441)	3,441	—	(770)	770
Legal Fees	—	(5,250)	5,250	—	(5,864)	5,864
Retiree Contributions In	—	117,015	(117,015)	—	5,244	(5,244)
Retiree Contributions Out	—	(117,015)	117,015	—	(5,244)	5,244
Benefit Payments	(355,168)	(355,168)	—	(34,065)	(34,065)	—
Investment Experience	—	(1,178,531)	1,178,531	—	(108,397)	108,397
Net Changes	589,020	(582,529)	1,171,549	134,873	18,519	116,354
Balance at Fiscal Year Ending June 30, 2019	\$ 11,283,691	\$ 10,344,365	\$ 939,326	\$ 1,961,246	\$ 1,018,350	\$ 942,896
<i>Measurement Date - December 31, 2018</i>						

Changes in Net Position for each plan for the measurement period ended December 31, 2017 is below:

	§ 501(c)(9) Plan			§115 Plan		
	Total OPEB Liability	Fiduciary Net Position	Net OPEB (Asset)/ Liability	Total OPEB Liability	Fiduciary Net Position	Net OPEB (Asset)/ Liability
Balance at Fiscal Year Ending June 30, 2017	\$ 10,062,447	\$ 9,268,879	\$ 793,568	\$ 1,677,294	\$ 787,288	\$ 890,006
<i>Measurement Date - December 31, 2016</i>						
Changes During the Period:						
Service Cost	284,073	—	284,073	54,769	—	54,769
Interest Cost	612,850	—	612,850	103,644	—	103,644
Expected Investment Income	—	560,422	(560,422)	—	49,833	(49,833)
Employer Contributions	—	445,063	(445,063)	—	103,441	(103,441)
Auditing Fees	—	(15,500)	15,500	—	(6,000)	6,000
Investment & Administrative Fees	—	(2,612)	2,612	—	(780)	780
Legal Fees	—	(19,268)	19,268	—	(788)	788
Retiree Contributions In	—	93,172	(93,172)	—	930	(930)
Retiree Contributions Out	—	(93,172)	93,172	—	(930)	930
Benefit Payments	(264,699)	(264,699)	—	(9,334)	(9,334)	—
Investment Experience	—	954,609	(954,609)	—	76,171	(76,171)
Net Changes	632,224	1,658,015	(1,025,791)	149,079	212,543	(63,464)
Balance at Fiscal Year Ending June 30, 2018	<u>\$ 10,694,671</u>	<u>\$ 10,926,894</u>	<u>\$ (232,223)</u>	<u>\$ 1,826,373</u>	<u>\$ 999,831</u>	<u>\$ 826,542</u>
<i>Measurement Date - December 31, 2017</i>						

A schedule of the plans' deferred resources as of June 30, 2019 is below:

	§501(c)(9) Plan		§115 Plan	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference Between Projected and Actual Earnings on Investments	\$ 370,060	\$ —	\$ 41,015	\$ —
Contributions Made Subsequent to the Measurement Date	258,430	—	121,798	—
Total	<u>\$ 628,490</u>	<u>\$ —</u>	<u>\$ 162,813</u>	<u>\$ —</u>

A schedule of the plans' deferred resources as of June 30, 2018 is below:

	§501(c)(9) Plan		§115 Plan	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference Between Projected and Actual Earnings on Investments	\$ —	\$ 763,687	\$ —	\$ 60,937
Contributions Made Subsequent to the Measurement Date	324,529	—	119,366	—
Total	<u>\$ 324,529</u>	<u>\$ 763,687</u>	<u>\$ 119,366</u>	<u>\$ 60,937</u>

TMWA will recognize the Contributions Made Subsequent to the Measurement Date in the next fiscal year. In addition, future recognition of other deferred resources as of June 30, 2019 is shown below.

Year ended June 30,	§501(c)(9) Plan	§115 Plan
	Deferred Inflows Recognized in OPEB Expense	Deferred Inflows Recognized in OPEB Expense
2020	\$ 44,784	\$ 6,445
2021	44,784	6,445
2022	44,785	6,444
2023	235,707	21,681
2024	—	—
Thereafter	—	—

Actuarial Valuation Assumptions

The total OPEB liability as of December 31, 2018 was determined using the following actuarial assumptions.

Healthcare trend rate (both plans) - TMWA plan medical premiums and per capita claims costs are assumed to increase at the following rates:

Effective January 1	Premium Increase	Effective January 1	Premium Increase
2019	6.3%	2023	5.3%
2020	6.0%	2024	5.0%
2021	5.8%	2025	5.0%
2022	5.5%	Thereafter	5.0%

Additional significant assumptions are listed below for each plan:

Assumption	§501(c)(9) Plan	§115 Plan
Valuation Date	December 31, 2017	December 31, 2017
Funding Method	Entry Age Normal Cost, level percent of pay	Entry Age Normal Cost, level percent of pay
Asset Valuation Method	Market value of assets	Market value of assets
Mortality	<p><i>Males:</i> RP-2000 Combined Healthy Table <i>Females:</i> RP-2000 Combined Healthy Table set back 1 year</p> <p>The rates described above were then adjusted to anticipate future mortality improvements each year until the payments anticipated in any future year occur.</p>	<p><i>Males:</i> RP-2000 Combined Healthy Table <i>Females:</i> RP-2000 Combined Healthy Table set back 1 year</p> <p>The rates described above were then adjusted to anticipate future mortality improvements each year until the payments anticipated in any future year occur.</p>
Long-Term Return on Assets and Discount Rate	6.0% Based on estimated future returns of the Retirement Benefits Investment Board. Rate is applied to all periods of projected benefit payments.	6.0% Based on estimated future returns of the Retirement Benefits Investment Board. Rate is applied to all periods of projected benefit payments.
Participants Valued	Only current active employees and retired participants and covered dependents are valued, excluding those who transferred to TMWA from Washoe County. No future entrants are considered in this valuation.	Only current active employees and retired participants who transferred to TMWA from Washoe County and covered dependents are valued. This plan is closed to new members.
Salary Increase	4.0% per year	4.0% per year
Assumed Wage Inflation	3.0% per year; a component of assumed average annual payroll increases	3.0% per year; a component of assumed average annual payroll increases
General Inflation Rate	2.75% per year	2.75% per year
Medicare Eligibility	All individuals are assumed to be eligible for Medicare Parts A and B at age 65.	All individuals are assumed to be eligible for Medicare Parts A and B at age 65.
Employer Cost Sharing	<p>IBEW Pre - 1998 Hires: Increases in the PRMPT-paid portion of healthcare premiums are assumed to increase at the same rates as medical trend (described above).</p> <p>IBEW Post-1997 Hires: The \$1,250 service multiplier is assumed to remain fixed at its current level in all future years. Retirees are expected to exhaust the lifetime allowance 4 years following retirement.</p> <p>MPAT: The \$235 (pre-65) and \$105 (post-65) service multipliers are assumed to remain fixed at their current level in all future years.</p>	<p>Tier 1: Increases in the Trust-paid portion of healthcare premiums are assumed to increase at the same rates as medical trend (described above).</p> <p>Tier 2: The TMWA subsidy provided prior to age 65 is assumed to increase at the same rates as medical trend. The subsidy provided at ages 65 and above is assumed to increase by 4.5% per year.</p>

GASB Statement No. 75 allows reporting liabilities as of any fiscal year end based on: (1) a *valuation date* no more than 30 months plus 1 day prior to the close of the fiscal year end; and (2) a *measurement date* up to one year prior to the close of the fiscal year. The following dates were used for this report:

Fiscal Year End	June 30, 2019
Measurement Date	December 31, 2018
Measurement Period	December 31, 2017 to December 31, 2018
Valuation Date	December 31, 2017

The discount rates used for the measurement periods ended December 31, 2018 and 2017 is 6.0%. Medical Cost Inflation was assumed to start at 6.25% and grade down to 5.0% for years 2024 and thereafter. The impact of a 1% increase or decrease in these assumptions is shown in the charts below for the two measurement periods.

Measurement Date - December 31, 2018

§501(c)(9) Plan	Discount Rate			Medical Cost Inflation		
	Discount Rate		Discount Rate	Medical Trend	Current	Medical Trend
	- 1%	Discount Rate	+ 1 %	- 1%	Medical Trend	+ 1 %
Total OPEB Liability	\$ 12,547,968	\$ 11,283,691	\$ 10,199,752	\$ 10,132,109	\$ 11,283,691	\$ 12,794,928
Net OPEB Liability (Asset)	\$ 2,203,603	\$ 939,326	\$ (144,613)	\$ (212,256)	\$ 939,326	\$ 2,450,563

§115 Plan	Discount Rate			Medical Cost Inflation		
	Discount Rate		Discount Rate	Medical Trend	Current	Medical Trend
	-1%	Discount Rate	+1%	-1%	Medical Trend	+1%
Total OPEB Liability	\$ 2,237,539	\$ 1,961,246	\$ 1,731,316	\$ 1,670,402	\$ 1,961,246	\$ 2,347,587
Net OPEB Liability (Asset)	\$ 1,219,189	\$ 942,896	\$ 712,966	\$ 652,052	\$ 942,896	\$ 1,329,237

Measurement Date - December 31, 2017

§501(c)(9) Plan	Discount Rate			Medical Cost Inflation		
	Discount Rate		Discount Rate	Medical Trend	Current	Medical Trend
	- 1%	Discount Rate	+ 1 %	- 1%	Medical Trend	+ 1 %
Total OPEB Liability	\$ 11,927,167	\$ 10,694,671	\$ 9,639,197	\$ 9,647,634	\$ 10,694,671	\$ 12,067,197
Net OPEB Liability (Asset)	\$ 1,000,273	\$ (232,223)	\$ (1,287,697)	\$ (1,279,260)	\$ (232,223)	\$ 1,140,303

§115 Plan	Discount Rate			Medical Cost Inflation		
	Discount Rate		Discount Rate	Medical Trend	Current	Medical Trend
	- 1%	Discount Rate	+ 1 %	- 1%	Medical Trend	+ 1 %
Total OPEB Liability	\$ 2,093,203	\$ 1,826,373	\$ 1,605,093	\$ 1,559,685	\$ 1,826,373	\$ 2,180,680
Net OPEB Liability (Asset)	\$ 1,093,372	\$ 826,542	\$ 605,262	\$ 559,854	\$ 826,542	\$ 1,180,849

OPEB Plans Fiduciary Net Position

Detailed information about the OPEB plans fiduciary net position are available in separately issued financial statements and can be requested by contacting TMWA's Finance Department at P.O. Box 30013, Reno, NV 89509-3013.

Note 12 - Commitments

TMWA has committed \$700,000 as a contribution to the Truckee River Fund of the Community Foundation of Western Nevada, for the purposes of water shed protection and enhancements to the Truckee River that will benefit the water customers of TMWA. This payment was made in September 2019.

Note 13 - Subsequent Events

In October 2019, TMWA reduced its outstanding commercial paper balance from \$23,500,000 to \$18,500,000 with a payment from unrestricted cash of \$5,000,000.

Required Supplementary Information

Truckee Meadows Water Authority

Truckee Meadows Water Authority
Schedules of Changes in Net OPEB Liability and Related Ratios
Last Ten Fiscal Years*

	2019	2018	2017
§501(c)(9) Plan			
<u>Total OPEB Liability</u>			
Service Cost	\$ 295,437	\$ 284,073	\$ 273,146
Interest	648,751	612,850	576,050
Changes of benefit terms	—	—	—
Differences between expected and actual experience	—	—	—
Changes of assumptions	—	—	—
Benefit payments	(355,168)	(264,699)	(228,880)
Total OPEB Liability - Beginning	<u>10,694,671</u>	<u>10,062,447</u>	<u>9,442,131</u>
Total OPEB Liability - Ending	<u>\$ 11,283,691</u>	<u>\$ 10,694,671</u>	<u>\$ 10,062,447</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - employer	\$ 324,529	\$ 445,063	\$ 244,429
Net investment income	(524,654)	1,515,031	536,863
Benefit payments	(355,168)	(264,699)	(228,880)
Auditing fees	(18,545)	(15,500)	(12,900)
Investment & administrative fees	(3,441)	(2,612)	(2,490)
Legal fees	(5,250)	(19,268)	(1,663)
Retiree contributions in	117,015	93,172	90,145
Retiree contributions out	(117,015)	(93,172)	(90,145)
Net change in plan fiduciary net position	<u>(582,529)</u>	<u>1,658,015</u>	<u>535,359</u>
Plan fiduciary net position - beginning	<u>10,926,894</u>	<u>9,268,879</u>	<u>8,733,520</u>
Plan fiduciary net position - ending	<u>\$ 10,344,365</u>	<u>\$ 10,926,894</u>	<u>\$ 9,268,879</u>
Net OPEB liability - ending	<u>\$ 939,326</u>	<u>\$ (232,223)</u>	<u>\$ 793,568</u>
Plan fiduciary net position as a percentage of total OPEB liability	91.7%	102.2 %	92.1%
Covered-employee payroll	<u>\$ 20,579,301</u>	<u>\$ 18,623,746</u>	<u>\$ 16,285,682</u>
Net OPEB liability as a percentage of covered-employee payroll	4.6%	(1.2)%	4.9%

Notes to Schedule

*Historical information is required only for measurement periods for which GASB Statement No. 75 is applicable. Future years' information will be disclosed up to 10 years as information becomes available.

Truckee Meadows Water Authority
Schedules of Changes in Net OPEB Liability and Related Ratios
Last Ten Fiscal Years*

	2019	2018	2017
§115 Plan			
<u>Total OPEB Liability</u>			
Service Cost	\$ 56,960	\$ 54,769	\$ 52,663
Interest	111,978	103,644	94,941
Changes of benefit terms	—	—	—
Differences between expected and actual experience	—	—	—
Changes of assumptions	—	—	—
Benefit payments	(34,065)	(9,334)	—
Total OPEB Liability - Beginning	<u>1,826,373</u>	<u>1,677,294</u>	<u>1,529,690</u>
Total OPEB Liability - Ending	<u>\$ 1,961,246</u>	<u>\$ 1,826,373</u>	<u>\$ 1,677,294</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - employer	\$ 119,366	\$ 103,441	\$ 151,176
Net investment income	(46,458)	126,004	35,423
Benefit payments	(34,065)	(9,334)	—
Auditing fees	(13,690)	(6,000)	(8,900)
Investment & administrative fees	(770)	(780)	(675)
Legal fees	(5,864)	(788)	(1,138)
Retiree contributions in	5,244	930	—
Retiree contributions out	(5,244)	(930)	—
Net change in plan fiduciary net position	<u>18,519</u>	<u>212,543</u>	<u>175,886</u>
Plan fiduciary net position - beginning	<u>999,831</u>	<u>787,288</u>	<u>611,402</u>
Plan fiduciary net position - ending	<u>\$ 1,018,350</u>	<u>\$ 999,831</u>	<u>\$ 787,288</u>
Net OPEB liability - ending	<u>\$ 942,896</u>	<u>\$ 826,542</u>	<u>\$ 890,006</u>
Plan fiduciary net position as a percentage of total OPEB liability	<u>51.9%</u>	<u>54.7%</u>	<u>46.9%</u>
Covered-employee payroll	<u>\$ 1,866,073</u>	<u>\$ 1,951,732</u>	<u>\$ 1,868,197</u>
Net OPEB liability as a percentage of covered-employee payroll	<u>50.5%</u>	<u>42.3%</u>	<u>47.6%</u>

Notes to Schedule

*Historical information is required only for measurement periods for which GASB Statement No. 75 is applicable. Future years' information will be disclosed up to 10 years as information becomes available.

Truckee Meadows Water Authority
Schedules of Contributions
Last Ten Fiscal Years*

	2019	2018	2017
§501(c)(9) Plan			
Actuarially Determined Contribution	\$ 298,077	\$ 284,882	\$ 445,063
Contributions in relation to the actuarially determined contribution	258,430	324,529	445,063
Contribution deficiency (excess)	39,647	(39,647)	—
Covered-employee payroll	21,778,468	18,936,890	18,341,120
Contributions as a percentage of covered employee payroll	1.2%	1.7%	2.4%
 §115 Plan			
Actuarially Determined Contribution	121,798	119,366	103,441
Contributions in relation to the actuarially determined contribution	121,798	119,366	103,441
Contribution deficiency (excess)	—	—	—
Covered-employee payroll	1,771,775	1,886,143	1,958,832
Contributions as a percentage of covered employee payroll	6.9%	6.3%	5.3%

Notes to Schedule

*Historical information is required only for measurement periods for which GASB Statement No. 75 is applicable. Future years' information will be disclosed up to 10 years as information becomes available.

Healthcare trend rate (both plans) - TMWA plan medical premiums and per capita claims costs are assumed to increase at the following rates:

Effective January 1	Premium Increase	Effective January 1	Premium Increase
2019	6.3%	2023	5.3%
2020	6.0%	2024	5.0%
2021	5.8%	2025	5.0%
2022	5.5%	Thereafter	5.0%

Additional significant assumptions are listed below for each plan:

Assumption	§501(c)(9) Plan	§115 Plan
Valuation Date	December 31, 2017	December 31, 2017
Funding Method	Entry Age Normal Cost, level percent of pay	Entry Age Normal Cost, level percent of pay
Asset Valuation Method	Market value of assets	Market value of assets
Mortality	<p><i>Males:</i> RP-2000 Combined Healthy Table <i>Females:</i> RP-2000 Combined Healthy Table set back 1 year</p> <p>The rates described above were then adjusted to anticipate future mortality improvements each year until the payments anticipated in any future year occur.</p>	<p><i>Males:</i> RP-2000 Combined Healthy Table <i>Females:</i> RP-2000 Combined Healthy Table set back 1 year</p> <p>The rates described above were then adjusted to anticipate future mortality improvements each year until the payments anticipated in any future year occur.</p>
Long-Term Return on Assets and Discount Rate	6.0% Based on estimated future returns of the Retirement Benefits Investment Board. Rate is applied to all periods of projected benefit payments.	6.0% Based on estimated future returns of the Retirement Benefits Investment Board. Rate is applied to all periods of projected benefit payments.
Participants Valued	Only current active employees and retired participants and covered dependents are valued, excluding those who transferred to TMWA from Washoe County. No future entrants are considered in this valuation.	Only current active employees and retired participants who transferred to TMWA from Washoe County and covered dependents are valued. This plan is closed to new members.
Salary Increase	4.0% per year	4.0% per year
Assumed Wage Inflation	3.0% per year; a component of assumed average annual payroll increases	3.0% per year; a component of assumed average annual payroll increases
General Inflation Rate	2.75% per year	2.75% per year
Medicare Eligibility	All individuals are assumed to be eligible for Medicare Parts A and B at age 65.	All individuals are assumed to be eligible for Medicare Parts A and B at age 65.
Employer Cost Sharing	<p>IBEW Pre - 1998 Hires: Increases in the PRMPT-paid portion of healthcare premiums are assumed to increase at the same rates as medical trend (described above).</p> <p>IBEW Post-1997 Hires: The \$1,250 service multiplier is assumed to remain fixed at its current level in all future years. Retirees are expected to exhaust the lifetime allowance 4 years following retirement.</p> <p>MPAT: The \$235 (pre-65) and \$105 (post-65) service multipliers are assumed to remain fixed at their current level in all future years.</p>	<p>Tier 1: Increases in the Trust-paid portion of healthcare premiums are assumed to increase at the same rates as medical trend (described above).</p> <p>Tier 2: The TMWA subsidy provided prior to age 65 is assumed to increase at the same rates as medical trend. The subsidy provided at ages 65 and above is assumed to increase by 4.5% per year.</p>

	2018	2017	2016	2015	2014
TMWA's proportion of the net pension liability	0.2761%	0.2806%	0.2674%	0.2345%	0.2139%
TMWA's proportionate share of the net pension liability	\$ 37,658,701	\$ 37,323,782	\$ 35,783,246	\$ 26,869,406	\$ 22,293,306
TMWA's covered payroll	\$ 18,259,883	\$ 17,947,692	\$ 16,314,669	\$ 14,077,995	\$ 12,573,558
TMWA's proportionate share of the net pension liability as a percentage of its covered payroll	206.24%	207.96%	219.33%	190.86%	177.30%
Plan fiduciary net position as a percentage of the total pension liability	75.24%	74.42%	72.23%	75.13%	76.30%

Notes to Schedule

*Historical information is required only for measurement periods for which GASB Statement No. 68 is applicable. Future years' information will be disclosed up to 10 years as information becomes available.

	2019	2018	2017	2016	2015
Statutorily required contribution	\$ 2,865,963	\$ 2,562,356	\$ 5,037,877	\$ 4,534,811	\$ 3,629,441
Contributions in relation to the statutorily required contribution	\$ 2,865,963	\$ 2,562,356	\$ 5,037,877	\$ 4,534,811	\$ 3,629,441
Contribution (deficiency) excess	\$ —	\$ —	\$ —	\$ —	\$ —
TMWA's covered payroll	\$ 20,440,658	\$ 18,259,883	\$ 17,947,692	\$ 16,314,669	\$ 14,077,995
Contributions as a percentage of covered payroll	14.02%	14.03%	28.07%	27.80%	25.78%

Notes to Schedule

*Historical information is required only for measurement periods for which GASB Statement No. 68 is applicable. Future years' information will be disclosed up to 10 years as information becomes available.

Beginning in 2018, Contributions reflect employer-paid contributions only due to GASB Statement No. 82, which classifies contributions as member contributions for the purposes of GASB Statement No. 68 if they are made by an employer to satisfy what are actually deemed to be member contribution requirements.

Supplementary Information
June 30, 2019 and 2018

Truckee Meadows Water Authority

Truckee Meadows Water Authority
Schedule of Revenues, Expenses, and Changes in Net Position - Budget and Actual
Year Ended June 30, 2019

	Final Budget	Actual	Variance
Operating Revenues			
Charges for water sales	\$ 100,626,513	\$ 101,496,912	\$ 870,399
Hydroelectric sales	2,812,568	2,624,285	(188,283)
Other operating sales	3,404,500	2,968,321	(436,179)
Total operating revenues	106,843,581	107,089,518	245,937
Operating Expenses			
Salaries and wages	21,078,271	20,973,151	105,120
Employee benefits	10,125,919	10,184,189	(58,270)
Services and supplies	28,268,124	28,475,960	(207,836)
Total operating expenses before depreciation	59,472,314	59,633,300	(160,986)
Depreciation	33,862,476	32,833,604	1,028,872
Total operating expenses	93,334,790	92,466,904	867,886
Operating Income	13,508,791	14,622,614	1,113,823
Nonoperating Revenues (Expenses)			
Investment earnings	2,833,548	4,409,486	1,575,938
Net change in fair value of investments	—	2,843,154	2,843,154
Gain (loss) on disposal of assets	—	(225,687)	(225,687)
Bond/note issue costs and amortization of bond insurance	(215,748)	(218,132)	(2,384)
Interest expense	(13,436,520)	(13,268,153)	168,367
Other nonoperating expense	—	(233,494)	(233,494)
Total nonoperating revenues (expenses)	(10,818,720)	(6,692,826)	4,125,894
Income (Loss) before Capital Contributions	2,690,071	7,929,788	5,239,717
Capital Contributions			
Grants	1,700,000	831,116	(868,884)
Water meter retrofit program	676,020	994,706	318,686
Water resource sustainability program	—	689,060	689,060
Developer infrastructure contributions	—	19,112,590	19,112,590
Developer will-serve contributions (net of refunds)	3,470,232	4,663,826	1,193,594
Developer capital contributions-other	5,922,000	6,636,417	714,417
Developer facility charges (net of refunds)	4,950,708	9,154,403	4,203,695
Contributions from other governments	—	100,000	100,000
Net capital contributions	16,718,960	42,182,118	25,463,158
Change in Net Position	\$ 19,409,031	\$ 50,111,906	\$ 30,702,875

Truckee Meadows Water Authority
Schedule of Revenues, Expenses, and Changes in Net Position - Budget and Actual
Year Ended June 30, 2018

	Final Budget	Actual	Variance
Operating Revenues			
Charges for water sales	\$ 94,303,278	\$ 95,181,554	\$ 878,276
Hydroelectric sales	2,990,391	3,757,043	766,652
Other operating sales	3,131,500	2,873,495	(258,005)
Total operating revenues	100,425,169	101,812,092	1,386,923
Operating Expenses			
Salaries and wages	19,024,704	18,735,892	288,812
Employee benefits	9,303,274	12,919,692	(3,616,418)
Services and supplies	28,312,357	25,835,318	2,477,039
Total operating expenses before depreciation	56,640,335	57,490,902	(850,567)
Depreciation	34,061,148	32,820,720	1,240,428
Total operating expenses	90,701,483	90,311,622	389,861
Operating Income	9,723,686	11,500,470	1,776,784
Nonoperating Revenues (Expenses)			
Investment earnings	1,342,692	2,313,513	970,821
Net change in fair value of investments	—	(934,120)	(934,120)
Gain (loss) on disposal of assets	—	133,972	133,972
Bond/note issue costs and amortization of bond insurance	(468,624)	(942,927)	(474,303)
Interest expense	(13,394,016)	(11,720,356)	1,673,660
Other nonoperating expense	—	(12,749)	(12,749)
Total nonoperating revenues (expenses)	(12,519,948)	(11,162,667)	1,357,281
Income (Loss) before Capital Contributions	(2,796,262)	337,803	3,134,065
Capital Contributions			
Grants	200,004	348,248	148,244
Water meter retrofit program	781,488	2,379,206	1,597,718
Developer infrastructure contributions	—	15,017,446	15,017,446
Developer will-serve contributions (net of refunds)	5,034,744	6,652,819	1,618,075
Developer capital contributions-other	4,345,296	6,448,549	2,103,253
Developer facility charges (net of refunds)	4,826,436	6,464,559	1,638,123
Contributions from other governments	—	100,000	100,000
Net capital contributions	15,187,968	37,410,827	22,222,859
Change in Net Position	\$ 12,391,706	\$ 37,748,630	\$ 25,356,924

Statistical Section

Truckee Meadows Water Authority

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

Section Contents**Schedule No.****Financial Trends****1-6**

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time.

Revenue Capacity**7-8**

These schedules contain information to help the reader assess the factors affecting the Authority's ability to generate its water sales and other revenues.

Debt Capacity**9**

These schedules present information to help the reader assess the affordability of the Authority's current levels of outstanding debt, and its ability to issue additional future debt.

Demographic and Economic Information**10-12**

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Authority's financial activities take place and to help make comparisons over time and with other utilities.

Operating Information**13-17**

These schedules contain information about the Authority's operations and resources to help the reader understand how the Authority's financial information relates to the services it provides and the activities it performs.

Debt Ratios**18-19**

These schedules contain information about changes in the Authority's debt and its debt in relation to service connections.

Sources: Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports for the relevant year.

Truckee Meadows Water Authority
Schedule No. 1 - Net Position by Component
Last Ten Fiscal Years

	Fiscal Year									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Net Position										
Net investment in capital assets	\$ 573,174,076	\$ 533,058,874	\$ 506,700,472	\$ 478,543,111	\$ 444,402,572	\$ 232,327,785	\$ 227,319,870	\$ 222,418,497	\$ 223,410,534	\$ 220,473,195
Restricted	29,351,818	30,123,412	28,589,861	40,505,804	42,158,803	25,198,683	22,644,404	13,678,852	22,873,643	23,515,136
Unrestricted	<u>115,662,201</u>	<u>104,893,903</u>	<u>95,037,226</u>	<u>65,933,399</u>	<u>77,312,759</u>	<u>54,036,550</u>	<u>51,471,349</u>	<u>57,107,888</u>	<u>41,907,040</u>	<u>43,968,725</u>
Total Net Position	<u>\$ 718,188,095</u>	<u>\$ 668,076,189</u>	<u>\$ 630,327,559</u>	<u>\$ 584,982,314</u>	<u>\$ 563,874,134</u>	<u>\$ 311,563,018</u>	<u>\$ 301,435,623</u>	<u>\$ 293,205,237</u>	<u>\$ 288,191,217</u>	<u>\$ 287,957,056</u>

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 2 - Changes in Net Position
Last Ten Fiscal Years

Fiscal Year	Operating Revenues	Operating Expenses	Operating Income	Total Nonoperating Revenues/ (Expenses)	Income/ (Loss) before Capital Contributions	Capital Contributions	Special Item	Change in Net Position
2019	\$107,089,518	\$ 92,466,904	\$ 14,622,614	\$ (6,692,826)	\$ 7,929,788	\$ 42,182,118	\$ —	\$ 50,111,906
2018	101,812,092	90,311,622	11,500,470	(11,162,667)	337,803	37,410,827	—	37,748,630
2017	97,268,183	82,339,194	14,928,989	(11,684,303)	3,244,686	43,351,171		46,595,857
2016	91,928,943	80,615,507	11,313,436	(9,491,450)	1,821,986	19,286,194		21,108,180
2015*	90,029,316	70,114,860	19,914,456	(23,526,380)	(3,611,924)	19,638,821	231,516,024	247,542,921
2014	84,315,390	59,317,860	24,997,530	(20,386,339)	4,611,191	5,516,204	—	10,127,395
2013	85,577,107	59,619,074	25,958,033	(20,675,251)	5,282,782	2,947,604	—	8,230,386
2012	81,790,499	56,622,273	25,168,226	(19,023,050)	6,145,176	1,109,062	—	7,254,238
2011	76,246,433	55,542,274	20,704,159	(21,802,941)	(1,098,782)	1,332,941	—	234,159
2010	75,667,848	58,388,775	17,279,073	(20,269,550)	(2,990,477)	5,841,325	—	2,850,848

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 3 - Operating Revenues by Customer Class
Last Ten Fiscal Years

	Fiscal Year									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Revenues from water sales										
Residential unmetered water sales	\$ 2,558,767	\$ 2,505,160	\$ 2,446,144	\$ 3,725,916	\$ 9,366,307	\$ 9,731,811	\$ 10,288,324	\$ 10,899,330	\$ 11,611,351	\$ 13,115,143
Residential metered water sales	71,651,111	67,393,330	65,829,635	60,198,267	51,796,871	44,137,033	43,957,551	41,476,536	37,636,859	35,962,518
Commercial metered water sales	12,807,368	12,238,878	11,369,179	11,026,132	11,339,953	10,755,824	10,885,539	10,473,659	10,214,401	10,112,854
Irrigation metered & fire protection	13,230,227	11,878,580	11,887,395	11,554,063	11,123,168	10,720,156	11,031,924	10,129,233	9,007,523	8,894,110
Wholesale sales	1,249,439	1,165,606	1,154,907	1,029,954	2,560,399	3,845,593	3,748,276	3,473,100	2,938,106	3,136,081
Total water sales	101,496,912	95,181,554	92,687,260	87,534,332	86,186,698	79,190,417	79,911,614	76,451,858	71,408,240	71,220,706
Hydroelectric revenue	2,624,285	3,757,043	1,788,934	1,175,195	1,366,786	3,045,147	3,557,965	3,519,897	3,079,158	2,577,660
Other operating revenues	2,968,321	2,873,495	2,791,989	3,219,416	2,475,832	2,079,826	2,107,528	1,818,744	1,759,035	1,869,482
Total operating revenues	<u>\$107,089,518</u>	<u>\$101,812,092</u>	<u>\$ 97,268,183</u>	<u>\$ 91,928,943</u>	<u>\$ 90,029,316</u>	<u>\$ 84,315,390</u>	<u>\$ 85,577,107</u>	<u>\$ 81,790,499</u>	<u>\$ 76,246,433</u>	<u>\$ 75,667,848</u>

* Fiscal Year 2015 reflect changes as a result of the water utility consolidation discussed in Note 1 of the financial statements.

Truckee Meadows Water Authority
Schedule No. 4 - Operating Expenses
Last Ten Fiscal Years

	Fiscal Year									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Salaries and wages	\$ 20,973,151	\$ 18,735,892	\$ 17,257,014	\$ 16,541,811	\$ 13,763,006	\$ 12,007,022	\$ 11,128,162	\$ 11,049,337	\$ 11,180,101	\$ 11,619,701
Employee benefits	10,184,189	12,919,692	8,931,838	6,364,279	5,271,735	5,045,922	4,819,187	4,537,531	4,378,347	4,429,266
Contract services	8,191,575	8,678,689	6,204,863	7,335,521	6,321,061	4,826,066	4,868,532	5,090,741	5,488,432	6,623,576
Utilities/power	5,953,121	5,322,771	5,201,870	5,386,413	5,449,347	5,189,312	4,571,453	4,432,932	6,639,620	7,384,879
Prof services (general/legal/media/leg)	2,821,923	2,905,859	2,258,454	2,512,154	3,132,132	2,538,097	1,610,614	1,254,751	1,909,575	2,751,236
Supplies	2,660,187	2,317,853	2,635,229	2,700,906	2,572,699	1,736,763	1,522,106	1,155,351	1,112,419	1,319,905
Chemicals	2,286,659	1,605,280	1,984,300	1,803,614	1,554,496	1,383,824	1,333,002	1,361,144	1,653,424	1,443,177
Insurance and claims	847,844	675,430	719,604	742,006	684,021	501,300	534,577	608,352	647,983	611,405
Leases and rentals	256,836	104,243	146,999	96,290	79,639.67	70,196	74,595.51	84,843.57	69,471.58	124,562.51
Other expenses	5,457,815	4,225,195	4,829,545	4,998,323	3,387,273	3,802,687	3,810,820	3,645,076	3,318,784	3,754,603
Total operating expenses before depreciation	59,633,300	57,490,904	50,169,716	48,481,317	42,215,410	37,101,189	34,273,049	33,220,059	36,398,157	40,062,311
Depreciation	32,833,604	32,820,720	32,169,578	32,134,190	27,899,449	22,517,885	22,349,225	22,322,217	21,990,618	22,153,951
Total Operating Expenses	<u>\$ 92,466,904</u>	<u>\$ 90,311,624</u>	<u>\$ 82,339,294</u>	<u>\$ 80,615,507</u>	<u>\$ 70,114,859</u>	<u>\$ 59,619,074</u>	<u>\$ 56,622,274</u>	<u>\$ 55,542,276</u>	<u>\$ 58,388,775</u>	<u>\$ 62,216,262</u>

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 5 - Nonoperating Revenues and Expenses
Last Ten Fiscal Years

Fiscal Year	Investment Earnings	Interest Expense	Gain/(Loss) on Disposal of Assets	Other Revenue or Expenses	Total Nonoperating Expenses
2019	\$ 4,409,486	\$ (13,268,153)	\$ (225,687)	\$ 2,391,528	\$ (6,692,826)
2018	2,313,513	(11,720,356)	133,972	(1,889,796)	(11,162,667)
2017	7,209,113	(16,968,911)	(155,722)	(1,768,783)	(11,684,303)
2016	6,737,745	(21,549,864)	6,460,373	(1,139,704)	(9,491,450)
2015*	2,127,009	(21,281,117)	(653,698)	(3,718,574)	(23,526,380)
2014	2,051,156	(21,282,412)	(136,300)	(1,018,783)	(20,386,339)
2013	2,007,375	(21,791,975)	(21,463)	(869,188)	(20,675,251)
2012	2,277,298	(21,786,675)	(611,086)	305,640	(19,814,823)
2011	2,322,169	(22,431,967)	(4,705)	(1,963,275)	(22,077,778)
2010	1,894,518	(22,291,259)	8,848	(742,748)	(21,130,641)

Truckee Meadows Water Authority
 Schedule No. 6 - Capital Contributions by Source
 Last Ten Fiscal Years

Fiscal Year	Developer Water Rights/ Will Serves	Developer Infrastructure	Developer Other	Water Meter Retrofit Program	Developer Facility Charges	Grants	Water Resource Sustainability Program	From Others	Total
2019	\$ 4,663,826	\$ 19,112,590	\$ 6,636,417	\$ 994,706	\$ 9,154,403	\$ 831,116	\$ 689,060	\$ 100,000	\$ 42,182,118
2018	6,652,819	15,017,446	6,448,549	2,379,206	6,464,559	348,248	—	100,000	37,410,827
2017	7,950,666	10,797,854	6,062,247	341,074	5,116,956	1,226,863	—	11,855,511	43,351,171
2016	4,363,692	8,454,980	2,473,163	482,081	2,931,940	224,138	—	356,200	19,286,194
2015*	1,864,446	2,703,092	1,588,158	1,013,896	2,494,434	276,260	—	9,698,535	19,638,821
2014	1,529,129	1,723,023	410,447	479,488	963,660	343,628	—	66,829	5,516,204
2013	201,871	702,699	469,732	174,698	1,047,715	208,227	—	142,662	2,947,604
2012	173,599	263,249	153,475	173,094	263,089	791,773	—	82,556	1,900,835
2011	125,123	507,970	126,899	170,201	252,748	274,837	—	150,000	1,607,778
2010	133,305	4,088,095	184,791	248,618	437,933	861,091	—	748,583	6,702,416

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 7 - Gallons of Water Sold and Revenues by Category
Last Ten Fiscal Years

Category	2019		2018	
	Gallons Sold (000)	Revenue	Gallons Sold (000)	Revenue
Residential-Unmetered (1)	—	\$ 2,558,767	—	\$ 2,505,160
Residential Metered	16,970,042	71,651,111	16,335,308	67,393,330
Commercial	4,315,407	12,807,368	4,232,836	12,238,878
Other (2)	2,974,110	13,230,227	2,698,977	11,878,580
Wholesale	619,928	1,249,439	591,624	1,165,606
Total	24,879,487	\$ 101,496,912	23,858,745	\$ 95,181,554

Category	2017		2016	
	Gallons Sold (000)	Revenue	Gallons Sold (000)	Revenue
Residential-Unmetered (1)	—	\$ 2,446,145	—	\$ 3,725,916
Residential Metered	16,487,693	65,829,634	14,633,319	60,198,267
Commercial	4,277,917	11,887,395	4,086,057	11,026,132
Other (2)	2,749,795	11,369,179	2,579,408	11,554,063
Wholesale	613,051	1,154,907	542,875	1,029,954
Total	24,128,456	\$ 92,687,260	21,841,659	\$ 87,534,332

Category	2015*		2014	
	Gallons Sold (000)	Revenue	Gallons Sold (000)	Revenue
Residential-Unmetered (1)	—	\$ 9,366,307	—	\$ 9,731,811
Residential Metered	15,151,881	51,796,871	11,581,326	44,137,033
Commercial	4,350,417	11,339,953	3,913,088	10,755,824
Other (2)	2,913,757	11,123,168	2,688,389	10,720,156
Wholesale	1,598,995	2,560,399	2,070,593	3,845,593
Total	24,015,050	\$ 86,186,698	20,253,396	\$ 79,190,417

Category	2013		2012	
	Gallons Sold (000)	Revenue	Gallons Sold (000)	Revenue
Residential-Unmetered (1)	—	\$ 10,288,324	—	\$ 10,899,330
Residential Metered	11,916,455	43,957,551	11,077,177	41,476,536
Commercial	4,083,972	10,885,539	3,902,183	10,473,659
Other (2)	2,816,474	11,031,924	2,543,132	10,129,233
Wholesale	1,982,557	3,748,276	1,831,821	3,473,100
Total	20,799,458	\$ 79,911,614	19,354,313	\$ 76,451,858

Category	2011		2010	
	Gallons Sold (000)	Revenue	Gallons Sold (000)	Revenue
Residential-Unmetered (1)	—	\$ 11,611,351	—	\$ 13,115,143
Residential Metered	10,233,494	37,636,859	9,940,587	35,962,518
Commercial	3,925,081	10,214,401	4,642,286	10,112,854
Other (2)	2,279,226	9,007,523	1,858,589	8,894,110
Wholesale	1,573,720	2,938,106	1,284,293	3,136,081
Total	18,011,521	\$ 71,408,240	17,725,755	\$ 71,220,706

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

(1) Complete consumption information is not available for unmetered customers.

(2) These accounts include irrigation and non metered fire protection/sprinkler systems located on the premises of residential and commercial customers.

Truckee Meadows Water Authority
Schedule No. 8 - Ten Largest Customers
June 30, 2019

Customer Name	Water Used (000s Gallons)	Total Revenue	% of Total Water Sales
1 Sun Valley Water	619,928	\$ 1,147,925	1.1%
2 Washoe County School District	365,383	978,645	1.0%
3 City of Reno	277,770	860,300	0.8%
4 City of Sparks	133,345	459,093	0.5%
5 Washoe County	147,975	449,239	0.4%
6 Nevada Properties, Peppermill	168,087	447,275	0.4%
7 University of Nevada	172,577	407,928	0.4%
8 Somerset HOA	111,916	367,202	0.4%
9 GSR Holdings, LLC	162,671	307,294	0.3%
10 Renown System	92,865	252,242	0.2%
Totals	2,252,517	\$ 5,677,143	5.6%

City of Reno includes the Reno Housing Authority.

Truckee Meadows Water Authority
Schedule No. 9 - Debt Service Coverage Ratios
Last Ten Fiscal Years

	Fiscal Year (in millions)									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Operating revenues ⁽¹⁾	\$ 101,497	\$ 95,182	\$ 92,687	\$ 87,534	\$ 86,187	\$ 79,190	\$ 79,912	\$ 76,452	\$ 71,408	\$ 71,221
Nonoperating revenues ⁽²⁾	10,002	8,944	11,790	11,132	5,970	7,176	7,672	7,643	7,253	6,669
Gross revenues	111,499	104,126	104,477	98,666	92,157	86,366	87,584	84,095	78,661	77,890
Operation and maintenance expenses ⁽³⁾	58,955	57,021	50,958	48,030	41,772	35,850	36,672	33,851	32,802	35,979
Taxes other than income taxes ⁽⁴⁾	678	470	462	451	443	440	429	422	418	419
Total expenses	59,633	57,491	51,420	48,481	42,215	36,290	37,101	34,273	33,220	36,398
Net Revenues	\$ 51,866	\$ 46,635	\$ 53,057	\$ 50,185	\$ 49,942	\$ 50,076	\$ 50,483	\$ 49,822	\$ 45,441	\$ 41,492
Senior Lien Annual Debt Service ⁽⁵⁾	\$ 17,891	\$ 15,696	\$ 18,916	\$ 31,780	\$ 29,955	\$ 31,285	\$ 29,672	\$ 21,295	\$ 31,191	\$ 31,124
Senior Lien Debt Coverage excluding SDCs	2.90	2.97	2.80	1.58	1.67	1.60	1.70	2.34	1.46	1.33
System Development Charges (SDCs):										
Developer facility charges	\$ 9,154	\$ 6,465	\$ 5,117	\$ 2,932	\$ 2,494	\$ 964	\$ 1,048	\$ 263	\$ 253	\$ 438
Developer capital contributions - other	6,636	6,449	6,062	2,473	1,588	410	470	153	127	185
Senior Lien Debt Coverage including SDCs ⁽⁶⁾	3.78	3.79	3.40	1.75	1.80	1.64	1.75	2.36	1.47	1.35

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

⁽¹⁾ Includes retail residential, commercial, irrigation water sales, and wholesale water sales net of bad debt expense.

⁽²⁾ Reflects hydroelectric revenues, other miscellaneous operating revenues from fees and charges, as well as gross investment income.

⁽³⁾ Includes water supply, treatment, distribution, hydroelectric power plant maintenance, customer service, water resource planning, conservation programs, administration, and inspection services. Wages and salaries, employee benefits, and services and supplies comprise these expenses.

⁽⁴⁾ The Authority is required to pay property taxes on water rights and storage facilities located in California. During the reported fiscal years TMWA paid various counties in California for hydroelectric facilities, and water storage rights in California.

⁽⁵⁾ This schedule does not include the payments on the DWSRF loan or the tax-exempt commercial paper, which are subordinate to the 2015-A, 2016, 2017 and 2018 Refunding Bonds.

⁽⁶⁾ TMWA's bond covenants require a minimum coverage of 1.25x total principal and interest payments. In fiscal year 2012, TMWA defeased the remaining 2001-A bonds. This resulted in a one-time increase in the senior lien debt coverage ratio. Without this defeasance, the senior lien debt coverage ratio would be 1.52x. In fiscal year 2017 and 2018, TMWA deferred principal payments on debt which increased the debt coverage ratio.

Truckee Meadows Water Authority

Schedule No. 10 - Schedule of Total Building Permits Issued by Jurisdiction/Member Entity
Last Ten Fiscal Years

Fiscal Year	Washoe County	City of Reno	City of Sparks
2019	4,307	4,709	3,890
2018	4,241	6,096	3,935
2017	2,615	5,399	3,636
2016	2,121	5,144	3,712
2015	1,807	4,792	3,581
2014	1,669	4,316	2,579
2013	1,516	3,214	2,393
2012	1,578	2,917	2,463
2011	1,272	2,919	1,763
2010	1,279	3,030	2,007

Source: As reported by each local governmental entity.

Truckee Meadows Water Authority
Schedule No. 11 - Selected Demographic and Economic Statistics for Washoe County
Last Ten Fiscal Years

Fiscal Year	Population (1)	Per Capita Income (2)	Median Age (3)	School Enrollment (4)	Total Personal Income (1)	Unemployment rate (Percent) (5)	Total Labor Force (5)	Construction Activity Total Value (6)	Number of New Family Units (6)	Taxable Sales (7)	Gross Income Gaming Revenue (8)	Total Passenger Air Traffic (9)
2019	475,596	\$ 55	38.0	66,960	\$ 22,556,498	3.6%	250,005	\$ 458,823,000	572	\$ 8,829,864,000	\$ 785,532,000	4,298,555
2018	467,417	48	37.9	66,989	22,550,000	4.2%	234,378	563,415,327	501	8,531,252,745	779,000,000	4,128,476
2017	459,142	48	37.5	63,919	21,265,000	4.0%	232,719	240,534,583	394	7,989,009,111	805,557,000	3,819,896
2016	451,248	51	37.5	63,670	20,165,000	5.9%	231,570	231,741,537	320	7,550,466,734	789,359,000	3,563,818
2015	441,165	48	37.4	63,108	19,077,000	6.4%	228,430	246,627,580	255	6,817,588,648	765,248,320	3,297,642
2014	436,647	48	37.6	62,986	18,833,000	7.2%	222,607	225,096,997	198	6,370,684,534	744,962,250	3,312,839
2013	434,120	47	37.6	62,424	18,284,145	9.8%	219,607	126,468,377	159	5,824,726,136	741,038,030	3,514,421
2012	427,704	45	37.4	62,323	17,849,009	12.3%	221,764	95,875,949	83	5,522,605,351	738,151,877	3,561,557
2011	421,593	49	37.2	62,324	17,944,975	13.2%	212,480	67,721,019	55	5,282,935,192	751,466,957	3,795,421
2010	417,379	47	37.0	62,452	17,421,365	13.6%	221,954	55,952,010	35	5,176,981,699	788,545,658	3,777,701

Sources:

- (1) US Census-Nevada, 2008 - 2012. Washoe County Community Development, 2013 - 2017. Washoe County Schedule 4.1, 2018, 2019
- (2) U.S. Department of Commerce, 2008. Washoe County Community Demographic Information 2009 - 2017. Washoe County Schedule 4.1, 2018, 2019
- (3) Center for Regional Studies, University of Nevada, Reno 2009 - 2017. Washoe County Schedule 4.1, 2018, 2019
- (4) Washoe County School District. Washoe County Schedule 4.1, 2018, 2019
- (5) State Department of Employment, Training and Rehabilitation (DETR). Washoe County Schedule 4.1, 2018, 2019
- (6) Washoe County Building and Safety Department.
- (7) Nevada State Department of Taxation. Washoe County Schedule 4.1, 2018, 2019
- (8) Nevada State Gaming Control Board. Washoe County Schedule 4.1, 2018, 2019
- (9) Reno/Tahoe International Airport. (RTIA) Washoe County Schedule 4.1, 2018, 2019

Truckee Meadows Water Authority
 Schedule No. 12 - Principal Employers
 Current and Nine Years Ago

Employer	December, 2018			December, 2009		
	Employees	Rank	Percentage of Total County Employment	Employees	Rank	Percentage of Total County Employment
Washoe County School District	8,750	1	3.50%	8,750	1	4.64%
Renown (Washoe) Medical Center	5,000	2	1.90%	3,750	2	1.99%
University of Nevada - Reno	4,750	3	2.00%	2,250	4	1.19%
Washoe County	3,000	4	1.20%	2,750	3	1.46%
Peppermill Hotel Casino - Reno	2,250	5	0.90%	2,250	6	0.01
Grand Sierra Resort	2,250	6	0.90%	—	—	—
Silver Legacy Resort Casino	2,250	7	0.90%	2,250	7	0.01
Atlantis Casino Resort	1,750	8	0.70%	1,750	9	0.93%
International Gaming Technology PLC	1,750	9	0.70%	2,250	5	1.19%
St. Mary's	1,750	10	0.70%	—	—	—%
City of Reno	—	—	—	1,750	8	0.93%
Eldorado Hotel & Casino	—	—	—	1,750	10	0.93%
 Total Washoe Covered Employment	 <u>249,828</u>			 <u>188,791</u>		

Note: Each of the years reflect respective 4th quarter calendar year information. Nevada Revised Statutes Chapter 612 stipulate that actual employment for individual employers may not be published. The Nevada Department of Employment Training and Rehabilitation outsources the publication of this information to Infogroup. Infogroup publishes employee counts in ranges of 5000. The number of employees are estimated using the midpoint.

Source: Nevadaworkforce.com

Nevada Employment and Unemployment Data (DES and Laus)

Washoe County Schedule 4.2

Truckee Meadows Water Authority
 Schedule No. 13 - Customer and Water Sales by Category
 Last Ten Fiscal Years

2019				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	663	0.5%	\$ 2,558,767	2.5%
Residential Metered	113,934	91.3%	71,651,111	70.6%
Commercial	10,161	8.1%	12,807,368	12.6%
Other ⁽²⁾	2	—%	13,230,227	13.0%
Wholesale	2	—%	1,249,439	1.2%
Total	124,762	100.0%	\$ 101,496,912	100.0%
2018				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	672	0.5%	\$ 2,505,160	2.6%
Residential Metered	111,963	91.3%	67,393,330	70.8%
Commercial and Irrigation	10,038	8.2%	12,238,878	12.9%
Other (2)	2	—%	11,878,580	12.5%
Wholesale	2	—%	1,165,606	1.2%
Total	122,677	100.0%	\$ 95,181,554	100.0%
2017				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	695	0.6%	\$ 2,446,144	2.6%
Residential Metered	109,939	91.2%	65,829,635	71.0%
Commercial and Irrigation	9,931	8.2%	11,369,179	12.3%
Other (2)	2	—%	11,887,395	12.8%
Wholesale	2	—%	1,154,907	1.2%
Total	120,569	100.0%	\$ 92,687,260	100.0%
2016				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	2,062	1.7%	\$ 3,725,916	4.3%
Residential Metered	106,730	89.9%	60,198,267	68.8%
Commercial and Irrigation	9,873	8.3%	11,026,132	12.6%
Other (2)	3	—%	11,554,063	13.2%
Wholesale	1	—%	1,029,954	1.2%
Total	118,669	100.0%	\$ 87,534,332	100.0%
2015*				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	6,224	5.2%	\$ 9,366,307	10.9%
Residential Metered	100,446	83.1%	51,796,871	60.1%
Commercial and Irrigation	9,648	8.0%	11,339,953	13.2%
Other (2)	4,528	3.7%	11,123,168	12.9%
Wholesale	2	—%	2,560,399	3.0%
Total	120,848	100.0%	\$ 86,186,698	100.0%

Truckee Meadows Water Authority
Schedule No. 13 - Customer and Water Sales by Category
Last Ten Fiscal Years

2014				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	6,379	6.7%	\$ 9,731,811	12.3%
Residential Metered	76,422	80.0%	44,137,033	55.7%
Commercial	8,743	9.1%	10,755,824	13.6%
Other ⁽²⁾	4,008	4.2%	10,720,156	13.5%
Wholesale	2	—%	3,845,593	4.9%
Total	95,554	100.0%	\$ 79,190,417	100.0%
2013				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	6,927	7.3%	\$ 10,288,324	12.9%
Residential Metered	75,113	79.3%	43,957,551	55.0%
Commercial and Irrigation	8,702	9.2%	10,885,539	13.6%
Other (2)	3,965	4.2%	11,031,924	13.8%
Wholesale	2	—%	3,748,276	4.7%
Total	94,709	100.0%	\$ 79,911,614	100.0%
2012				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	7,699	8.2%	\$ 10,899,330	14.3%
Residential Metered	73,836	78.3%	41,476,536	54.3%
Commercial and Irrigation	8,695	9.2%	19,245,940	25.2%
Other (2)	4,088	4.3%	1,356,952	1.8%
Wholesale	2	—%	3,473,100	4.5%
Total	94,320	100.0%	\$ 76,451,858	100.0%
2011				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential -Unmetered	8,685	9.3%	\$ 11,611,351	16.3%
Residential Metered	72,457	77.3%	37,636,859	52.7%
Commercial and Irrigation	8,564	9.1%	17,921,409	25.1%
Other (2)	4,078	4.3%	1,300,515	1.8%
Wholesale	2	—%	2,938,106	4.1%
Total	93,786	100.0%	\$ 71,408,240	100.0%
2010				
Category	Average Number of Accounts	% of Total Accounts	Fiscal Year Water Revenues ⁽¹⁾	% of Total Revenues
Residential-Unmetered	10,403	11.1%	\$ 13,115,143	18.4%
Residential Metered	70,556	75.6%	35,962,518	50.5%
Commercial and Irrigation	8,465	9.1%	17,872,178	25.1%
Other (2)	3,943	4.2%	1,134,786	1.6%
Wholesale	7	—%	3,136,081	4.4%
Total	93,374	100.0%	\$ 71,220,706	100.0%

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

⁽¹⁾ Water Revenues are revenues that are billed and estimated for the fiscal year periods. Estimated revenues are revenues for water deliveries just prior to fiscal year end that are unbilled until July of the next fiscal year.

⁽²⁾ Includes non metered private fire protection services located on the premises of commercial and some residential customers.

Truckee Meadows Water Authority
Schedule No. 14 - Schedule of Insurance Coverage
June 30, 2019

Coverage	Carrier/Policy	Term	Limits/Deductible
Property/Boiler and Machinery Policy	America Home Assurance Company (AIG)	6/11/2017 to 6/11/2019	Blanket limit of \$464,064,202 per occurrence with sub-limits of \$50,000,000 for Earth Movement (excluding CA properties) and \$10,000,000 for flood (excluding Glendale plant). Equipment Breakdown \$100,000,000. Deductibles for flood and earth movement are \$100,000 per occurrence for each location; general policy deductible is \$25,000.
General Liability and Business Automobile Policy	Philadelphia Indemnity Insurance Company	6/11/2018 to 6/11/2019	First \$1,000,000 in liability limits. General Liability Aggregate limit of \$3,000,000 Inland Marine Physical Damage \$834,750. General liability deductible of \$25,000 per occurrence. Auto Physical Damage deductible of \$1,000.
Excess Umbrella Liability Policy	Philadelphia Indemnity Insurance Company	6/11/2018 to 6/11/2019	First Layer Excess Liability limit of \$10,000,000.
	Travelers Insurance Company	6/11/2018 to 6/11/2019	Second Layer Excess Liability Limit of \$10,000,000.
Workers' Compensation	Employer's Insurance Company of Nevada	6/11/2018 to 6/11/2019	Fully insured for statutory limits under Workers' Compensation with no deductible. Policy also provides \$1,000,000 limit for Employer's Liability.
Employee Health Insurance	By contract with the City of Reno's health insurance programs	6/11/2018 to 6/11/2019	Varies by plan selected.
Commercial Crime/ Government Crime	Fidelity & Deposit Company of Maryland	6/11/2018 to 6/11/2019	Employee Theft/Forgery or Alteration Computer Fraud/ Funds Transfer Fraud \$3,000,000 per loss. Employee Theft including expenses, Inside/Outside Premises Money and Securities, Robbery or Safe Burglary, Money Orders, Counterfeit Currency, Credit Card Forgery, Faithful Performance, Telephone Toll \$1,000,000.
	Zurich		Fraudulent Impersonation \$250,000.
Network Security/ Cyber Risk	Ace American Insurance Company	6/11/2018 to 6/11/2019	Network Information, Communications Media, Regulatory Defense, Crisis Management, Security Breach Remediation, Computer Program/Data Restoration, Computer Fraud, E-Commerce Extortion Business Interruption \$3,000,000. Crisis Management Expenses \$1,000,000.
Kidnap and Ransom	National Union Fire Insurance Company	6/11/2018 to 6/11/2019	Ransom, In-Transit Delivery, Expenses, Judgements, Settlements, and Defense \$3,000,000 Death or Dismemberment \$250,000/\$1,250,000 person/event. Disappearance/Threat \$100,000, Hostage Crisis \$500,000

Truckee Meadows Water Authority
Schedule No. 15 - Number of Employees by Identifiable Activity
Last Ten Fiscal Years

	Fiscal Year									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Administration/IT	30	28	25	28	22	20	18	20	22	22
Supply/Treatment Operations	44	40	40	32	30	31	26	27	28	28
Distribution Maintenance	71	65	65	63	62	48	45	44	42	45
Hydroelectric	7	7	7	6	6	6	7	8	7	5
Customer Service/Conservation	23	23	25	25	24	20	26	33	28	41
Water Planning/Resources	15	15	17	19	19	13	15	12	13	14
Engineering/Construction	31	28	25	24	23	14	15	11	14	15
Total Authorized Employees	<u>221</u>	<u>206</u>	<u>204</u>	<u>197</u>	<u>186</u>	<u>152</u>	<u>152</u>	<u>155</u>	<u>154</u>	<u>170</u>

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 16 - Current and Historical Water Rates
Last Ten Fiscal Years

Fiscal Year																				
2019			2018			2017			2016			2015*			2014	2013	2012	2011	2010	
TMWA	WC	STMGID	TMWA	WC	STMGID	TMWA	WC	STMGID	TMWA	WC	STMGID	TMWA	WC	STMGID						
Customer Charges by Meter Size																				
3/4"	19.67	18.49	10.07	19.67	18.49	10.07	19.10	17.95	9.77	18.54	17.43	9.49	18.54	17.43	9.49	19	17	17	16	16
1"	21.64	23.79	12.32	21.64	23.79	12.32	21.01	23.09	11.96	20.40	22.42	11.61	20.40	22.42	11.61	20.40	18.80	18.80	17.30	17.30
1 1/2"	24.61	34.02	17.47	24.61	34.02	17.47	23.90	33.03	16.96	23.20	32.07	16.47	23.20	32.07	16.47	23.20	21.40	21.40	19.60	19.60
2"	28.54	45.36	n/a	28.54	45.36	n/a	27.71	44.04	n/a	26.9	42.76	n/a	26.90	42.76	n/a	26.90	24.80	24.80	22.80	22.80
3"	32.46	73.04	n/a	32.46	73.04	n/a	31.52	70.92	n/a	30.6	68.85	n/a	30.60	68.85	n/a	30.60	28.20	28.20	25.90	25.90
4"	37.34	106.98	n/a	37.34	106.98	n/a	36.26	103.87	n/a	35.2	100.84	n/a	35.20	100.84	n/a	35.20	32.50	32.50	29.80	29.80
6"	43.28	195.05	n/a	43.28	195.05	n/a	42.02	189.37	n/a	40.8	183.85	n/a	40.80	183.85	n/a	40.80	37.70	37.70	34.50	34.50
Commodity Charge (all meter sizes)																				
TMWA Tier 1	1.82			1.82			1.77			1.72			1.72			1.72	1.72	1.72	1.72	1.72
TMWA Tier 2	2.95			2.95			2.86			2.78			2.78			2.78	2.78	2.78	2.78	2.78
TMWA Tier 3	3.45			3.45			3.35			3.25			3.25			3.25	3.25	3.25	3.25	3.25
WC Tier 1		2.78			2.78			2.70			2.62			2.62						
WC Tier 2		3.47			3.47			3.37			3.27			3.27						
WC Tier 3		4.17			4.17			4.05			3.93			3.93						
WC Tier 4		5.57			5.57			5.41			5.25			5.25						
STMGID Tier 1			1.44			1.44			1.40			1.36			1.36					
STMGID Tier 2			1.91			1.91			1.85			1.80			1.80					
STMGID Tier 3			2.34			2.34			2.28			2.21			2.21					
STMGID Tier 4			2.74			2.74			2.66			2.58			2.58					
STMGID Tier 5			2.90			2.90			2.81			2.73			2.73					
Above rates are for metered single family residential service.																				
Monthly Base Rates (Meter Size)																				
3/4"	n/a	n/a	47.65	n/a	n/a	47.65	n/a	n/a	46.26	100.63	89.82	44.91	100.63	89.82	44.91	100.63	94.10	94.10	86.30	86.30
1"	n/a	n/a	47.65	n/a	n/a	47.65	n/a	n/a	46.26	144.90	90.18	44.91	144.90	90.18	44.91	144.90	135.50	135.50	124.30	124.30
1 1/2"	n/a	n/a	47.65	n/a	n/a	47.65	n/a	n/a	46.26	262.60	92.12	44.91	262.60	92.12	44.91	262.60	245.60	245.60	225.20	225.20
2"	n/a	n/a	47.65	n/a	n/a	47.65	n/a	n/a	46.26	374.30	93.55	44.91	374.30	93.55	44.91	374.30	350.10	350.10	321.00	321.00
3"	n/a	n/a	47.65	n/a	n/a	47.65	n/a	n/a	46.26	469.90	94.96	44.91	469.90	94.96	44.91	469.90	439.40	439.40	403.00	403.00
4"	n/a	n/a	47.65	n/a	n/a	47.65	n/a	n/a	46.26	595.70	99.18	44.91	595.70	99.18	44.91	595.70	557.10	557.10	510.00	510.00
6"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Above rates are for unmetered single family residential service.																				
TMWA rates took effect on June 11, 2001, and were revised effective May 2009, May 2010, February 2012, February 2014, June 2016, May 2017, and May 2018																				

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 17 - Selected Operating and Capital Indicators
Last Ten Fiscal Years

	Fiscal Year									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Miles of water mains	2,019	1,986	1,961	1,940	1,915	1,341	1,337	1,352	1,339	1,332
Number of storage tanks	95	88	93	93	93	42	42	42	42	42
Number of Finished Water Storage	2	2	2	2	2	2	2	2	2	2
Number of pump stations	114	113	113	121	112	93	94	95	94	96
Number of wells	100	82	81	79	86	32	32	32	32	32
Treatment capacity (millions of gallons/day)										
Glendale Plant	34.5	34.5	34.5	34.5	37.5	37.5	37.5	37.5	25.0	25.0
Chalk Bluff	90.0	90.0	90.0	90.0	95.0	95.0	95.0	95.0	95.0	95.0
Longley Lane	3.6	3.6	3.6	3.6	—	—	—	—	—	—

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Truckee Meadows Water Authority
Schedule No. 18 - Schedule of Changes in Debt
Last Ten Fiscal Years

	Final Maturity Date	Authorized	Balance June 30, 2019	Balance June 30, 2018	Balance June 30, 2017	Balance June 30, 2016	Balance June 30, 2015	Balance June 30, 2014	Balance June 30, 2013	Balance June 30, 2012	Balance June 30, 2011	Balance June 30, 2010
2001 A Water Revenue (Tax Exempt) Bonds 3.70%-5.50%	7/1/2034	\$ 448,810,000	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 8,810,000	\$ 28,590,000
2005 Water Revenue DWSRF (Tax Exempt) Bonds 3.21%	1/1/2025	4,669,565	1,824,283	2,095,861	2,358,926	2,613,744	2,860,578	3,099,675	3,331,277	3,555,620	3,772,931	3,983,431
2005 A Water Revenue (Tax Exempt) Bonds 4.25%-5.00%	7/1/2036	40,000,000	—	—	—	—	890,000	34,795,000	35,620,000	36,415,000	37,180,000	37,920,000
2006 Water Revenue (Tax Exempt) Refunding Bonds 3.50%-4.875%	7/1/2034	150,745,000	—	—	—	400,000	148,415,000	148,785,000	149,140,000	149,485,000	149,815,000	150,135,000
2007 Water Revenue (Tax Exempt) Refunding Bonds 4.00%-5.00%	7/1/2030	218,975,000	—	—	—	214,290,000	214,800,000	215,285,000	215,745,000	216,185,000	216,605,000	217,005,000
2009 A Water Revenue DWSRF ARRA (Tax Exempt) Bonds 0%	7/1/2029	2,401,120	1,298,522	1,422,190	1,545,859	1,669,527	1,793,197	1,916,866	2,040,534	2,164,202	2,282,661	2,309,945
2010 Water Revenue (Tax Exempt) Refunding Bonds 5.00%	7/1/2015	28,240,000	—	—	—	—	9,435,000	19,855,000	28,240,000	28,240,000	28,240,000	28,240,000
2010 A Water Revenue DWSRF (Tax Exempt) Bonds 3.25%	1/1/2030	4,381,614	3,100,507	3,331,595	3,555,353	3,772,013	3,981,798	4,184,928	4,381,614	4,381,614	3,921,904	201,110
2014 Water Revenue DWSRF (Tax Exempt) Bonds 2.81%	1/1/2025	9,109,437	5,529,367	6,364,231	7,176,120	7,965,667	8,733,487	—	—	—	—	—
2015-A Water Revenue (Tax Exempt) Refunding Bonds 2.00%-5.00%	7/1/2036	28,750,000	26,185,000	27,070,000	27,920,000	28,750,000	28,750,000	—	—	—	—	—
2015-B Water Revenue DWSRF (Tax Exempt) Bonds 2.62%	1/1/2035	15,000,000	8,195,717	8,589,045	8,971,562	8,239,034	—	—	—	—	—	—
2016 Water Revenue (Tax Exempt) Refunding Bonds 5.00%	1/1/2025	124,790,000	124,790,000	124,790,000	124,790,000	124,790,000	—	—	—	—	—	—
2017 Water Revenue (Tax Exempt) Refunding Bonds 4.50%-5.00%	1/1/2025	147,415,000	147,415,000	147,415,000	147,415,000	—	—	—	—	—	—	—
2018 Water Revenue (Tax Exempt) Refunding Bonds 5.00%	7/1/2039	38,835,000	38,835,000	38,835,000	—	—	—	—	—	—	—	—
Subtotal			357,173,396	359,912,922	323,732,820	392,489,985	419,659,060	427,921,468	438,498,425	440,426,436	450,627,496	468,384,486
Less unamortized net bond discount (premium)			(47,320,705)	(52,014,598)	(51,182,862)	(28,441,399)	(3,673,290)	(35,590)	(661,198)	(1,286,806)	(3,440,321)	(4,371,510)
Total debt before tax exempt commercial paper			404,494,101	411,927,520	374,915,682	420,931,384	423,332,350	427,957,058	439,159,623	441,713,242	454,067,817	472,755,996
Tax-Exempt Commercial Paper		\$ 148,600,000	23,500,000	30,000,000	83,400,000	87,800,000	95,000,000	68,000,000	68,000,000	79,400,000	79,400,000	68,000,000
Total Debt			<u>\$ 427,994,101</u>	<u>\$ 441,927,520</u>	<u>\$ 458,315,682</u>	<u>\$ 508,731,384</u>	<u>\$ 518,332,350</u>	<u>\$ 495,957,058</u>	<u>\$ 507,159,623</u>	<u>\$ 521,113,242</u>	<u>\$ 533,467,817</u>	<u>\$ 540,755,996</u>

Truckee Meadows Water Authority
Schedule No. 19 - Debt by Service Connection
Last Ten Fiscal Years

	Fiscal Year									
	2019	2018	2017	2016	2015*	2014	2013	2012	2011	2010
Total Debt	\$ 357,173,396	\$ 359,912,922	\$407,132,820	\$ 480,289,985	\$514,659,060	\$495,921,468	\$506,498,425	\$519,826,436	\$ 530,027,496	\$ 536,384,486
Total Service Connections	122,597	120,746	118,348	116,653	114,529	89,070	88,268	87,464	87,013	86,781
Debt per Service Connection	<u>\$ 2,913</u>	<u>\$ 2,981</u>	<u>\$ 3,440</u>	<u>\$ 4,117</u>	<u>\$ 4,494</u>	<u>\$ 5,568</u>	<u>\$ 5,738</u>	<u>\$ 5,943</u>	<u>\$ 6,091</u>	<u>\$ 6,181</u>

Note: Service Connections include residential and commercial connections only. Irrigation, fire protection, and wholesale connections have been excluded.

* Fiscal Year 2015 reflects the first year of the water utility consolidation as discussed in Note 1 of the Financial Statements.

Compliance Section

Truckee Meadows Water Authority



**Independent Auditor's Report on Internal Control over Financial Reporting
and on Compliance and Other Matters Based on an Audit of Financial Statements
Performed in Accordance with *Government Auditing Standards***

To the Board of Directors
Truckee Meadows Water Authority
Reno, Nevada

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Truckee Meadows Water Authority (TMWA), as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise TMWA's basic financial statements, and have issued our report thereon dated November 25, 2019.

Internal Control over Financial Reporting

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

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

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

Compliance and Other Matters

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

Purpose of this Report

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

A handwritten signature in cursive script that reads "Eide Bailly LLP".

Reno, Nevada
November 25, 2019



Auditor's Comments

To the Board of Directors
Truckee Meadows Water Authority
Reno, Nevada

In connection with our audit of the financial statements of the Truckee Meadows Water Authority (TMWA) as of and for the year ended June 30, 2019, and the related notes to the financial statements, nothing came to our attention that caused us to believe that TMWA failed to comply with the specific requirements of Nevada Revised Statutes cited below. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding TMWA's noncompliance with the requirements of Nevada Revised Statutes cited below, insofar as they relate to accounting matters.

Statute Compliance

The required disclosure on compliance with Nevada Revised Statutes and the Nevada Administrative Code is contained in Note 2 to the financial statements.

Progress on Prior Year Statute Compliance

TMWA conformed to all significant statutory constraints on its financial administration during the year ended June 30, 2018.

Prior Year Recommendations

There were no findings for the year ended June 30, 2018.

Current Year Recommendations

We noted no material weaknesses and reported no significant deficiencies in internal control for the current year.

A handwritten signature in black ink that reads "Eide Bailly LLP".

Reno, Nevada
November 25, 2019



TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Michele Sullivan, Chief Financial Officer
 Matt Bowman, Financial Controller
DATE: November 26, 2019
SUBJECT: Presentation of First Quarter Fiscal Year 2020 Financial Results

Summary

Please refer to Attachments A-1 and A-2 for full Statements of Revenues, Expenses and Changes in Net Position for both actual to budget and year-over-year comparisons as discussed in the report below.

Budget to Actual

	Actual YTD 2020	Budget YTD 2020	Variance \$	Variance %
CHANGE IN NET POSITION	22,752,361	18,559,736	4,192,625	23%

Change in net position (or overall P&L) in FY 2019 was \$4.2m higher than budget. This is primarily due to higher net capital contributions which were approximately \$3.0m higher than budget. Adding to the variance was lower operating expenses of \$2.0m, lower nonoperating expenses of \$0.5m, offset by lower operating revenue of \$1.3m. Higher capital contributions were driven by higher developer contributions. Lower operating revenue was driven by lower water sales caused by less usage than budgeted, and the variance in operating expenses is mostly attributable to timing. These variances will be discussed in further detail in the sections below.

Year over Year

	Actual YTD 2020	Actual YTD 2019	Variance \$	Variance %
CHANGE IN NET POSITION	22,752,361	22,579,534	172,827	1%

Year over year, change in net position was \$0.2m higher in FY 2020 compared to FY 2019. Compared to the first quarter in the prior year, operating revenues are down \$1.6m, operating expenses are up \$0.6m, nonoperating expenses are lower by \$0.9m and capital contributions are up \$1.5m. Lower operating revenue was driven by less usage (water sales are down \$1.7m), capital contributions are up due to higher developer contributions.

RevenueBudget to Actual

	Actual YTD 2020	Budget YTD 2020	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	38,624,282	39,989,772	(1,365,490)	(3)%
Hydroelectric Sales	1,069,464	987,357	82,107	8 %
Other Operating Sales	832,757	880,900	(48,143)	(5)%
Total Operating Revenues	40,526,503	41,858,029	(1,331,526)	(3)%

Operating revenue was \$1.3m lower than budget due mostly to \$1.4m (3%) less in water sales. TMWA's water sales budget is derived from several inputs including historical water usage. Year over year, water use for the quarter was down nearly 7% on a per service basis. Although it was a dry summer, temperatures remained mild with only one day reaching 100 degrees during July, August and September. This likely influenced behavior, keeping irrigation water use lower.

Year over Year

	Actual YTD 2020	Actual YTD 2019	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	38,624,282	40,286,534	(1,662,252)	(4)%
Hydroelectric Sales	1,069,464	944,715	124,749	13 %
Other Operating Sales	832,757	923,586	(90,829)	(10)%
Total Operating Revenues	40,526,503	42,154,836	(1,628,333)	(4)%

Total operating revenues were \$1.6m less in FY 2020 compared to the prior year. This is due mostly to lower water sales which were \$1.7m less. As discussed above, milder temperatures in the first quarter led to lower water use. During the first quarter FY 2019, there was 20 days at 100 degrees or more, whereas only one day in the first quarter FY 2020.

Operating ExpensesBudget to Actual

	Actual YTD 2020	Budget YTD 2020	Variance \$	Variance %
OPERATING EXPENSES				
Salaries and Wages	5,760,051	5,797,408	(37,357)	(1)%
Employee Benefits	2,495,410	3,068,794	(573,384)	(19)%
Services and Supplies	8,066,985	9,347,736	(1,280,751)	(14)%
Total Operating Expenses Before Depreciation	16,322,446	18,213,938	(1,891,492)	(10)%
Depreciation	8,290,967	8,409,005	(118,038)	(1)%
Total Operating Expenses	24,613,413	26,622,942	(2,009,529)	(8)%

Total operating expenses were \$2.0m lower than budget for the first quarter 2020. This is primarily due to lower services and supplies costs (\$1.3m lower than budget). Part of this variance is timing, meaning expenses that were budgeted have not been incurred as of the end of Q1, but are expected to be incurred before the end of the fiscal year. Included in these costs are expensed costs of \$0.3m related to the Customer Information System implementation project which is ongoing (training and some data conversion costs will be expensed, the remaining are capitalized). Another \$0.3m variance is due to the Glendale diversion construction which was substantially completed in October 2019. TMWA is working with FEMA to receive reimbursement for up to 75% of these costs. An additional "temporary" difference is \$0.2m related to a lower contribution to the Truckee River Fund which is to be replaced by the installation of the Portland Loo. Lower water use as discussed above, drove down chemical usage and power consumption which contributed to a "permanent" variance of \$0.2m. Employee benefits are lower due to lower PERS expense incurred in Q1 of \$0.7m compared to budget. This variance is likely temporary as accounting standards require an annual adjustment to the expense which typically increases what has been recognized throughout the year.

Year over Year

	Actual YTD 2020	Actual YTD 2019	Variance \$	Variance %
OPERATING EXPENSES				
Salaries and Wages	5,760,051	5,244,619	515,432	10 %
Employee Benefits	2,495,410	2,252,285	243,125	11 %
Services and Supplies	8,066,985	8,490,414	(423,429)	(5)%
Total Operating Expenses Before Depreciation	16,322,446	15,987,318	335,128	2 %
Depreciation	8,290,967	8,037,821	253,146	3 %
Total Operating Expenses	24,613,413	24,025,140	588,273	2 %

Total operating expenses were \$0.6m higher in Q1 2020 compared to the prior year. As budgeted, salaries and wages and employee benefits are each up approximately 10% from the prior year. This is due to headcount, step and cost of living increases. Services and supplies are down \$0.4m year over year. Reductions in chemical costs and costs related to cleaning the outlet channel at Donner Lake incurred in the prior year, offset by higher power costs due to running the Fish Springs system led to this variance. Again,

caused by lower water usage, chemical costs were lower by \$0.1m year over year. In the first quarter FY 2019 TMWA was completing the clean-out of the Donner Lake outlet channel and incurred approximately \$0.9m. Primarily due to the operation of the Fish Springs system, which commenced in January 2019, power costs were up \$0.6m.

Non-Operating Expenses

Budget to Actual

	Actual YTD 2020	Budget YTD 2020	Variance \$	Variance %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	1,044,527	852,454	192,073	23 %
Net Increase (Decrease) in FV of Investments	470,475	—	470,475	— %
Gain (Loss) on Disposal of Assets	(168,898)	—	(168,898)	— %
Amortization of Bond/note Issuance Costs	(71,199)	(47,700)	(23,499)	49 %
Interest Expense	(3,193,572)	(3,266,532)	72,960	(2)%
Other Nonoperating Revenue	—	—	—	— %
Other Nonoperating Expense	—	—	—	— %
Total Nonoperating Revenues (Expenses)	(1,918,667)	(2,461,778)	543,111	(22)%

Nonoperating expenses were \$0.5m lower compared to budget in Q1 2020. This is primarily due to higher investment income of \$0.7m. Although rates are generally lower now than one year ago, TMWA currently holds investments at higher rates than it did a year ago, which has resulted in more investment income. This is also evidenced by the net increase in FV of investments which reflects investments held at higher rates than current market rates.

Year over Year

	Actual YTD 2020	Actual YTD 2019	Variance \$	Variance %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	1,044,527	918,650	125,877	14 %
Net Increase (Decrease) in FV of Investments	470,475	(294,770)	765,245	(260)%
Gain (Loss) on Disposal of Assets	(168,898)	—	(168,898)	— %
Amortization of Bond/note Issuance Costs	(71,199)	(29,494)	(41,705)	141 %
Interest Expense	(3,193,572)	(3,310,982)	117,410	(4)%
Other Nonoperating Revenue	—	19	(19)	(100)%
Other Nonoperating Expense	—	(128,728)	128,728	(100)%
Total Nonoperating Revenues (Expenses)	(1,918,667)	(2,845,305)	926,638	(33)%

Nonoperating expenses are lower than prior year by \$0.9m primarily due to more investment income. Investment income is higher due to the reasons discussed above. Interest expense is lower due mostly to principal payments since the last year (approximately \$9.3m in principal payments have been made).

Capital ContributionsBudget to Actual

	Actual YTD 2020	Budget YTD 2020	Variance \$	Variance %
CAPITAL CONTRIBUTIONS				
Grants	—	484,375	(484,375)	(100)%
Water Meter Retrofit Program	—	—	—	— %
Water Resource Sustainability Program	481,640	231,606	250,034	108 %
Developer Infrastructure Contributions	84,627	—	84,627	— %
Developer Will-serve Contributions (Net of Refunds)	1,818,433	1,266,884	551,549	44 %
Developer Capital Contributions - Other	2,853,471	1,674,250	1,179,221	70 %
Developer Facility Charges (Net of Refunds)	3,492,267	2,129,312	1,362,955	64 %
Net Capital Contributions	8,757,938	5,786,427	2,971,511	51 %

Capital contributions were \$3.0m higher than budget in the first quarter. This was driven by increased developer contributions due primarily to the change in rates which took place on October 1st. If developers were able to submit contracts (which often included payment) before October 1, they could take advantage of the lower rates. Just on September 30, we recorded deposits for 35 projects for over \$2.0m. This variance is likely due to timing and we would expect the amounts to level off and depending on growth may come down to budget before the end of the fiscal year. The variance in grant proceeds is related to timing. These proceeds are expected later in the year.

Year over Year

	Actual YTD 2020	Actual YTD 2019	Variance \$	Variance %
CAPITAL CONTRIBUTIONS				
Grants	—	—	—	— %
Water Meter Retrofit Program	—	566,388	(566,388)	(100)%
Water Resource Sustainability Program	481,640	—	481,640	— %
Developer Infrastructure Contributions	84,627	—	84,627	— %
Developer Will-serve Contributions (Net of Refunds)	1,818,433	2,230,600	(412,167)	(18)%
Developer Capital Contributions - Other	2,853,471	1,658,086	1,195,385	72 %
Developer Facility Charges (Net of Refunds)	3,492,267	2,840,069	652,198	23 %
Net Capital Contributions	8,757,938	7,295,143	1,462,795	20 %

Capital contributions are higher than prior year in the first quarter by \$1.5m. This again is due to the influx of projects before the fee increase.

Capital Spending

Spending on capital outlays and construction projects during the quarter was approximately \$8.2m. Total planned spending for the year is \$58.5m. Top project spend during the quarter is below -

- Mount Rose Water Treatment Plant \$2.4m
- Customer Information System Replacement \$1.1m
- Chalk Bluff - Backup Generator \$1.0m

Cash Position

At September 30, 2019, total cash on hand was \$212.4m or \$14.6m higher than at the beginning of the fiscal year. Of the total cash on hand, \$155.5m was unrestricted to be used to meet upcoming and future operating & maintenance expenses, principal & interest payments and construction project payments. The remaining \$56.9m was restricted to pay for scheduled bond principal and interest payments as well as maintaining required reserves as stipulated in our bond covenants.

Truckee Meadows Water Authority

Comparative Statements of Revenues, Expenses and Changes in Net Position
For the quarter ended September 30, 2019

	Actual YTD 2020	Budget YTD 2020	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	\$ 38,624,282	\$ 39,989,772	\$ (1,365,490)	(3)%
Hydroelectric Sales	1,069,464	987,357	82,107	8 %
Other Operating Sales	832,757	880,900	(48,143)	(5)%
Total Operating Revenues	40,526,503	41,858,029	(1,331,526)	(3)%
OPERATING EXPENSES				
Salaries and Wages	5,760,051	5,797,408	(37,357)	(1)%
Employee Benefits	2,495,410	3,068,794	(573,384)	(19)%
Services and Supplies	8,066,985	9,347,736	(1,280,751)	(14)%
Total Operating Expenses Before Depreciation	16,322,446	18,213,938	(1,891,492)	(10)%
Depreciation	8,290,967.48	8,409,005	(118,038)	(1)%
Total Operating Expenses	24,613,413	26,622,942	(2,009,529)	(8)%
OPERATING INCOME	15,913,090	15,235,087	678,003	4 %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	1,044,527	852,454	192,073	23 %
Net Increase (Decrease) in FV of Investments	470,475	—	470,475	— %
Gain (Loss) on Disposal of Assets	(168,898)	—	(168,898)	— %
Amortization of Bond/note Issuance Costs	(71,199)	(47,700)	(23,499)	49 %
Interest Expense	(3,193,572)	(3,266,532)	72,960	(2)%
Other Nonoperating Revenue	—	—	—	— %
Other Nonoperating Expense	—	—	—	— %
Total Nonoperating Revenues (Expenses)	(1,918,667)	(2,461,778)	543,111	(22)%
Gain (Loss) Before Capital Contributions	13,994,423	12,773,309	1,221,114	10 %
CAPITAL CONTRIBUTIONS				
Grants	—	484,375	(484,375)	(100)%
Water Meter Retrofit Program	—	—	—	— %
Water Resource Sustainability Program	481,640	231,606	250,034	108 %
Developer Infrastructure Contributions	84,627	—	84,627	— %
Developer Will-serve Contributions (Net of Refunds)	1,818,433	1,266,884	551,549	44 %
Developer Capital Contributions - Other	2,853,471	1,674,250	1,179,221	70 %
Developer Facility Charges (Net of Refunds)	3,492,267	2,129,312	1,362,955	64 %
Net Capital Contributions	8,757,938	5,786,427	2,971,511	51 %
CHANGE IN NET POSITION	22,752,361	18,559,736	4,192,625	23 %

Truckee Meadows Water Authority

Comparative Statements of Revenues, Expenses and Changes in Net Position
For the quarter ended September 30, 2019

	Actual YTD 2020	Actual YTD 2019	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	\$ 38,624,282	\$ 40,286,534	\$ (1,662,252)	(4)%
Hydroelectric Sales	1,069,464	944,715	124,749	13 %
Other Operating Sales	832,757	923,586	(90,829)	(10)%
Total Operating Revenues	40,526,503	42,154,836	(1,628,333)	(4)%
OPERATING EXPENSES				
Salaries and Wages	5,760,051	5,244,619	515,432	10 %
Employee Benefits	2,495,410	2,252,285	243,125	11 %
Services and Supplies	8,066,985	8,490,414	(423,429)	(5)%
Total Operating Expenses Before Depreciation	16,322,446	15,987,318	335,128	2 %
Depreciation	8,290,967	8,037,821	253,146	3 %
Total Operating Expenses	24,613,413	24,025,140	588,273	2 %
OPERATING INCOME	15,913,090	18,129,696	(2,216,606)	(12)%
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	1,044,527	918,650	125,877	14 %
Net Increase (Decrease) in FV of Investments	470,475	(294,770)	765,245	(260)%
Gain (Loss) on Disposal of Assets	(168,898)	—	(168,898)	— %
Amortization of Bond/note Issuance Costs	(71,199)	(29,494)	(41,705)	141 %
Interest Expense	(3,193,572)	(3,310,982)	117,410	(4)%
Other Nonoperating Revenue	—	19	(19)	(100)%
Other Nonoperating Expense	—	(128,728)	128,728	(100)%
Total Nonoperating Revenues (Expenses)	(1,918,667)	(2,845,305)	926,638	(33)%
Gain (Loss) Before Capital Contributions	13,994,423	15,284,391	(1,289,968)	(8)%
CAPITAL CONTRIBUTIONS				
Grants	—	—	—	— %
Water Meter Retrofit Program	—	566,388	(566,388)	(100)%
Water Resource Sustainability Program	481,640	—	481,640	— %
Developer Infrastructure Contributions	84,627	—	84,627	— %
Developer Will-serve Contributions (Net of Refunds)	1,818,433	2,230,600	(412,167)	(18)%
Developer Capital Contributions - Other	2,853,471	1,658,086	1,195,385	72 %
Developer Facility Charges (Net of Refunds)	3,492,267	2,840,069	652,198	23 %
Net Capital Contributions	8,757,938	7,295,143	1,462,795	20 %
CHANGE IN NET POSITION	22,752,361	22,579,534	172,827	1 %



STAFF REPORT

TO: TMWA Standing Advisory Committee
FROM: John Zimmerman, Water Resources Manager
 Laine Christman, Resource Economist and Conservation Supervisor
DATE: December 3, 2019
SUBJECT: **Presentation of analysis of TMWA Rule 7 water demand estimates and discussion and possible action and recommendation to the Board on potential future changes to Rule 7 demand estimates**

SUMMARY

To evaluate the water right dedication requirements under TMWA Rule 7, every year staff analyzes how much water its customers are using. The past several years of water usage data for single-family and multi-family customers show a statistically distinct downward pattern of water use on average, which staff believes is permanent. Staff presented the results of this analysis to the State Engineer and he agreed with staff's conclusion and approved a change to the water right dedication formula under Rule 7 for single-family developments (see attached). Staff also presented the details regarding the results of the analysis to the TMWA Board. The Board approved staff's recommendation to move forward with public outreach and directed staff to bring any comments to the Board in December before proceeding with a formal rule change.

Staff presented the results of the analysis at a public workshop and to the Builders Association of Northern Nevada. Overall, the public and BANN were in favor of the rule change. Staff will provide a more-detailed presentation of the analysis at the SAC meeting. Below is a summary of the schedule for the rule change.

September	Nevada State Engineer
October	TMWA Board
November	BANN
	Public workshop at TMWA's offices
December	SAC
	TMWA Board
January	First Reading
February	Second Reading and Possible Adoption

STEVE SISOLAK
Governor

STATE OF NEVADA



Attachment
BRADLEY CROWELL
Director

TIM WILSON, P.E.
Acting State Engineer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

901 South Stewart Street, Suite 2002

Carson City, Nevada 89701-5250

(775) 684-2800 • Fax (775) 684-2811

<http://water.nv.gov>

October 4, 2019

Truckee Meadows Water Authority
P.O. Box 30013
Reno, NV 89520-3013

Re: Request to Amend Rule 7 for Single Family Residences

Dear Sir or Madam:

The Division of Water Resources has reviewed your request to change the Truckee Meadows Water Authority Rule 7 dedication rates for single-family residences (SFR).

The existing formula for SFR water right dedication amounts is as follows:

$$\text{Dedication Rate} = \frac{1 \text{ afa}}{1.1 + \frac{10,000 \text{ sq. ft.}}{\text{Lot Size}}}$$

The proposed formula for SFR water right dedication amounts is as follows:

$$\text{Dedication Rate} = \frac{1 \text{ afa}}{1.1 + \frac{15,000 \text{ sq. ft.}}{\text{Lot Size}}}$$

After examination of the data and assumptions supporting the request, the State Engineer finds that the revised formula is reasonable and is accepted as the means to calculate water demand for SFR for future projects. This new formula only applies prospectively and will not be applied retroactively to existing dedications.

Please contact this office if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Tim Wilson, P.E.".

Tim Wilson, P.E.
Acting State Engineer

TW/mjw/l

Analysis of TMWA Rule 7 Water Demand Estimates

December 3, 2019



TMWA Demand Estimating Procedures

Rule 7 controls the volume of water rights that must be dedicated to TMWA for water service

Single Family: $1 / [1.1 + (10,000/\text{Lot Size in ft}^2)]$

Condos/Apts/Duplexes: 0.12 acre-feet per unit

Mobile Homes: 0.25 acre-feet per unit

Irrigation: Turf – 3.41 acre-feet per acre of turf

Drip – Landscape plans

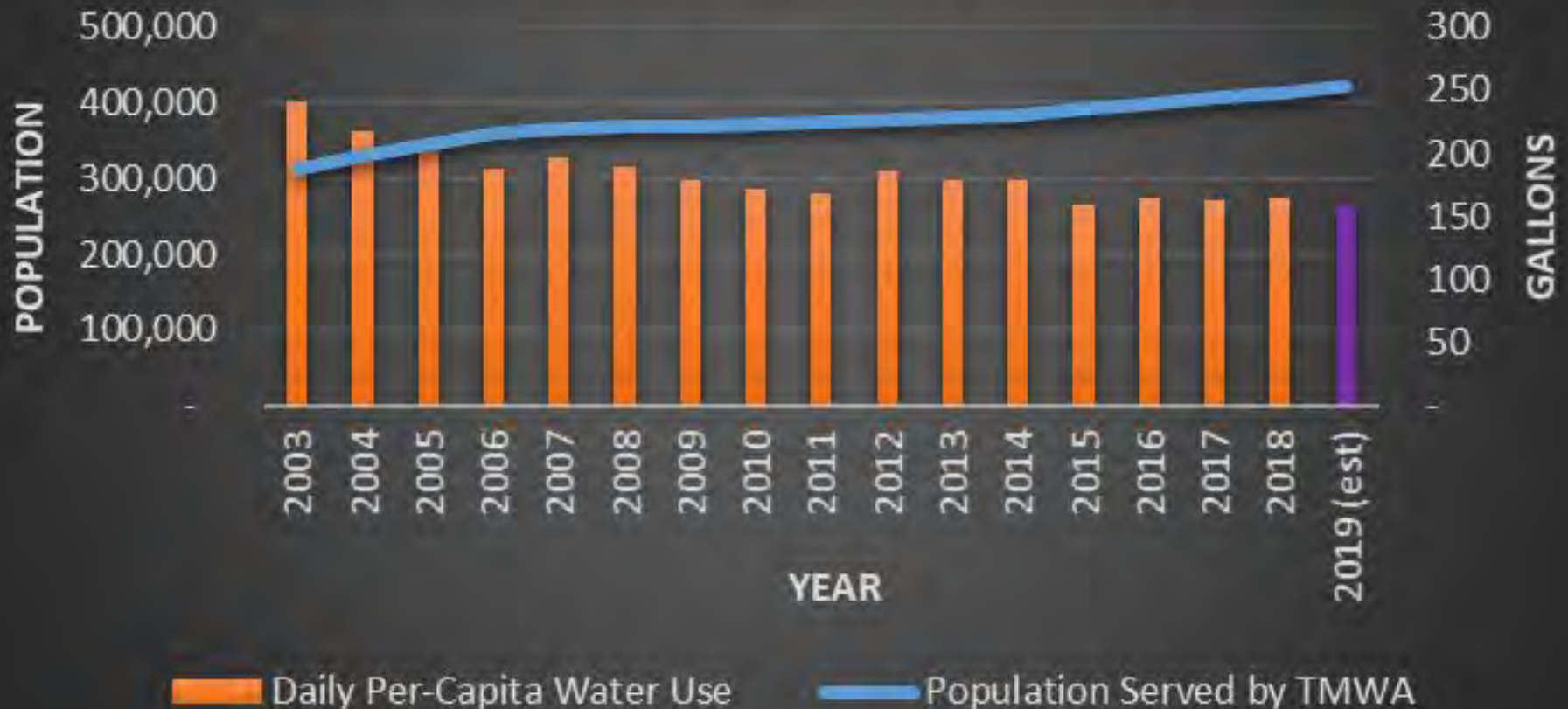
Commercial: Best available data and estimating procedures

Customer Water Use Trend



Customer Water Use Trend

Population and Daily Per-Capita Water Usage (2003 - 2019)



Single-Family Residential Use Analysis

- Customer Annual Water Use v. Estimated Demand Studied
- TMWA Conducts Analysis Every Year to Check Whether The Existing Rule 7 Demand Formula Accurately Estimates Water Use.
- Analyzed Usage Data For Newer Homes (Built from 2013 – 2015)
 - 2014, 2016, 2017 and 2018 Water Use
 - Omitted 2015 Because TMWA Requested 10% Conservation and Customers Reduced Water Use
 - At Least 3 years of Water Use History To Be Included
 - Ensure Landscaping Is Fully Established
 - Dataset Includes Over 3,000 Services That Are Representative Of Newer Services In TMWA Service Territory
 - Above Services Appear To Be Fundamentally Different Than Older Services

Single-Family Residential Results

On average, newer services use 0.08 acre-feet (18%) **less** than demand estimate.

Average Annual Use and Rule 7 Allotment for Newer Homes

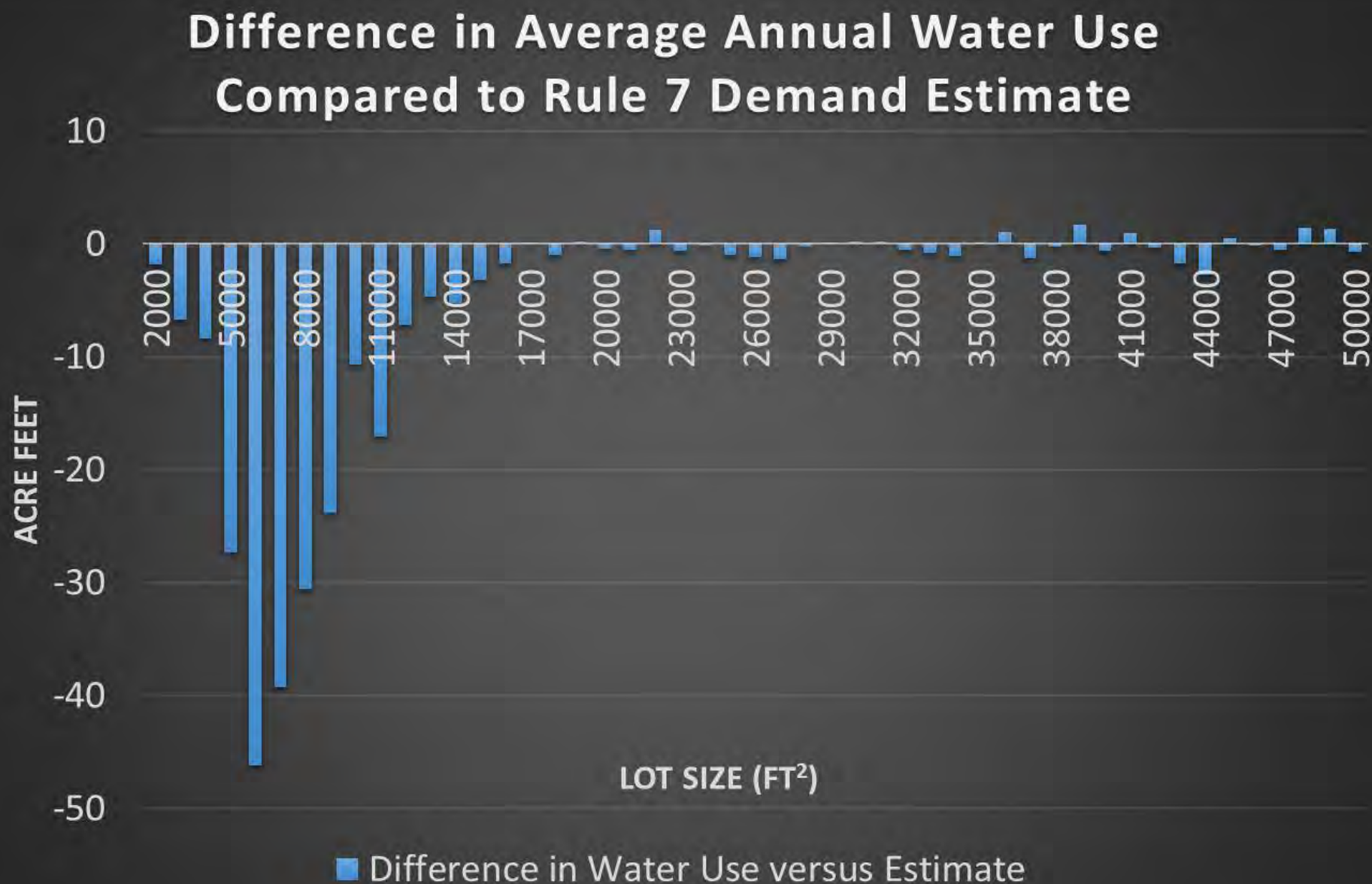


N=3,007 services

Rule 7 Demand Estimate

Average Annual Water Use (2014-2018)

Single-Family Residential Results

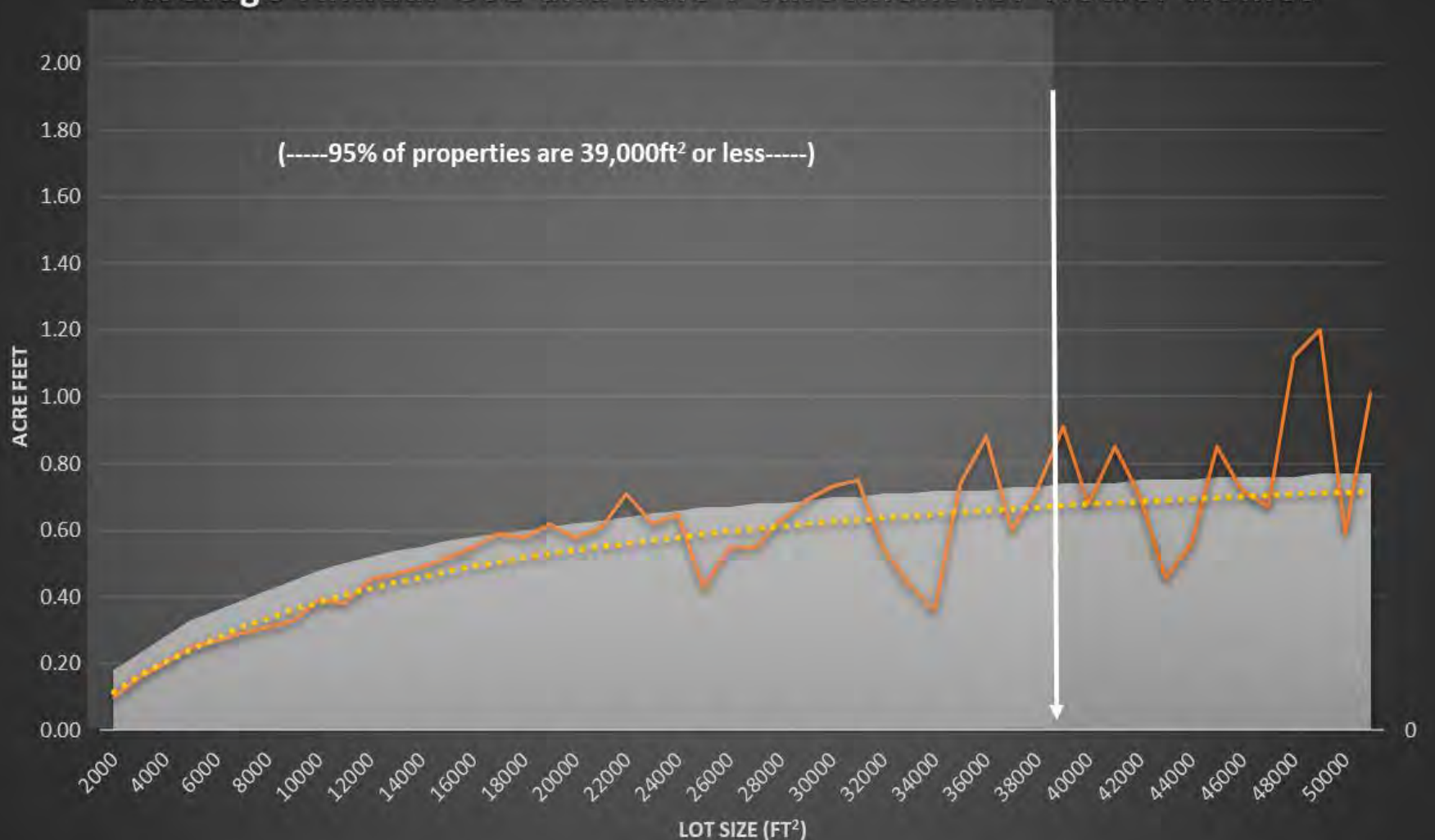


Proposed Rule 7 Change

- Current Equation $1 / [1.1 + (10,000/\text{Lot Size SF})]$
- Proposed Equation $1 / [1.1 + (15,000/\text{Lot Size SF})]$

Proposed Rule 7 Change

Average Annual Use and Rule 7 Allotment for Newer Homes



N=3,007 services

Rule 7 Demand Estimate

Average Annual Water Use (2014-2018)

Proposed Rule 7 Demand Estimate

Proposed Rule 7 Change

- The difference in estimated demand under the existing Rule 7 equation and the proposed equation can range from 26% for very small lots to 1% for very large lots. The savings to the average lot size is approximately 20%.

Property Size (ft2)	Rule 7 Demand Estimate*	Proposed Rule 7 Estimate*
2000	0.18	0.13
5000	0.36	0.27
10000	0.53	0.42
15000	0.63	0.53
20000	0.69	0.60
25000	0.74	0.65
30000	0.78	0.70
35000	0.8	0.72
40000	0.82	0.75
45000	0.83	0.78
50000	0.85	0.79

*Includes a 0.11 Drought Factor



Quality. Delivered.

Proposed Rule 7 Change

- Aligned With Water Use Trends for New Single-Family Services
- Increases the Efficient Use of Water Rights
- Helps with Affordable Housing Concerns by Lowering Total Cost of Housing
- Approved by the Nevada State Engineer for Residential Subdivisions

Multi-Family Residential Use Analysis

- Customer Annual Water Use v. Estimated Demand Studied
- Same Parameters as the Single-Family Analysis
 - 2014, 2016, 2017 and 2018 Water Use
 - Omitted 2015 Because TMWA Requested 10% Conservation and Customers' Reduced Water Use
 - At Least 3 years of Water Use History To Be Included
 - Dataset Includes 82 Services / 1,177 Units That Are Representative Of Newer Services In TMWA Service Territory
 - Above Services Likely Have Greater Efficiencies Than Older Services (newer appliances and fixtures)

Multi-Family Residential Results

- 3-year Average Use for New Multi-Family Services is 0.11 AF per Unit
- Current Rule 7 Estimate is 0.12 AF per unit
- Difference of 0.01 AF per unit
- Proposed Rule 7 Change is to Lower the Estimate to New 3-year Average of 0.11AF

Irrigation Service Use Analysis

- Dedications Are Calculated Using TMWA's Plant Factors
 - Trees ($\# \text{ of trees} \times 32 \times 32 / 325,851$)
 - Shrubs ($\# \text{ of shrubs} \times 16 \times 32 / 325,851$)
 - Groundcover plants ($\# \text{ of plants} \times 8 \times 32 / 325,851$)
 - Turf Irrigation ($\text{Turf S.F.} \times 3.41 / 43,560$)
- Dedications Are Submitted via a Landscape Map stamped by a Certified Landscape Architect

Irrigation Service Use Analysis

- Irrigation Water Use v. Estimated Demand Studied
- How Does Rule 7 Demand Formula Estimation For Irrigation Services Track With Use?
 - Analyzed 2014, 2016, 2017 and 2018 Water Use
 - Omitted 2015 Because TMWA Requested 10% Conservation and Customers' Reduced Water Use
 - Dataset Includes 1,976 Services from 489 Projects With Water Rights Dedicated to TMWA
 - Projects have Between 1 and 16 Services and Are Representative of Irrigation Services With TMSA

Irrigation Service Results

- T-test Results Suggest There is No Statistical Difference Between Average Annual Demand and The Associated Irrigation Dedication.
- Results indicate the TMWA's existing landscape demand coefficients work reasonably when compared to annual average.

Paired t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
irr_af	489	3.319162	.3001815	6.638016	2.729354	3.908969
yuse_avg	489	3.466173	.2785242	6.159101	2.918919	4.013428
diff	489	-.1470117	.1548506	3.424266	-.451268	.1572446

mean(diff) = mean(irr_af - yuse_avg)

t = -0.9494

Ho: mean(diff) = 0

degrees of freedom = 488

Ha: mean(diff) < 0

Ha: mean(diff) != 0

Ha: mean(diff) > 0

Pr(T < t) = 0.1714

Pr(|T| > |t|) = 0.3429

Pr(T > t) = 0.8286

Commercial Service Demand

- Demand is Estimated Based on Best Available Data and Estimating Procedures
 - Requires Case-By-Case Analysis
 - Fixture Counts
 - Comparison to Similar Services
 - Usage History
- TMWA Reviewed Commercial Projects From 2012-2017 and Usage is Tracking Close to Demand Estimates
- TMWA is Not Proposing to Change the Estimating Procedures for Commercial Services

Project Allocation Limit

- Overview of TMWA's Inventory of Uncommitted Water Rights
- No Express Limit On Quantity That Can be Bought For a Single Project
- Recommend Requiring TMWA Board Approval for Allocations above 100 Acre-Feet For a Single Project
 - Only 4 Single-Project Allocations Above 100 AF Since 2001
 - Average Allocation For Single-Family Subdivisions Per Phase is 16 AF
 - Average Allocation For Multi-Family Developments Per Phase is 14 AF
 - Largest Allocation for Single-Family Development Since 2016 was 80 AF
 - Largest Allocation for Multi-Family Development Since 2016 42 AF
 - Intent to Require Board Approval of Very Large Projects

Proposed Schedule

November

Public Outreach

- TMWA Citizens Standing Advisory Committee
- General Public Open House
- Builders Association of Northern Nevada

December

TMWA Board Presentation of Public Outreach

January

TMWA Board First Official Reading

February

TMWA Board Second Official Reading/Adoption

Thank you!
Questions?



STAFF REPORT

TO: Standing Advisory Committee
FROM: Sonia Folsom, SAC Liaison
DATE: November 25, 2019
SUBJECT: Update on Standing Advisory Committee Membership

Please find attached the 2020 Standing Advisory Committee (SAC) membership. Those whose term-limits expire on December 31, 2019 have been notified. The final SAC membership list will be presented to the Board for approval at the December meeting.

TMWA Standing Advisory Committee
Term Appointments
2020 Membership List

Customer Class	Primary Representative	Member Since	Term Ends	Alternate Representative	Member Since	Term Ends
Wholesale (Sun Valley)	Fred Schmidt	2005	12/31/2019	N/A		
Irrigation	Neil McGuire	2005	12/31/2020	Karl Katt	2013	12/31/2021
Multi-family Residential	Mike Schulewitch	2013	12/31/2020	Jonnie Pullman	2012	12/31/2021
Commercial	Donald Kowitz	2017	12/31/2020	Vacant		
Senior Citizen	Robert Chambers	2005	12/31/2020	Vacant		
At-Large 1	Ken McNeil	2013	12/31/2020	Ken Becker	2017	12/31/2020
At-Large 2	Jordan Hastings	2017	12/31/2020	Susan Hoog	2019	12/31/2021
Residential:						
Representative 1	Carol Litster	2014	12/31/2020	Dale Sanderson	2017	12/31/2020
Representative 2	Harry Culbert	2006	12/31/2020	Fred Arndt	2017	12/31/2020
Representative 3	Jerry Wager	2014	12/31/2020	Scot Munns	2017	12/31/2020
Appointments:						
BANN	Colin Hayes	2010	12/31/2019	Jim Smith	2010	12/31/2019
Reno-Sparks Chamber	Taylor Russo	2020	12/31/2021	Ann Silver	2019	12/31/2021



STAFF REPORT

TO: Standing Advisory Committee
FROM: Sonia Folsom, TMWA SAC Liaison
DATE: November 25, 2019
SUBJECT: **Presentation of applications to fill Commercial Customer Class Alternate vacancy and other possible vacancies, and possible recommendation to the Board**

Recommendation

Staff is presenting to the Standing Advisory Committee (SAC) for its review, and possible recommendation to the Board, applications submitted by local residents for the Commercial Customer Class Alternate vacancy and other possible vacancies.

Background

The SAC was created in 2005 to review budgets, rate proposals and other matters as directed by the Board. The committee currently consists of Board-appointed representatives of ten customer classes and two other seats held by representatives of community-interest groups (Attachment 1). Applications to the SAC are accepted on an ongoing basis and when there is a vacancy, present the applicant(s) to the SAC for possible recommendation to the Board.

Discussion

Staff received an application from a former Reno-Sparks Chamber appointee indicating interest in resuming a role on the SAC as a Commercial Customer Class representative. The Commercial Customer Class Alternate position will be vacant as of January 1, 2020. Typically, if there were multiple vacancies, recruitment methods would include use of bill insert, public notices, press releases and social media. However, in this instance, the timing of the application and vacancy coincided without the need to fund such endeavors.

A total of one application was received for the vacant position:

- Commercial Customer Alternate – One (1) Vacancy; 1 applicant

The applicants' experience is summarized in the table below:

APPLICANT NAME	CITY	CUSTOMER CLASS	PERTINENT EXPERIENCE
John Krmptic	Reno	Commercial	<ul style="list-style-type: none">• Metered rate residential customer• Water planning and design projects• Appointed by the Builders Association of Northern Nevada (BANN) to the SAC 2008-2009• President, KLS Planning & Design

Staff is pleased to have such a skilled applicant who has expressed interest in representing customer issues to the TMWA Board as part of the SAC.



September 25, 2019

Sonia Folsom
Executive Assistant
Truckee Meadows Water Authority
1355 Capital Blvd. | Reno, NV 89502

Re: TMWA SAC - Letter of Interest

Dear Ms. Folsom:

I am writing to express my interest in serving on the SAC. Although there are more qualified technical experts that serve and need to be on the committee, I feel my background would serve an important purpose by bringing a wide range of skills and perspective needed for a good committee make-up. I have experience in water planning of many types of projects at the conceptual design level to share with this committee, particularly on land use and development related matters.

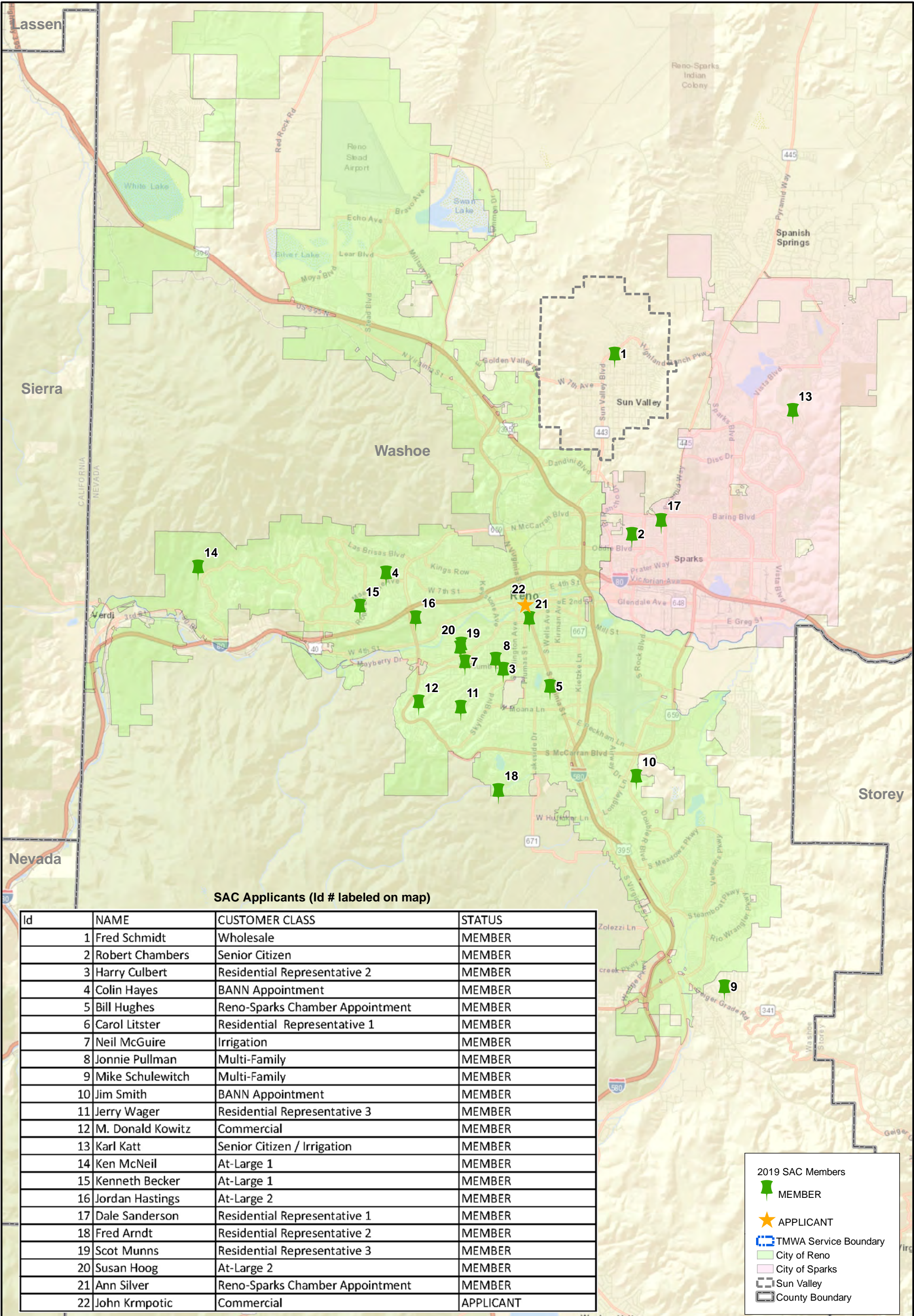
I really have one purpose in serving. That is, to influence the best outcome of the SAC role as advisory to staff and the TMWA Board. I would be glad to serve on any of the customer classes you see fit.

Thank you for your consideration. Please let me know if you need anything else from me.

Respectfully,

A handwritten signature in black ink, appearing to read 'John F. Krmpotic', is written over a light blue circular stamp.

John F. Krmpotic, AICP
President
KLS Planning & Design



Distribution of SAC Members & Applicants

DATE 11/27/2019
MAP BY: JAK
REQUESTED BY: SF
SCALE: 1 in = 2 miles





STAFF REPORT

TO: Standing Advisory Committee
FROM: Sonia Folsom, SAC Liaison
DATE: November 24, 2019
SUBJECT: **Presentation and possible approval of 2020 meeting schedule**

The TMWA Standing Advisory Committee meets the first Tuesday of each month at 3:00 p.m. The schedule of proposed meeting dates for 2020 is:

- Tuesday, January 7
- Tuesday, February 4
- Tuesday, March 3
- Tuesday, April 7
- Tuesday, May 5
- Tuesday, June 2
- Tuesday, July 7
- Tuesday, August 4
- Tuesday, September 1
- Tuesday, October 6
- Tuesday, November 3
- Tuesday, December 1

Meetings that appear on this schedule may be cancelled or changed due to lack of agenda items or other considerations.